

QueryVision: Report Autosizing Guide

Version2016.1

Table of Contents

1. 1.1	WHAT'S NEW Qvt Version 2016.1	1 1
2. 2.1 2.2	QUICK START Autosizing Adjusting SharePoint page layout for IBM Cognos reports	1 1 7
3.	DOCUMENT GUIDE	.10
4.	INTRODUCTION – OPTIMIZING IBM COGNOS/SHAREPOINT INTEGRATION	.12
5.	PROBLEM OVERVIEW	.15
6. 6.1 6.2 6.3	SOLUTION OVERVIEW Suggested Solution Strategy Autosizing - enable Cognos reports for dynamic sizing in SharePoint SharePoint Page Layout Modification Tools	. 16 16 17 18
7. 7.1 7.2 7.3 7.4 7.5 7.5. 7.5. 7.6 7.7 7.8 7.9	AUTOSIZING Installation and Configuration SharePoint, Cognos and Browser support Report Viewer Web Part Properties & Autosizing Enabling Reports for Autosizing Specifying embedded resizing options 1 qv_addHeight - List Frame Footer/Navigation Controls "Icing" 2 qv_rowsPerPage – Specify rows per page for SharePoint Drill up/down Behavior Autosizing reports with multiple page definitions (including prompt pages) Behavior of Reports with prompt pages Drill-Through Behavior	.19 20 20 22 23 26 26 27 27 27 28
8. 8.1 8.2 8.3	SHAREPOINT PAGE LAYOUT MODIFICATION TOOLS SharePoint specific JavaScript page layout manipulation considerations Example of specific techniques used Why the Script Editor Web Part for JavaScript?	. 28 29 30 30
9. 9.1 9.2 9.2. 9.3 resizir 9.3.	APPENDIX Troubleshooting Select the appropriate SharePoint page layout 1 SharePoint Web Part Page templates Leverage SharePoint Web Part Page, Web Part Zone and Web Part built-in dynamic ng capabilities	.31 31 31 31 32 32



SharePoint Web Parts for IBM Cognos

9.3.	2 Dynamic techniques	34
9.4	Leveraging IBM Cognos Report height and width configuration capabilities	34
9.5	Creating a SharePoint page with a web part template	37
9.6	Pitfalls with SharePoint's "Focus on content"	39
9.7	Guide for Cognos Report Heights in SharePoint	40
9.8	Detailed Feature Specifications	43
9.9	Advanced Autosizing - Multi-Tabbed Dashboard via Nested Reports	44
9.9.	1 Introduction	44
9.9.	2 Container Report Configuration	44



1. WHAT'S NEW

1.1 Qvt Version 2016.1

- IBM Cognos Analytics 11.X support With IBM Cognos Analytics 11.X the relative location of .js files accessed from embedded JavaScript in Reports has changed see section 7.4 Enabling Reports for Autosizing
- SharePoint 2016 support

2. QUICK START

Recommended: See the combination of Autosizing and SharePoint Page Layout Modification Tools in the video <u>Introducing QueryVision Autosizing</u> on the <u>QueryVision YouTube channel</u>

Note: HTML/JavaScript Code snippets and sample reports can be found here. It is HIGHLY RECOMMENDED to copy/paste from the files included in the QueryVision SharePoint Web Parts installation folder

Snippets provided in the text from this PDF document are for illustration purposes only.

We have split Quick Start into two sections – applying dynamic Autosizing and Adjusting SharePoint page layout for IBM Cognos reports.

2.1 Autosizing

Note: It is HIGHLY RECOMMENDED to copy/paste from the files included in the QueryVision SharePoint Web Parts installation folder:

Autosizing Samples.zip

The following are links latest versions of this guide <u>QueryVision Report Viewer Autosizing</u> <u>Guide and the Autosizing Samples</u> on the QueryVision web site (<u>queryVision.com</u>)

QueryVision's Autosizing capabilities require embedding references to JavaScript (.js) files and small snippets of JavaScript code into a Report Studio Report's Specifications "using HTML Items" for interactively running the report as HTML in SharePoint. This can support:

- Fixed size specify the height of the report in pixels
- Dynamic size enable the report to resize to its actual height, along with a minimum and a maximum height

Configuring for Autosizing requires the following:

- **Provide .js libraries on your Cognos Server** find the <*installLocation>\ibm\cognos\c10_64\webcontent* folder add a *\queryvision* sub folder and include the following files from the installed QueryVision\QueryVision SharePoint Web Parts\Configuration folder:
 - iframeResizer.contentWindow.min.js
 - qvtResizer.contentWindow.min.js
- Include JavaScript in an HTML item in your Report specification As a quick demonstration select or create a Cognos Report Studio report with a single page definition – a simple list report best illustrates auto-sizing. In the report header (e.g. beside the Report Title) insert an "HTML item" and include the following:



```
<script type="text/javascript">
    var QvtReportStyleProperties =
'{"report":{"runAsHtml":{"dynamicSize":{"config":{"sizeMode":"dynamicSize
","qv_addHeight":"25px"}}}';
</script>
<script language="javascript" type="text/javascript"
src="../queryvision/qvtResizer.contentWindow.min.js"></script>
<script language="javascript" type="text/javascript"
src="../queryvision/iframeResizer.contentWindow.min.js"></script></script></script></script></script"></script"></script"></script"></script</script</script></script</script></script></script></script></script></script></script></script"></script</script</script</script</script></script></script</script></script"></script</script</script></script></script></script></script></script></script></script></script></script"></script</script</script</script</script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></script></scr
```

Notes:

- the 'var QvtReportStyleProperties' script specifies the Autosizing options and the other scripts load the necessary resizing JavaScript components.
- For IBM Cognos Analytics 11.X and later, change the relative location of the .js files from ../ to ../../

Shown below is an example Cognos Report using Dynamic Autosizing using the IBM supplied sample Go Data Warehouse (analysis) Report Package and database. Note that it has a single report page definition. Also note where the HTML item is inserted in the report (in the Report header to ensure it is rendered on each page)

File Edit View Structure Table	Data Run Tools	Help				
🖹 🚅 🔛 🐇 🗎 🏦 🗶 💝 🛸 🖬	l 🖮 🕨 • 🔒 🗊 •	🗇 🌳 🏠 🔰 - 🖏 -	÷ - ∑ -	- 🍾 - 🗈 🗇 🖉	2 📄 • 🖬 • 📸 🖬 🗎	• 🎟 • 🖹 🚼 🔞
Font 💙 Size 💙 🛕 🔻	B ℤ <u>U</u> ≡ ≡ :			✓ <u>/</u> · ⊞ · ∉ ·	·≣•®•®• ∦ /	a - *a 🕅
Source	- 🗆 🗈	Page layers:		Cont	text filter:	
- 🗉 🖿 🦆 🖗 🔗		 Dron members here to 	rreate name laver		Dron members here to create	a context filter (slicer)
GO Data Warehouse (analysis)			< HTML Ite	Double-click	<u>k to edit text</u>	
 HR (analysis) Sales and Marketing (analysis) 	Page Explorer		X roduct line	Product type	Opening inventory	Quantity shipped
🕨 🧰 Finance (analysis)	🔻 🚞 Report Pages	single page	luct line>	<product type=""></product>	<opening inventory=""></opening>	<quantity shipped=""></quantity>
Filters	Page1		luct line>	<product type=""></product>	<opening inventory=""></opening>	<quantity shipped=""></quantity>
	Prompt Pages		luct line>	<product type=""></product>	<opening inventory=""></opening>	<quantity shipped=""></quantity>
Properties - A HTML Item	HTML <pre>script type="text/ <script ""="" <="" language="
<script language=" pre=""></th><th>avascript"> ReportStyleProperties = '{"re javascript" type="text/javasc javascript" type="text/javasc</th><th>port":{"runAsHt rigt" srs="/gu rigt" srs="/gu</th><th>ml":{"dynamicSize":{"cc envision/qrtResizer.cor envision/iframeResizer.</th><th>enfig":("sizeMode":"dynamic ntentWindow.js"></script> contentWindow.js"><th>Size"."ifiz t></th></pre>	Size"."ifiz t>				
HTML Source Variable					- ON	/

To embed this report in SharePoint requires using a QueryVision Report Viewer web part. To select the report and configure for Autosizing, do the following:

- First ensure you are logged into a Cognos Server on SharePoint via QueryVision Authentication to Cognos.
- Create or use an existing web part page, add a QueryVision Report Viewer to a web part zone, then select to "Edit web part":



Quer	yVision Re	eport Viewer '	Webpart [2]		_	-	V
Optic	ons Actions					Minimize	
						Close	-
Year	Month	Product line	Product type	Open invent	×	Delete	
2004	January 2004	Camping Equipment	Cooking Gear	2			
2004	January 2004	Camping Equipment	Tents		Ð	Edit Web Part	
2004	January 2004	Camping Equipment	Sleeping Bags			Connections	
2004	January 2004	Camping Equipment	Packs			connections	
2004	January 2004	Camping Equipment	Lanterns			Export	
2004	1	Deserved.	W-4-6		co 30	0 70.040	

- Make the following changes:
 - Set the Default Report Execution Mode to "HTML" and add either copy/paste a Cognos SearchPath to the Report Path property or click on the button beside the Report Path and navigate to and select the report.

∢ QueryVision Report Viewer Webpart [2] ×
QueryVision Report Viewer Prop
Login Page Address
🕅 Redirect To Login Page
Login Redirect Delay 5
Report Path
/content/folder[@name='Qvtt
Report Title
Run Report Automatically
Show Toolbar
🗑 Show Menu
Enable Studios
Report Style Properties
overflow:auto;width:100%;heig
Default Report Execution Mode
HTML
Enable Interactive Run Mode

Scroll down to the bottom of the configuration settings and select OK or Apply, then OK to apply the settings. The report will now run with the Autosize settings.



PAGE

SharePoint Web Parts for IBM Cognos

Newsfeed OneDrive Sites Neil J. Thomson - 🔯 ?

🖸 SHARE 🏠 FOLLOW 💢

	Options	Actions				
Public Folders						
- Ccelero						
- QvtTests	Year	Month	Product line	Product type	Opening inventory	Quantity shipped
E- Cara AutoSize	2010	January 2010	Camping Equipment	Cooking Gear	236.107	234
- O AnalysisStudioProductByYearRevenue	2010	January 2010	Camping Equipment	Tents	51,253	5
	2010	January 2010	Camping Equipment	Sleeping Bags	54,218	5
DefaultNestedReport_noAutSize	2010	January 2010	Camping Equipment	Packs	47,380	4
DrilableReportRetailers	2010	January 2010	Camping Equipment	Lanterns	92,038	8
DrillableReportRetailers_23_1	2010	January 2010	Personal Accessories	Watches	59,299	7
LongCrossTab_2_1	2010	January 2010	Personal Accessories	Eyewear	192,737	21
i LongWideCrossTab	2010	January 2010	Personal Accessories	Knives	140,107	1:
MestTest_2_28FixedSwap2_10px_8	2010	January 2010	Personal Accessories	Binoculars	18,304	
Nest lest_8_Buttons	2010	January 2010	Personal Accessories	Navigation	33.879	
NestTest_8_noresize	2010	January 2010	Outdoor Protection	Insect Repellents	251.413	2
ProductinventoryList-multipage	2010	January 2010	Outdoor Protection	Sunscreen	107.188	1
Productivement is multipage solona	2010	Jenuary 2010	Outrinor Protection	First Aid	35.128	
ProductinventoryList-multipages_1_need ProductinventoryList-multipages_31 1	2010	January 2010	Golf Equipment	Irops	6.582	
ProductinventoryList-multipage 23 1 noautosize	2010	January 2010	Golf Equipment	Weets	4.005	
ProductInventovi ist-multipage 23.1 singleItem	2010	January 2010	Golf Environment	P. Hour	25.247	
ProductLineSource auto 23 1	2010	January 2010	Coll Equipment	Coll Assessoirs	43 533	
ProductLineTarget auto 23 1	2010	Calculy 2010	Conception Factories	Contraction Contraction	10,000	
- ProductLineTarget_manprompt_23_1	2010	February 2010	Camping Equipment	Cooking Gear	000,040	-
- ProductLineTarget manprompt 23 2	2010	February 2010	Camping Equipment	Tents	130,819	
PromptPagePromptedReport	2010	February 2010	Camping Equipment	Sleeping Bags	111,647	
E- DrillThrough	2010	February 2010	Camping Equipment	Packs	83,374	
8- 🗀 ObjTypeTests	2010	February 2010	Camping Equipment	Lanterns	198,317	
🗄 🧰 Output Tests	2010	February 2010	Personal Accessories	Watches	50,145	
- DeaseWait	2010	February 2010	Personal Accessories	Eyewear	27,307	3
E- C ReportLayout	2010	February 2010	Personal Accessories	Knives	404,335	1:
🗄 🛅 WebPartFilters	2010	February 2010	Personal Accessories	Binoculars	38,116	
Samples	2010	February 2010	Personal Accessories	Navigation	67,798	
Camples_Drillthrough	2010	February 2010	Outdoor Protection	Insect Repellents	431,141	24
- 🗀 Samples_PowerPlay	2010	February 2010	Outdoor Protection	Sunscreen	470,778	16

The above report uses the default configuration a fixed height of 700px. Note the vertical scroll bar on the report



DROWSE RAGE

SharePoint Web Parts for IBM Cognos

Sta Kell.Themen* @ 1 O www.common 2

e 🥮 e	ublic Foldera	Coloris	Automs				
1 22	And a state	Vert	bloot.	Date stills	Date of Long	On an investment	On and the section
Ĩ	- Change	2010	January 2010	Camping Couldment	Coping Cear	225,137	
111	- R Analysis in de Send with Van Deven at	2010	January 2010	Comparison in the second second	Level 1	11.330	
111	- R darbeetboetboetboeta	2010	January 2210	Camping Sociement	Sheeping Bags	04.516	
	- 📓 SelaultSededTapart solutSee	2010	January 2010	Camping Couldment	Packa	47.000	
111	- Driftsbleibepartitietaliens	2010	January 2010	Camping Couldment	Larburg	92,038	
111	- 📓 Bellehir Report Scholerer, 23, 1	suno	January 2010	Personal Accessories	Water es	CALLER	
	- Di LongCrossTab_2_1	2010	January 2010	Personal Accessories	Systemat	992,127	
111	- EuropWebGassTals	2010	January 2010	Personal Accessories	Hindows	140,107	
	 MeetTest_2_20Fb adSvap2_10pb_8 	2010	January 2010	Personal Accessories	Oncoviers	10.004	
111	- Monthel Schulzen	suno	January 2010	Personal Accessories	Rengelon	344.0	
111	The second second second second	2010	January 2010	Outdoor Pretaction	Insect Repellents	201,415	
111	 Production of Section Company Production of Section Company 	2010	January 2010	Outdoor Protection	Sumerien	197,100	
111	 Reductionarized interaction (Count) 	2040	January 2010	Outliner Protection	First Ald	25,126	
111	- Dark of Inventory 10 m disease, 21, 3	surro	January 2010	Molt key privations	Trans.	0.5452	
111	Productinventori/List multipage 22 1 scentorize	2010	January 2010	Oof Equipment	Woods	4,025	
111	Product investory in Provide says, 23, 3, single from	2010	January 2010	Golf Equipment	Puters	25.247	
	ProductUneSource_suite_22_1	2010	January 2010	Coll Deviationant	Colf Accessories	40,500	
111	- 🖹 Probation Legel, etc. 1	suno	Hedroxy SUTU	Managing tecapitient	Cooking Great	20.04.40	
	- DroductUseTarpet manprompt 23 1	2010	February 2010	Camping Equipment	Tenta	120.619	
	- 🖹 Productures Larget_manprompt_24_2	2010	February 2010	Camping Coulonent	Skeeping Daga	111247	
111	- Dromph Darpel tromphent Report	2040	Tebruary 2010	Camping Couloment	Packs	60.374	
1 1 1	B-Cal Dill Through	suno	Hedroxy SOTU	Maniping segaptions	Larterna	198317	
112	B-L_ Oktopetiels	2010	February 2010	Parsonal Accessories	Watches	53,145	
1 1 1	B-La Output Terts	3040	February 2010	Personal Accessories	Cysersor	27.507	
117		2040	February 2010	Parsonal Accessories	Kiniyes	404,008	
1 1 2	Constant and a second sec	surro	Hedroxy SUTU	Paramet Accessories	Menopularia	34.110	
1 4-0	Samples	2010	February 2010	Personal Accessories	Navigation	67,796	
100	Samples pull-brough	2010	February 2010	Outdoor Pretaction	Insect Repellents	421,141	
18-6	Samples Reservice	2010	February 2010	Outliner Pretaction	Curatmen	470,776	
1 100	w28/2er8280 - Cg 10.2.2 KTM	suno	Hearing 2010	Outdoor Pretaction	First Aut	81.344	
i (190	y Politices	2010	February 2010	Golf Equipment	Inone	15,122	
		2010	February 2010	Golf Equipment	Woode	9.276	
		2040	February 2010	Golf Equipment	Puters	69,254	
		suno	February 2010	Molt Expurpment	Gall Accessories	92.420	
		2010	March 2010	Camping Equipment	Cooking Gear	955.006	
		2010	March 2010	Camping Couloment	Tenta	100,610	
		2040	March 2010	Camping Coulonent	Cleaping Dega	109,109	
		2010	March 2010	Camping Sigaipment	Packs	92.557	
		2010	March 2010	Camping Equipment	Lanterna	212.527	
		2010	March 2010	Personal Accessories	Watches	70,197	
		2040	March 2010	Personal Accessories	Cysensor	29,140	
		2010	March 2010	Personal Accessories	Ponyes	272.138	
		2010	March 2010	Personal Accessories	Ginoculara	15.696	
		2010	March 3010	Personal Accessories	Navigation	75,140	
		2040	March 2010	Outliner Pretaction	Insect Repellents	422,434	
		2010	March 2010	Outside Phetadion	Sumonen	442.001	
		2010	March 2010	Outdoor Pretaction	First Aid	01.721	
		2010	March 2010	Golf Equipment	Irone	15.050	
		2010	March 2010	Golf Equipment	Woods	9,000	
			And the second second	On the contract	(hoters)	doublet.	

The above report has had autosizing applied. Note that the report is taller on the page and lack of a vertical scroll bar on the report.



SharePoint Web Parts for IBM Cognos

Setting height:100% doesn't do what you would hois not an alternative - The following is what you get when 'height:100%' is included in the Report Style Properties string (vs. using QueryVision Autosizing or a fixed height of 700px). What you're seeing is a minimal default height setting (e.g. 200 px or less).

Image: Image							Newsfeed OneDriv	e Sites Neil J. Thomson -
	PAGE							🗘 SHARE 🏠 FI
OuryUsion Content Manager Tree	Edt perties - X Delete Page	a Alert Popularity Me - Treds Approve Reject W	oridiow Page - Ho	Make Title Bar mepage Properties N Actions Tacts a	ge & otes nd Notes			
Productivering Control Contro Control Control	QueryVision Conte	ent Manager Tree	Query	Vision Report Vie	wer Webpart			
Yes Mode Product line Product line Product line Quantity slipped 2010 January 2010 Camping Equipment Tests 51.23 23.53.22 2010 January 2010 Camping Equipment Tests 51.23 23.53.22 2010 January 2010 Camping Equipment Tests 51.21 23.53.22 2010 January 2010 Camping Equipment Tests 51.21 23.53.22 2010 January 2010 Camping Equipment Tests 51.21 23.53.22 2010 January 2010 Camping Equipment Steeping Bigs 51.21 23.53.22 2010 January 2010 Camping Equipment Steeping Bigs 51.21 23.53.22 2010 January 2010 Camping Equipment Steeping Bigs 51.21 23.53.22 2010 January 2010 Camping Equipment Steeping Bigs 51.21 23.53.22 2010 January 2010 Camping Equipment Steeping Bigs 51.21 23.53.22 2010 Steeping Bigs Podddttestory 4the Malagand January 20.11 Podddttestory 4the Malagand January	P- Public Folders		Options	Actions				
Autobic True to the total program Concerption (Giver) Output program	E-Contraction		Vaar	Month	Product ine	Product type	Opening inventory	A Duantity shipped
 	- AutoSze		2010	January 2010	Capring Equipment	Cooking Gear	236 107	224 034
Image: Server Double Server Double Server	- C AnalysisStu	dioProductByYearRevenue	2010	January 2010	Camping Equipment	Tante	51 253	53.982
Image: Defaultiestation (Defaultiestation (Defaul	- BarOverDo	nutsCharts	2010	January 2010	Camping Equipment	Classics Dava	51,235	63,332
- • Drddekeprostations Imp Progrup * Pro	- DefaultNes	edReport_noAutSize	2010	January 2010	Camping Equipment	Steeping Bags	54,218	53,735
ProductineTarget, and page, and page and pa	Next res_6 Next res_6 Productin Productin	Jonume provesse sitoryList-multipage entoryList-multipage-30rows entoryList-multipage_23_1 entoryList-multipage_23_1_monatosee entoryList-multipage_23_1_monatosee entoryList-multipage_23_1						
PoductureTarget_mappointsReport PoductureTarget_mappoints	- 🚰 ProductLin	:Target_auto_23_1 :Target_manprompt_23_1						
Le PrompRayerhompteReport PrompRayerhompteReport PompRayerhompteReport PompRaye	- ProductLin	Target_manprompt_23_2						
⊕ Doffwords ⊕	- PromptPag	ePromptedReport						
Pio Odf/typeTess Pio Odf/typeTess Pio Pepadotat Pio Pepadotat Pio Pepadotat Pio Pepadotat Pio Pepadotat Pio Serpie_Dettrough Pio Serpie_Dettrough Pio Serpie_Dettrough	🖲 🧰 DrilThrough							
Pierovitat	DbjTypeTests							
☐ # Poseviat ∯ = Reportanyout ∯ = WecPartFitters ∯ = Samples ∯ = Samples, Distribution ∯ = Samples, Distribution ∯ = Samples, Distribution	0- Output Tests							
V → Repolutions Bright Methods Repolutions	I I I I Diagon/Mait							
Image: Samples Image: S	in Constant							
* is simple_Dittrough * is simple_Dittrough * is simple_Dittrough	ReportLayout							
	P- ReportLayout P- WebPartFitters P- Samples							
B 0 409-000109 C0 10.3 3 0TM	ReportLayout Generation Samples Definition	h						
		lþ						

Note: In general setting HTML height in percent is only effective on within the web page it is included. If the page is embedded in an iframe, particularly in the case (such as SharePoint host page/Cognos iframe scenario) where the host page and iframe page are in different domains, then communication on height does not take place, so 100% loses its context.



2.2 Adjusting SharePoint page layout for IBM Cognos reports

This Quick Start shows an example of modifying a SharePoint Web page for IBM Cognos reports via JavaScript. It assumes the following:

- The SharePoint site is based on the "Team Site" template and uses the default master page
- The content page was generated from a SharePoint Web Part Page template

The JavaScript, HTML and CSS provides the following:

- Show and hide of the SharePoint master page side navigation panel (sideNavBox)
 - O Provides the user with an HTML button to toggle show/hide for the side nav panel
 - Initially hide the side nav panel

 \diamond Changes the main borders/margins for the web parts and web part zones to 0 pixels Steps:

This assumes that a QueryVision Report Viewer web has been added to the page and configured to run a report. Autosizing is not required. Including a QueryVision Content Manager Navigation tree Web Part is optional.

• Select to edit the page and add a Script Editor Web part to either the header web part zone or in the "Add a Web Part" area immediately above the QueryVision Report Viewer

SharePoint					Newsfeed	OneDrive	Sites	Neil J. Thomso
BROWSE PAGE INSERT W	EB PART							🗘 SHARE 🔮
Stop Editing Edit Manage	age	oprove Reject Workflows	Edit Mobile Page - Make Homepage I	Title Bar Properties Tags & Notes Tags and Notes				
Categories	Parts			About the part				
Document Sets Filters Forms Media and Content QueryVision Web Parts Search Search-Driven Content Social Collaboration Upload a Web Part ▼	Content Editor Get started with your site Image Viewer Media Web Part Page Viewer Picture Library Slideshow Web Script Editor	Silverlight Web	Part	Content Editor Allows authors to enter Add part to: Body	rich text content.		ſ	Add
Homo							_	
Documents	Header							
Recent								
ExampleYearListForPro mpts ProductTypeList			Ac	dd a Web Part				
Cognos BI								
Site Contents								
EDIT LINKS	Add a Web Part	QueryVisio Options Ac	n Report Viewe	Add a Web P	art			



- The Script Editor web part should then appear in the selected web part zone with the label "Script Editor". Click on the "Edit Snippet"
- Compose the following using any text or programming editor using the *SharePoint web page layout mods snippets.htm* file as a starting point. This can be done by removing HTML (the other button definitions) and JavaScript (initialization and calls to other show/hide functions) as required:

```
// this adds a single button to show/hide the side nav box
» 
  » 
     >> <input type="button" id="QvtSideNavBoxShowHideBtn" value="Show Navigation"></input>
  >>
  » 
  <style type="text/css">
» .qvtS4TitlerowHide{ display: none !important;}
  .ms-webpartPage-root {
     border-spacing: 0px !important;
- - - - }
  .ms-webpartzone-cell {
   margin: Opx !important;
  --}
</style>
<script type="text/javascript" src="/wpresources/Queryvision.Webparts/js/qvtShrPntWidthUtils.js"></script>
<script language="javascript">
    spBodyOnLoadFunctionNames.push("qvtSideNavBoxShowHide");
 function qvtSideNavBoxShowHide()
  ---{
qvtShrPntWidthUtils.sideNavBoxShowHide({
showHideBtnID: "QvtSideNavBoxShowHideBtn", // optional, default: no button
```

```
</script>
```

---> });

• You should now see the following in the Script Editor, which includes rendering the "Show Navigation" button

Paste some script or emb	ed code below.			_
				~
<	td>			
	<input <="" id="QvtSideNa</td><td>wBoxShowHideBt</td><td>n" td="" type="</td><td>button"/>			
value="Show Navigation	n"> /td>			~
			Insert	Cancel

·····» » // cbMargins: // optional default: '0px 0px 0px 0px'

• Click on Stop editing. You should now see the following:



- The whitespace due to margins and borders have been reduced/removed (set to "0"/zero)
- ◊ The master page side nav box is hidden
- ◊ The Show Navigation button is visible

SharePoint		Newsfeed	OneDrive	Sites	Neil J. Thor	mson v	ø	?
BROWSE PAGE					🗘 Share	☆ FOLI	LOW	
	eryVision Development	🖋 EDIT LINKS	Search th	nis site		Q]	^
Show Navigation QueryVision Re	port Viewer Webpa	art						
Options Actions								
		Report title						
80%			Re	t ailer cour United Stat Canada Mexico	n try es			

• Clicking the Show Navigation button should show the side nav panel and change the button label to "Hide Navigation".





3. DOCUMENT GUIDE

To help you find the information you are looking for here is a quick description of each section of this document:

- **Quick start** step by step: Enable and display an IBM Cognos report with Autosizing. Modify the SharePoint page with JavaScript to show and hide the master page side navigation panel
- Introduction Why you should strongly consider using QueryVision's Autosizing and SharePoint Page layout tools
- Problem Overview why embedding IBM Cognos content in SharePoint pages can be difficult
- **Solution Overview** High level description the QueryVision solution and a recommended strategy on optimizing height and width for SharePoint pages for IBM Cognos content
- Autosizing
 - Installation and Configuration –installation and configuration for Cognos Servers.SharePoint installation of Autosizing related components is via the web part installation process.
 - SharePoint, Cognos and Browser support SharePoint 2013 vs. Cognos Versions vs. Browser brand and version compatibility and limitations
 - Report Viewer Web Part Properties & Autosizing configuring QueryVision's Report Viewer web part for Autosizing, including recommended settings for web part width and height settings
 - Specifying Resizing Options in a Cognos Report Autosizing requires embedding JavaScript into Cognos reports via Report Studio "html items". The available Autosizing options and how to format them in a Cognos report
 - Orill up/down behavior Autosizing support for drill up/down behavior
 - Autosizing reports with multiple page definitions how to enable Autosizing for reports with one or more prompt pages and/or report page definitions
 - Drill-through behavior how to enable both source and target reports for Autosizing
- SharePoint Page Layout Modification Tools
 - SharePoint specific JavaScript page layout manipulation considerations some of the key idiosyncrasies of SharePoint generated web pages
 - Example of specific techniques used some examples of how QueryVision's solution deals with SharePoint specific issues
 - Why the Script Editor Web Part? why you should not use the Content Editor or other Web Parts.
- Appendices
 - **Troubleshooting**
 - Select the appropriate SharePoint page layout
 - **b** Leverage SharePoint built in dynamic sizing capabilities
 - **Creating a SharePoint page from a Web Part Page template**
 - O Pitfalls of Share Points "Focus on content"



- **Output** Guide for Cognos Report Heights
- **Detailed Feature Specifications** details on what Autosizing can and cannot do
- Advanced Autosizing Multi-tabbed Dashboard via Nested Reports how to use Cognos reports as HTML containers for presenting multiple reports using html controls (tabs, buttons, etc.) for report selection, plus, how to configure this technique for Autosizing



4. INTRODUCTION – OPTIMIZING IBM COGNOS/SHAREPOINT INTEGRATION

QueryVision's commitment has always been to make embedding of IBM Cognos content into SharePoint - simpler, faster and easier.

With QueryVision's Autosizing solution suite, we take that a step further, introducing dynamic resizing of IBM Cognos Reports and application page layout modification techniques that dramatically reduce the time and cost to provide seamless integration in SharePoint

The following were the key issues that were identified:

- Customers were increasingly using IBM Cognos content that would dynamically change the height required within the SharePoint page due to user actions, including dynamically changing reports, drill down and drill through. This was causing vertical scroll bars on many reports, which could not be addressed by out-of-the-box SharePoint or Cognos techniques.
- Many IBM Cognos reports were wider than the SharePoint page layout could support with standard configuration options resulting in horizontal scroll bars.
- This was resulting in expensive solutions including writing custom Cognos Reports for use in SharePoint or modifying SharePoint pages, Master pages and templates.

The requirement was to:

- Slash the development time
- Avoid custom Cognos Reports for SharePoint
- Avoid changing SharePoint Master Pages and templates or use of SharePoint Designer
- Leverage the existing skills of Cognos and SharePoint application developers

The solution includes a suite of components and techniques which can be mixed and matched as required

- Autosizing Enable Cognos reports for dynamic and static sizing options in SharePoint
- SharePoint Page Layout Modification Tools Adjust space on the SharePoint page for Cognos Reports

For an overview and demonstration see the video on the QueryVision YouTube channel



Autosizing Samples

Here are two examples of IBM Cognos/SharePoint integration – before and after applying Autosizing :

Single wide & tall report

arePoint															Newsfeed	d OneD	rive Sites	Neil J. Tho	omson
ISE PAGE																		🗘 SHARE	÷
QueryVision Development WithoutAuto	≠ edit links DZIZC															Sea	arch this site		
ne uments ent Example YearListForPro mpts ProductTypeList	QueryVision R	eport	Viewer	Webpart			_												
lognos BI							PI	oduc	t Line	(Sour	ce) - with	nout Autosiz	ing				_		^
Contents	Product line	Product type	Product	Product number	Product key	Introduction date	Product brand	Product brand	Product brand	Product	Campaign	Revenue	Gross margin	Gross profit	Unit cost	Unit price	Product cost	Quantity P	la
FOT LINKS	Camping Equipment	Cooking Gear	TrailChef Canteen	2110	30002	15-Feb-01 12:00:00 AM	701	701	TraiChef	2 liters	Regular sale				7.22	12.88	5,171,982.32		1
				2110	30002	15-Feb-01 12:00:00 AM	701	701	TrailChef	2 liters	TrailChef Campaign	2,452,413.29	87.8062	1,016,470.83	6.68	13.13	1,435,942.48	258,887	
			TrailChef Cook Set	5110	30005	15-Feb-01 12:00:00 AM	701	701	TrailChef	6-piece	Regular sale				34.97	54.93	27,283,594.00		
				5110	30005	15-Feb-01 12:00:00 AM	701	701	TraiChef	6-piece	Rising Star Campaign	0	0	-1,021,880.21	31.31	54.93	1,021,880.21	33,580	
			Cup	4110	30004	15-Feb-01 12:00:00 AM	701	701	TraiChef	330 ml	Regular sale	1 101 504 0	00.4022	710 779 4	0.85	3.66	1,095,302.91	527.024	
			TrailChaf	0110	30004	12:00:00 AM	701	701	TraiChef	Sou mi	Campaign	1,101,004.6	99.4032	112,118.4	81.03	129.72	35 122 883 85	027,904	
			Deluxe Cook Set	6110	30008	12:00:00 AM 5-Mar-03	701	701	TraiChef	9-piece	sale	0	0	-404.921.99	55.69	129.72	404.921.99	7.271	-
			TrailChef	8110	30008	12:00:00 AM 5-Mar-03	701	701	TrailChef	Double-	Star Campaign Regular				75.00	151.77	16,454,175.00		
			Double Flame	8110	30008	12:00:00 AM 5-Mar-03	701	701	TraiChef	burner Double-	salé Rising	1,642,035.11	60.6087	564,510.11	75.00	151.77	1,077,525.00	14,387	
				8110	30008	5-Mar-03	701	701	TrailChef	Double- burner	Campaign TrailChef	1,253,950.72	14.705	368,725.72	75.00	151.77	885,225.00	11,803	
			TrailChaf	9110	30009	AM 5-Mar-03	701	701	TrailChef	1.5 liters	Regular				5.28	13.22	7,748,232.08		
			Kettle			12.00.00													

Before Autosizing

SharePoint													Newsfe	ed On	Drive S	ites Neil J	I. Thomso	n- @ ?
RROWSE DAGE																0.5	HARE 🗹	FOLLOW D
QueryVision F Options Action	Report Vie	ewer Webpart				Product L	ine (Sourc	e) - with Au	itosizing & ro	wsPerPage								
Product line	Product type	Product	Product number	Product key	Introduction date	Product brand code	Product brand key	Product brand	Product size	Campaign	Revenue	Gross margin	Gross profit	Unit cost	Unit price	Product cost	Quantity	Planned revenu
Camping Equipment	Cooking Gear	TrailChef Canteen	2110	30002	15-Feb-01 12:00:00 AM	701	701	TrailChef	2 liters	Regular sale				7.22	12.88	5,171,962.32		9,162,560.2
			2110	30002	15-Feb-01 12:00:00 AM	701	701	TrailChef	2 liters	TrailChef Campaign	2,452,413.29	87.6062	1,016,470.83	5.56	13.13	1,435,942.48	256,887	3,399,361.9
		TrailChef Cook Set	5110	30005	15-Feb-01 12:00:00 AM	701	701	TrailChef	6-piece	Regular sale				34.97	54.93	27,283,594.00		42,850,38
			6110	30005	15-Feb-01 12:00:00 AM	701	701	TrailChef	6-piece	Rising Star Campaign	0	0	-1,021,880.21	31.31	54.93	1,021,860.21	33,580	1,844,549
			4110	30004	15-Feb-01 12:00:00 AM	701	701	TrailChef	330 ml	Regular sale				0.85	3.66	1,090,302.91		4,699,948.7
			4110	30004	15-Feb-01 12:00:00 AM	701	701	TrailChef	330 ml	TrailChef Campaign	1,101,504.8	99.4032	712,778.4	0.85	3.66	448,788.40	527,984	1,932,421.4
		TrailChef Deluxe Cook	6110	30006	5-Mar-03 12:00:00 AM	701	701	TrailChef	9-piece	Regular sale			81.03	129.72	35,122,883.85		56,410,687	
		ser	6110	30008	5-Mar-03 12:00:00 AM	701	701	TrailChef	9-piece	Rising Star Campaign	0	0	-404,921.99	55.69	129.72	404,921.99	7,271	943,194.1
		TrailChef Double Flame	8110	30008	5-Mar-03 12:00:00 AM	701	701	TrailChef	Double- burner	Regular sale				75.00	151.77	10,454,175.00		33,290,008.5
			8110	30008	5-Mar-03 12:00:00 AM	701	701	TrailChef	Double- burner	Rising Star Campaign	1,642,035.11	60.6087	584,510.11	75.00	151.77	1,077,525.00	14,387	2,180,479.5
			8110	30008	5-Mar-03 12:00:00 AM	701	701	TrailChef	Double- burner	TrailChef Campaign	1,253,950.72	14.705	368,725.72	75.00	151.77	885,225.00	11,803	1,791,341.3
		TrailChef Kettle	9110	30009	5-Mar-03 12:00:00 AM	701	701	TrailChef	1.5 liters	Regular sale				5.28	13.22	7,740,232.00		19,423,101.6
			9110	30009	5-Mar-03 12:00:00 AM	701	701	TrailChef	1.5 liters	TrailChef Campaign	6,881,090.97	111.5098	3,253,808.87	4.23	13.22	3,827,282.10	887,729	11,471,377.3
		TrailChef Kitchen Kit	-3110	30003	15-Feb-01 12:00:00 AM	701	701	TrailChef	15-piece	Regular sale				15.93	23.80	12,042,781.40		17,992,324

6:20:15 PM

After Autosizing

1



SharePoint Web Parts for IBM Cognos

24/07 DACE							6	CHADE	Y'Y FOUR
WSE PAGE QueryVision Developm	ent 🖌 EDIT UNKS					Search this s	ر. ite	/ SHARE	23 FOLL D
	wors No Autosizo								
	vers no Autosize								
e									
ments									
nt									
xampleYearListForPro	QueryVision Report Viewer Webpart [1]		QueryV	ision Re	oort Viewer V	Vebpart [2]			
npts	Options Actions		Options	Actions					
	Retailer Revenue and Quantity	without A		Pro	oduct Line Ir	ventory .	/ithout Au	tosizin	~
Contents			Ma	Mar all	Destaution	Destautions	0	01-11-1	
	100%	anne a	rear	Month	Product line	Product type	inventory	inventory	
DIT LINKS	80% - Unand Unand and a south of a second and		2010 Ja 2010 Ja	anuary 2010 anuary 2010	Camping Equipment	Cooking Gear Tents	236,107 51,253	585,040	
	and a second second second second second	Munu -	2010 Ja	anuary 2010	Camping Equipment	Sleeping Bags	54,218	111,647	
			2010 Ja	anuary 2010	Camping Equipment	Packs	47,380	83,374	
	₩ 40% -		2010 Ja 2010 Ja	anuary 2010 anuary 2010	Camping Equipment Personal Accessories	Lanterns Watches	92,036 59,299	196,317	
	20%	1 and 1	2010 Ja	anuary 2010	Personal Accessories	Eyewear	192,737	27,307	
			2010 Ja	anuary 2010	Personal Accessories	Knives	140,107	404,335	
		01313131	2010 Ja 2010 Ja	anuary 2010	Personal Accessories	Navigation	33,879	67,798	
	Trans 2 April 2 April 2 June 2	larch 2 July 2 July 2 Mber 2	2010 Ja	anuary 2010	Outdoor Protection	Insect Repellents	251,413	431,141	
	Febr Febr Jann Moverent Febr Febr Au Decent	Septer	2010 Ja 2010 Ja	anuary 2010 anuary 2010	Outdoor Protection	Sunscreen First Aid	197,188 35 128	470,778	
	Open	~	2010 Ja	anuary 2010	Golf Equipment	Irons	6,582	15,122	
		>	2010 Ja	anuary 2010	Golf Equipment	Woods	4,605	9,278	
			2010 Ja 2010 Ja	anuary 2010 anuary 2010	Golf Equipment Golf Equipment	Putters Golf Accessories	25,247 43.533	69,264 88.420	
			2010 Fe	ebruary 2010	Camping Equipment	Cooking Gear	585,040	565,338	
			2010 Fe	ebruary 2010	Camping Equipment	Tents Classics Ress	136,819	133,613	
			2010 Fe	ebruary 2010 ebruary 2010	Camping Equipment	Packs	83,374	80,357	
			2010 Fe	ebruary 2010	Camping Equipment	Lanterns	196,317	218,387	
			2010 Fe	ebruary 2010 ebruary 2010	Personal Accessories Personal Accessories	Watches	50,145 27.307	70,197	
			2010 Fe	ebruary 2010	Personal Accessories	Knives	404,335	372,108	
			2010 Fe	ebruary 2010	Personal Accessories	Binoculars	38,116	35,896	~
			2010 19	ebruary 2010	Personal Accessories				
Point E PAGE	Before	e Autosizir	ng	ebruary 2010	Personal Accessories	Newsfeed OneDri	re Sites	Neil J. Tr	homson - RE 🏠 P
Noint PAGE QueryVision Development TWO Viewer	Before	e Autosizir	ng	ebruary 2010	Personal Accessones	Newsfeed OneDri	ve Sites	Neil J. Th	homson RE 🏠 F
oint page QuaryVision Development TWO Viewer vigunon sion Report Viewer Webp:	Before rs with Autosize	e Autosizir	ng	Vebpart [2	Personal Accessones	Newsfeed OneDri	re Sites	Neil J. Tř	homson RE 🏠 F
oint FACE QueryVision Development TWO Viewer sion Report Viewer Webp: Actors	Before rs with Autosize	e Autosizir QueryVision Re Options Actions	port Viewer V	Vebpart [2	Personal Accessones	iewsfeed OneDri	ve Sites	Neil J. Tř	homson - RE 🏠 P
cint FACE QueryVision Development TWO Viewer Sion Report Viewer Webpa Antons Retailer	Before rest taxes rs with Autosize art [] rRevenue and Quantity - with Autosizing	QueryVision Re Options Actions	ng	Vebpart [2 Product) t Line Invento	Kevsteed OneDri	ve Sites	Neil J. Th	homson RE ☆ F
cint PACE Query/Nicion Development TWO Viewer Sion Report Viewer Webpa Antons Retailer	Before rest taxes rs with Autosize art [] r Revenue and Quantity - with Autosizing Protocomposition	e Autosizir QueryVision Re Options Actions	port Viewer V	Vebpart [2 Product type Cooking Gear	Image: second Accessores Image: second Accestres Image: seco	iewsfaed OnsDri iewsfaed OnsDri vith Autosiz Dosing Invertory Cua	e Sites	Neil J. Tř C SHAI	homson RE ☆ R
oint PAGE Query/Nicion Development TWO Viewer vegation Sion Report Viewer Webps Actors Retailer	Entrumes rs with Autosize art [] r Revenue and Quantity - with Autosizing	e Autosizir QueryVision Re Options Actions Verse Month 2010 January 2010 2010 January 2010	Product Ine Compo Equipment Compo Equipment Compo Equipment	Vebpart [2 Product type Cooking Gear Terts Siesping Bass) : Line Inventori Quero jevenov Quero jevenov 228,077 9,229,077 9,229,077	iewsteed OnsDrif	re Sites sarch this site nfty shipped 234,034 53,062 63,735	Unit cost 18.94 120.41 64.89	homson RE 应有
oint PAC QueryVision Development TWO Viewer ingenon Son Report Viewer Webp: Actors Retailer	Before • cert taxs rs with Autosize art [1] • Revenue and Quantity - with Autosizing	e Autosizir QueryVision Re Options Actions Yeer Morth January 2010 January 2010 January 2010	port Viewer V Product Ine Compro Equipment Compro Equipment Compro Equipment Compro Equipment	Vebpart [2 Product type Cooking Gear Terts Sleeping Bags Packs) : Line Inventor 228/07 4:229 4:229 4:229 4:229 4:239 4:239 4:239 4:239	Yest OneOri 2 - V - with Autobiz 2 - 32 -	re Sites earch this site ing 234,034 53,032 63,032 40,851	Neil J. Ti Q SHAP 1024 1024 1024 1024	homson RE 合有
oint PACE QueryVision Development TWO Viewer Vigeton sion Report Viewer Webpp Actions Retaillet	Before * torruss is with Autosize art [] Revenue and Quantity - with Autosizing Theorem and Quantity - with Autosizing	e Autosizir QueryVision Re Optors Actions	Podda Ine Podda Ine Comp Gaumer Comp Gaumer Comp Gaumer Comp Gaumer Comp Gaumer	Vebpart [2 Product Product type Cooking Gear Terts Sileeping Bags Packs Lanterns Watches	Image: second accessores Image: second accesores Image: seco	Yes with Autobit 2 - 3 - 3 - 3 - 3 - 3 - 3	re Sites aarch this site mg 234,034 53,735 40,851 80,006 72,540	Neil J. Tr SHAI SHAI 1894 1895 1894 1894 1895 1894 1895 1894 1894 1894 1895 1894 1895	homson RE 读 f
oint put QueryVision Development TWO Viewer sion Report Viewer Webpp Antons Retailer	Before * Err DMS * With Autosize art [] * Revenue and Quantity - with Autosizing * Revenue and Quantity - with Autosizing	e Autosizir QueryVision Re Optors Actions Ver Month 2010 January 2010 2010 January 2010 January 2010 2010 January 2010 2010 January 2010 January 2010 2010 January 2010 January 2010 2010 January 2010 January	Product Ine Compose Sequence Compose Seq	Vebpart [2 Product type Cooking Bage Tacka Lanterns Vataches Eyewaar Exiones	() ()	Image OneOn Image Image Image <td>re Sites arch this site 234,034 55,862 72,860 74,86074,960 74,960 74,960 74,960 74,960 74,960 74,960 74,96</td> <td>Neil J. Tr SHAI Unit cost 15:041 04:80 70:72 46:20 47:22 46:20 34:74 13:76</td> <td>homson</td>	re Sites arch this site 234,034 55,862 72,860 74,86074,960 74,960 74,960 74,960 74,960 74,960 74,960 74,96	Neil J. Tr SHAI Unit cost 15:041 04:80 70:72 46:20 47:22 46:20 34:74 13:76	homson
oint FACE QueryVision Development TWO Viewer Sion Report Viewer Webps Arrors Retailer Merors	Exercises * Exercises * Star With Autosize art [1] * Revenue and Quantity - with Autoscians * Consume the Start Sta	QueryVision Re QueryVision Re Options Actions 200 January 200 200 January 200 200 January 200 200 January 200 200 January 200 200 January 200 200 January 200	port Viewer V port Vi	Vebpart [2 Product Cooking Gear Terts Sleeping Bags Packs Larterns Watches Ejwwar: Knives Einoculars	Image: President Accessores Image:	Image Oraclinit Second and Oraclinit Image Image	e Sites arch this site arch this sit	Neil J. Ti SHAI Unit cost 1594 120.41 120.41 120.41 120.41 120.41 120.42 120.42 120.42 14.62 14.62 14.62 14.62 14.77 14.62 14.77 14.	homson 程 合 F
oint FAGE Query/Nicion Development TWO Viewer Webp: Actions Rectailer Extense	End of the second secon	QueryVision Re Options Actions Vision January 2010 2010 January 2010	Product Ine Campo Equipment Campo Equipment Ca	Vebpart [2 Product type Cooking Gear Terts Steeping Bags Packs Vibros Farsts Navigation Navigation Navigation	Image: second accessores Image: second accesores Image: seco	Instrument One:OH Securitized One:OH Q - with Autosiz Disary Investory Oue Status - Oue Disary Investory Oue Status - Oue Disary Investory Oue Status - Oue Disary - Oue Status - Oue Disary - Oue	e Sites arch this site 234054 234054 48,865 48,865 48,865 48,865 40,000 200,161 130,775 30,654 30,000 44,865 30,000 110,775 30,654 30,000 110,775 30,654 30,000 110,775 30,654 30,000 110,775 30,654 30,000 110,775 30,000 110,775 30,000 110,775 30,000 110,775 30,000 110,775 30,000 110,775 30,000 110,775 30,000 100,000 100,0000 100,0000 100,0000 100,0000 100,00000000	Neil J. Ti SHAI Unit cost 1594 120.41	homson -
oint PAGE QueryVision Development TWO Viewer Webp: Actions Rectailer Page 10 Page 10	Ender s with Autosize art [] revenue and Quantity - with Autosizes art [] revenue and Quantity - with Autosizes before revenue and Quantity - with Autosizes before b	e Autosizir QueryVision Re Options Actions Visit Manay 2010 2010 January 2010	Postad free Product free Camping Equipment Camping Equipment Campi	Vebpart (2 Product/pe Cooking General Product type Cooking General Packa Steering Bage Packa Steering Packa Steering Packa Steering Steering	Image: second accessores Image: second accesores Image: seco	Instruction One:Onio Image: Comparison of the image of the	re Sites arch this site 734,034 234,034 234,034 234,034 234,034 234,034 234,034 234,034 234,034 230,042 200,042 200,040 200,042 200,00	Neil J. Tr SHAH Unit cost 12041 12041 12041 12041 12041 12042 14021 14021 14021 14021 12728 14022 14722 14022 1	homson - RE ☆ F
oint pate pate pate pate pate pate pate pat	er russ s with Autosize ar [] revenue an Quantity - with Autosians revenue an Quantity - with Autosians	e Autosizin QueryVision Re Options Actions Ver Month 2010 January 2010 2010 January	Product Ine Compose Systems Product Ine Compose Systems Compose Systems Compos	Vebpart [2] Product) t Line Inventor 2.28.07 4.208 4	Instrument OneOri Image: Control of the second secon	re Sites arch this site 234,054 234,054 53,952 234,054 234,054 234,054 234,054 234,054 234,054 234,054 236,059 236,059 236,059 24,050 26,059 2	Neil J. Tr SHAI Unit cost 12041 12041 12041 12045 12045 12045 12045 12045 12045 12045 12046 1375 1492 12728 1492 12728 1492 12728 1492 12728 1492 12728 1492 149	hamson RE 🏠 I
cint pdc QueryVision Development TWOO Viewer Webpo Totom Totom Recalled UNIT OF TOTAL Statement State	Deform	e Autosizir QueryVision Re Optors Action Very Manay 200 200 Janary 200 Janary 200 200 Janary 200 Ja	Podda Ine Campo Equipment Campo Equipment Camp	eeway 2010 Vebpart [2 Product Produc	Presonal Accessores // /	Imagenetic OneOnit 4eexsfaed OneOnit 5 5 5 5 5 5 5 5 5 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 111647 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5 111547 5	rg Skei arch this she arch this she shapped 234.024 53.025 72.540.24 54.024 72.540.24 54.024 72.540.24 54.025 72.540.24 54.025 72.540.240.240.240.240.240.240.240.240.240.2	Neil J. Tr SHAI SHAI 1804 1804 1804 1804 1804 1804 1804 1804	homson RE 公主
cint FACE Carry Vision Development TWO Viewer Webps Arrors Rectaller William Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller UNITATION Rectaller Rect	Perruns rs with Autosize art [] Prevenue and Quantity - vith Autosize	e Autosizin QueryVision Re option: Actions 200 January 200 200 January 200	Posta Ine Compa Equipment Compa Equipment Compa Equipment Compa Equipment Compa Equipment Compa Equipment Compa Equipment Compa Equipment Compa Equipment Compa Equipment Control Postantin Panonal Accessions Periodal Accessions Periodal Accessions Periodal Accessions Periodal Accessions Periodal Accessions Periodal Accessions Codeo Projection Codeo Projection Codeo Projection Codeo Periodal Codeo Periodal Cod	Vebpart [2 Productor Produ	Image: President Accessores Image:	Image Oracing Oracing Second and an analysis Second analysis Second analysis Second analysis Second analysis Second analysis	rg mg mg 284.0244 284.024 284.024 284.024 284.024 284.024 284.024 284.024 284.	Neil J. T SHAI Unit cost 18.94 120.41	homson RE 公主
oint FACE Query/Nion Development TWO Viewer Webp: Arrow Retailer Union Retailer Union Retailer Listorer Retailer Listorer Retailer Listorer Retailer	er uns rs with Autosize art [] revenue and Quantir - with Autosize revenue and Autosize revenue an	e Autosizin QueryVision Re Options Actions 200 January 2010 200 January 2010 20	Posta Ine Campo Equipment Campo Equipment	Vebpart [2 Productors Produc	Image: Second Accessores Image: Sec	Instrument One:Off Securitized One:Off Securitized One:Off Operating Operating	Image Sines Image Image Image <td>Neil J. Tr SHAN Unit cost 12041 1200</td> <td>homson RE ĝ f</td>	Neil J. Tr SHAN Unit cost 12041 1200	homson RE ĝ f
oint PACE Query/Vision Development TWO Viewer Webp: Actors Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer Re	er runs revenue and Quantity - with Autosizes art [] Revenue and Quantity - with Autosizes Constanting of the second of t	e Autosizin QueryVision Re options Actions Versi Month 2010 January 2010 2010 Januar	Productine Productine Compt Viewer V Productine Compt Equipment Compt Equipment Compt Equipment Compt Equipment Compt Equipment Compt Equipment Compt Equipment Coder Protection Odder Protection	Vebpart [2 Product/period Product/pe	Image: second Accessores Image: sec	Instrument One:OH Image: Second	 Stea strath this site arch this site <	Neil J. Th SHALL Unit cost 15:04	homson RE ☆ F
oint FACE QueryVision Development TWOO Viewer Webp: Action Report Viewer Webp: Action Report Viewer Webp: Control Report	Pertures a with Autosizes art [] Pertures	e Autosizin QueryVision Re Optors Actions Ver Month 2010 January 2010 2010 January 2	Polyce free Polyce free Polyce free Camping Equipment Camping Equi	Vebpart [2 Product Productor Product	Image: second accessores Image: second accesores Image: seco	Instrument Onexpire Image: Control of the second sec	e Stea arch this site my shoped 50,022 40,034 40,005 90,014 102,477 90,005 110,147 90,005 90,014 102,477 90,000 104,005 90,005 9	Neil J. T SHA SHA Unit cost 1594 1594 1594 1594 1594 1594 1594 1594	homson RE ☆ P
oint PAC QueryVision Development TWOO Viewer Webps: Actions Report Viewer	Pertures a with Autosizes art [] Pertures	e Autosizin QueryVision Re Optors Action Ver Manay 200 200 Annay 200 200 Ann	Product Inte Product Inte Campor Equipment Campor Equipment Ca	Vebpart (2 Produce Produce Codig Gen Sease Nones Nones	Image: President Accessores Image: President Accessores </td <td>Instrument OneOnit 4eensteed OneOnit 2 - 3 - 3 - <td< td=""><td> Stea arrch this site arrch this sit</td><td>Veil J. TT SHAIL J. TT SHAIL</td><td>hamson</td></td<></td>	Instrument OneOnit 4eensteed OneOnit 2 - 3 - 3 - <td< td=""><td> Stea arrch this site arrch this sit</td><td>Veil J. TT SHAIL J. TT SHAIL</td><td>hamson</td></td<>	 Stea arrch this site arrch this sit	Veil J. TT SHAIL J. TT SHAIL	hamson
cint FACE Curry Vicion Development TWO Viewer Webps: Arrow Rectaller Union Unio	Perrurs rs with Autosize art () Provenue and Quartity - vith Autosize Provenue and Quartity - vith Autosize Company of the company of the com	CueryVision Re QueryVision Re QueryVis	Podat Ine Campa Extension Campa Extension Camp	Vebpart [2 Productor	Image: President Accessores Image:	Imagenetic OracDrift Secretified OracDrift Imagenetic Imagenetic Imagenetic Imagenetic <td< td=""><td>o Sites arrch this site arrch this site arrch this site 228,034 228,034 228,034 228,034 228,034 228,034 228,034 228,034 238,034 228,034 238,034 228,034 238,034 208,0161 130,147 102,020 228,034 208,034 252,047 208,047 228,027 98,329 74,492 208,327 74,492 208,328 74,100 98,342 132,994</td><td>Neil J. T/ SHAH SHAH SHAH SHAH SHAH SHAH SHAH SHA</td><td>hamson</td></td<>	o Sites arrch this site arrch this site arrch this site 228,034 228,034 228,034 228,034 228,034 228,034 228,034 228,034 238,034 228,034 238,034 228,034 238,034 208,0161 130,147 102,020 228,034 208,034 252,047 208,047 228,027 98,329 74,492 208,327 74,492 208,328 74,100 98,342 132,994	Neil J. T/ SHAH SHAH SHAH SHAH SHAH SHAH SHAH SHA	hamson
Cont PAGE QueryVision Development TWO Viewer Webpz Actions Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer United States Retailer Retaile	e renter s with Autosize art [] Revenue and Quantity - urb Autosize Provenue an	e Autosizin QueryVision Re option Actions 200 Jamay 2010 200 Jamay 2010 2	Posta Ine Campo Espanor Campo Espanor Campo Espanor Campo Espanor Parcial Accessions Parcial Accessions	Vebpart [2 Productors	Image: Control of Accessores Image: C	Instrument OneOff Sensitived OneOff Sensitived OneOff Sensitived OneOff Sensitived Sensitive	rg rg rg rg rg rg rg rg rg rg	Neil J. T. Q. SHAI 10.64 120.41 120.4	homson - Æ ΥΥ F
Cont PAGE QueryVision Development TWOO Viewer sion Report Viewer Webps Tetrans Retailer Uit for Uit for	er une s with Autosize art [] Revenue an Quanty - un Autosize Constanting of Constanting 	e Autosizin QueryVision Re option Autom Very Month Option Autom Very Month Option Autom Very Month Option Autom Option Auto	Product time Product time Campo Equipment Campo Equipment Paronal Accessions Paronal Accessions P	Vebpart [2 Product/pe	Image: Pressonal Accessores Image:	Instrument One:OH Securitized One:OH Securiti	g Sites ing rstr.h this site rstg.htpsed 224.024 234.024 234.024 234.024 46.051 200.161 132.747 92.04.361 92.04.364 92.04.362 72.540.04 92.04.361 92.04.362 92.04.361 92.04.362 92.04.361 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362 92.04.362	Unit cost SHAIN Unit cost 12041 12051 1	hamson Æ ☆ F
Voint PAGE QueryVision Development TWO Viewer Webps arganon Sigon Report Viewer Webps Actors Retailer	e ranse s with Autosizes art [7] Pronue an Quanty - un Autosize Provue an Quanty - un Autosize Pro	e Autosizin QueryVision Re Optors Action 200 January 200 200 January 2	Productions Productions Campo Equipment Campo	Vebpart [2 Product Pro	Image: second Accessores Image: sec	Newspace Image: Construction One:Off Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Construction Image: Co	ng Steel mg mg mg mg mg mg mg mg mg mg	Unit cost Unit cost 15.041 15.041 15.041 15.041 15.041 15.041 15.041 15.041 15.041 15.041 16.041 17.072 2.13 2.142 2.14	homson -
Note PAGE QueryVision Development TWO Viewer Webps action Action Control Contro	<pre>Protects s with Autosize art [] Created and antipart of the antipart of the antipart of the antipart of the antipart of the antipart of the antipart of</pre>	e Autosizin QueryVision Rec QueryVision Rec QueryVision Rec QueryVision Rec QueryVision Rec QueryVision Rec QueryVision Rec Rec QueryVision Rec QueryVision Rec Rec Rec QueryVision Rec Rec Rec QueryVision Rec Rec Rec QueryVision Rec Rec Rec Rec Rec Rec Rec Rec	Podet Int Carry & Carry & Carr	Vebpart (2 Produce Produce Codeg Gene Sease Press Sease Bandar Manha Sease Press Sease Sea	Image: Pressonal Accessores Image: Pressonal Accessores </td <td>Newspect Aversified OneOrit Image: Second Se</td> <td> Stea arrch this site arrch this sit</td> <td>Neil J. T. SHAI Unit cost: 1594 1594 1594 1594 1594 1594 1594 1594 1594 1694 1694 17072 1492 2437 1518 16304 1524 257 258 259 659</td> <td>homson -</td>	Newspect Aversified OneOrit Image: Second Se	 Stea arrch this site arrch this sit	Neil J. T. SHAI Unit cost: 1594 1594 1594 1594 1594 1594 1594 1594 1594 1694 1694 17072 1492 2437 1518 16304 1524 257 258 259 659	homson -

After Autosizing



5. PROBLEM OVERVIEW

IBM Cognos/SharePoint integration sizing issues

Cognos reports that are embedded in SharePoint are frequently wider and taller than the SharePoint pages were designed for, particularly if the Cognos Reports and the SharePoint application pages were not explicitly designed for each other.

The tools in Report Studio to control the width and height are limited. Column, row, list and cross tab width and height can be configured to be fixed or dynamic. Using these settings, width can set to expand and contract in a "responsive" manner, but that is still insufficient in many cases. Height can only be controlled with rows per page, which is not configurable out-of-the-box from SharePoint.

SharePoint width can be configured to 100% for web parts and web part zones, but out-of-thebox, the height can only be set to fixed values. As Cognos height can vary based on the report, the data/filtering, drill-down/up or drill-through this frequently results in scroll bars for the report within the SharePoint page.

In many cases, the only way to get sufficient width in SharePoint for a wide Cognos report is to either change the Master or content pages or use JavaScript to dynamically hide some or all of SharePoint page elements above or beside an embedded Cognos report. However, SharePoint pages generated by Master Pages and some content template pages are notoriously difficult to manipulate reliably with JavaScript/CSS.

And finally, embedding Cognos reports in SharePoint involves the use of iframes, which lacks the mechanism to allow space on the parent/containing SharePoint page to be adjusted for the space required by the child page/Cognos content viewer without additional technology.



6. SOLUTION OVERVIEW

At a high level, Autosizing provides the following tools:

Autosizing Tools

Individual Cognos Report Studio reports can be configured with embedded JavaScript to modify height and width behaviour when rendered in SharePoint:

Number of rows per page

Real-time dynamic or static sizing

Changes to Report specifications have been designed and tested to be transparent when running/viewing within Cognos Connection or use by other 3rd party applications.

SharePoint Page Layout Modification Tools

We provide an open source JavaScript library and application techniques to use within individual SharePoint pages to optimize the space available for embedded Cognos content.

6.1 Suggested Solution Strategy

Before we start expanding on using these tools and techniques, we'd like to recommend some strategies:

• Think dynamic height/fixed width

SharePoint and Cognos content both tend to be in table/column format, where width is relatively fixed, but height can vary. For example it is easier to work with (and a best practice) a page that scrolls vertically for additional content vs. horizontally.

So when laying out a SharePoint page to accept Cognos content, design it to accommodate the width of the widest SharePoint and Cognos report that will appear beside each other, while allowing for height to adjust dynamically.

• Avoid SharePoint content to the left or right of a Report

If the width of Cognos reports that could be displayed is not known (e.g. users can interactively select from a list of reports which may be constantly added to or updated), then avoid placing other content beside a Cognos Report

Hide Report selection when not in use

If using either QueryVision's Content Manager Navigation Web part or a custom SharePoint list (or other control) to select reports shown on the page, put the selection control to the left (or right) of the report viewer and use the SharePoint Page Layout Modification Tools to show/hide the selection control web part/web part zone when the user is not actively selecting a report.

• Hide the Master Page header for tall reports

Desktop and laptop screen layouts 16 to 9 (landscape) ratio, so for portrait Cognos content, we suggest using the SharePoint Page Layout Modification Tools to permanently or selectively hide the Master Page header or other content above the report (e.g. other web parts or web part zone content)

Dedicate SharePoint pages for viewing large reports

Where SharePoint pages can't be rearranged for Cognos reports, provide a link - or a link & a small summary Cognos report/chart – to launch a SharePoint page dedicated to Cognos reports.



This provides a page that maximizes the space for Cognos content through hiding parts of the page, but allows the user to show the report selector or site navigation panel as required

A suggested layout for the page would be:

- Use a SharePoint Web Part page template with side by side web part zones.
- Place a report selector web part either QueryVision Content Manager Navigation web part or a SharePoint list of reports – in the left web part zone
- Place a QueryVision Report Viewer web part in the web part zone to the right of the report selector web part. Make sure this wep part zone has width = 100%.
- Add script to the page with the SharePoint Page Layout Modification Tools:
 - Hide the Master Page header and side nav bar/panel/box (initial hide = true), with a button to allow the side nav panel to be shown/hidden.
 - Add a button to show/hide the web part zone with the report selector. If there is a
 default report, then set the initial hide = true, otherwise set to false.

6.2 Autosizing - enable Cognos reports for dynamic sizing in SharePoint

Background

As JavaScript iframe support allows for a parent page (e.g. SharePoint) and a child/iframe page (e.g. Cognos report viewer) to access each other's page elements, conceptually it is possible to add JavaScript to have the child tell the parent what height and width the child's iframe should be set to.

However, current browsers will block this communication ("same origin policy") as the SharePoint and Cognos servers are in different domains.

Neither Cognos reports nor native JavaScript provides a way to determine the actual rendered height of the Cognos page. This is complicated by the fact the Cognos HTML Report rendering also does some dynamic adjustment of where to place such items as the page footer and page navigation controls (start/previous/next/end) for multipage reports (e.g. list and cross tab reports).

Solution

QueryVision has adapted and extended Dynamic sizing native JavaScript libraries to allow the QueryVision Report Viewer web part and Cognos reports to exchange information to provide real-time dynamic height and width adjustments within SharePoint pages.

The major benefit of dynamic sizing is real-time height adjustments, with additional techniques (see *SharePoint Page Layout Modification Tools*, below) included to provide additional height and width optimization.

Dynamic sizing is optional and backwards compatible. No changes are required to existing QueryVision Report Viewer web parts or Cognos reports.

If a IBM Cognos report is not enabled for Autosizing, then the QueryVision Report Viewer "Report Style Properties" parameter "height" value is used (default: 700px).

The solution requires including JavaScript within IBM Cognos reports, which requires authoring in Report Studio to insert HTML elements to contain the scripts. Other Cognos report/content types can be supported by converting them to Report Studio reports.

Dynamic sizing only applies to running reports in HTML mode. It does not apply to running reports in pdf or other output formats. It does not apply to displaying saved output, including the "default output" option (equivalent to the Cognos Connection "default action" value "view most recent report") which will use a saved output if available or run the report live otherwise.



Adding dynamic sizing JavaScript to Cognos Report specifications does not impact any aspect of using reports in Cognos Connection or with other 3rd party applications.

The in-report scripts include referencing the required JavaScript files/libraries, plus a Javascript defined JSON block which specifies the dynamic sizing options. The key options are

- Dynamic height
 - Min and maximum height (pixels)
 - A Rows per page (where applicable)
 - Additional height (pixels) for the page footer/page navigation controls for multi-page reports
- Static height
 - height in pixels
 - A Rows per page (where applicable)

For more information see the following:

<< pointers to specific sections in the document for autosizing>>

6.3 SharePoint Page Layout Modification Tools

The annotated screen shot, below, shows a Cognos Report embedded in a typical SharePoint page. The SharePoint Site was generated from the "Team Site" template, and uses the default Team Site master page. This particular page was generated by selecting to create a web part page using one of the built in web part page templates.

SharePoint															Ne	wsfeed	OneDrive	Sites	Neil J. Thoms	on- 🔯	?
BROWSE PAGE																			Q SHARE f	2 FOLLOW)Ľ
QueryVision Development Without	itAutozi	ort unvis Z C			Mas	ter P	age:	Hea	der								Search	this site		٩	^
Home Documents Recent					CS	SS: p	addir	ng v	vhite	espa	ice										
ExampleYearListForPro mpts DroductTuneList	Qu	eryVision Re ations Actions	eport	Viewer	Webpart			Rep	ort	View	/er -	+ Me	nu								
Cognos Bl								P	roduc	t Line	(Sour	<u>ce)</u> - with	nout Autosia	ing					~		
Site Contents		Product line	Product type	Product	Product number	Product key	Introduction date	Product brand code	Product brand key	Product brand	Product Size	Campaign	Revenue	Gross margin	Gross profit	Unit cost	Unit price	Product cost	Quantity		
 EDIT LINKS 	Q	amping Equipment	Cooking Gear	TrailChef Canteen		30002	15-Feb-01 12:00:05			TrailChef	2.00ers	Regular sale					12.88	5,171,982.33			
Master Page					2110	30002	15-Feb-01 12:00:00 AM	701	701	TrailChef	2 iters	TrailChef	2,452,413.29	87.6082	1,016,470.83	5.55		1,435,942.40	256,867		
SideNavBox				TrailChef Cook Set	5110	30005	15-Feb-01 12:00:00 AM		IB	M Co	ogno	os Re	eport			34.97	54,93	27,283,594.00			
					5110	30005	15-Feb-01 12:00:00 AM	701	701	TraiChef	8-piece	Rising Star Campaign	0	0	-1.021.888.21		64.93	1.021.860.21	33,580		
				TrailChaf Cup	4110	30004	15-Feb-01 12:00:00 AM	701		TrailChef	330 mi	Regular sale				0.85	3.66	1.090,302.91			
					4110	30004	15-Feb-01 12:00:00 AM			TrailOhef	330 mi	TrailChef Campaign	1,151,554.8	99.4032	712,778.4	0.85	3.00	448,786.40	2 527,984		
				TrailChef Delcom Cook	8110	30005	5-Mar-03 12:00:00 AM			TrailChef	9-piece	Regular sale				81.03	129.72	35,122,883.85			
				Set	8110	30006	5-Mar-03 12:00:00 AM	701		TrailChef	9-piece	Rising Star Campaign	io.	0	-454.921.99	55.69	129.72	404,021.00	7,271		
				TrailChef Double Flame	8110	30008	5-Mar-03 12:00:00 AM	701		TraiChef	Double- burner	Regular sale				75.00	151.77	18,454,175.00			
					8110	30008	5-Mar-03 12:00:00 AM	781		TraiChel	Double- burner	Rising Star Campaign	1,642,035.11	80.8067	584,510.11	75.00	151.77		14,387		
					8110	30006	5-Mar-03 12:00:00	701	701	TrailChef	Double- burner	TrailChef Campaign	1,253,950 72	14.705	368,725.72	75.00	151.77	885,225.00	11,803		~

The area highlighted in green (IBM Cognos Report) is the maximum space available by default, which is 75% of the width, 58% of the height and 50% overall for the page.

So in addition to dynamic sizing for height, there needs to be reliable ways to change the SharePoint page layout without changing the SharePoint master page or content pages at the HTML source level.



The result is the toolkit of JavaScript, HTML and CSS overrides via use of the SharePoint Script Editor Web Part.

We provide a package of open source JavaScript functions and solution specific sample scripts plus CSS styles and HTML to:

- Show/hide elements of Master pages
- Show/hide adjacent web part zones
- Various strategies and techniques for optimizing white space.

The following shows an example of applying these techniques to the page shown above:

SharePoint													Newsfe	ed One	eDrive S	ites Neil J	. Thomso	n- 🌣 ?			
BROWSE PAGE	E															Q s	HARE 🏠	rollow 🖂			
QueryVision F Options Action	Report Vie	ewer Webpart																			
						Product L	ine (Sourc	e) - with Au	rtosizing & ro	wsPerPage											
Product line	Product type	Product	Product number	Product key	Introduction date	Product brand code	Product brand key	Product brand	Product size	Campaign	Revenue	Gross margin	Gross profit	Unit cost	Unit price	Product cost	Quantity	Planned revenue			
Camping Equipment	Cooking Gear	TrailChef Canteen	2110	30002	15-Feb-01 12:00:00 AM	701	701	TrailChef	2 liters	Regular sale				7.22	12.88	5,171,962.32		9,162,560.24			
				2110	30002	15-Feb-01 12:00:00 AM	701	701	TrailChef	2 liters	TrailChef Campaign	2,452,413.29	87.6062	1,016,470.83	5.58	13.13	1,435,942.48	258,887	3,399,381.99		
		TrailChef Cook Set	5110	30005	15-Feb-01 12:00:00 AM	701	701	TrailChef	6-piece	Regular sale				34.97	54.93	27,283,594.00		42,858,388			
			5110	30005	15-Feb-01 12:00:00 AM	701	701	TrailChef	6-piece	Rising Star Campaign	0	0	-1,021,860.21	31.31	54.93	1,021,880.21	33,580	1,844,549.4			
		TrailChef Cup	4110	30004	15-Feb-01 12:00:00 AM	701	701	TrailChef	330 ml	Regular sale				0.85	3.66	1,096,302.91		4,699,948.74			
			4110	30004	15-Feb-01 12:00:00 AM	701	701	TrailChef	330 ml	TrailChef Campaign	1,161,564.8	99.4032	712,778.4	0.85	3.66	448,788.40	527,984	1,932,421.44			
		TrailChef Deluxe Cook Set TrailChef Double Flame	TrailChef Deluxe Cook (Set	TrailChef Deluxe Cook Set	6110	30008	5-Mar-03 12:00:00 AM	701	701	TrailChef	9-piece	Regular sale				81.03	129.72	35,122,883.85		56,410,687.8	
					Set	Set	Set	6110	30006	5-Mar-03 12:00:00 AM	701	701	TrailChef	9-piece	Rising Star Campaign	-0	0	-404,921.99	55.69	129.72	404,921.99
			8110	30008	5-Mar-03 12:00:00 AM	701	701	TrailChef	Double- burner	Regular sale				75.00	151.77	16,454,175.00		33,296,668.53			
				8110	30008	5-Mar-03 12:00:00 AM	701	701	TrailChef	Double- burner	Rising Star Campaign	1,642,035.11	60.6087	564,510.11	75.00	151.77	1,077,525.00	14,387	2,180,479.59		
			8110	30008	5-Mar-03 12:00:00 AM	701	701	TrailChef	Double- burner	TrailChef Campaign	1,253,950.72	14.705	368,725.72	75.00	151.77	885,225.00	11,803	1,791,341.31			
		TrailChef Kettle	9110	30009	5-Mar-03 12:00:00 AM	701	701	TrailChef	1.5 liters	Regular sale				5.28	13.22	7,748,232.08		19,423,101.62			
			9110	30009	5-Mar-03 12:00:00 AM	701	701	TrailChef	1.5 liters	TrailChef Campaign	6,881,090.97	111.5098	3,253,808.87	4.23	13.22	3,627,282.10	867,729	11,471,377.38			
		TrailChef Kitchen Kit	-3110	30003	15-Feb-01 12:00:00	701	701	TrailChef	15-piece	Regular sale				15.93	23.80	12,042,761.40		17,992,324			

30-Nov-15 ☆ Top ☆ Page up ¥ Page down ≭ Bottom 6:20:15 PM

For more information see the following:

• Section 8 SharePoint Page Layout Modification Tools

7. AUTOSIZING

7.1 Installation and Configuration

SharePoint Server

Installation of the Autosizing components for SharePoint is included as part of the Web Part installation process.

Cognos Server

On each Cognos Server, several JavaScript libraries/.js files need to be copied.

Find the *<installLocation>\ibm\cognos\c10_64\webcontent* folder add a *\queryvision* sub folder and include the following files from the installed QueryVision\QueryVision SharePoint Web Parts\Configuration folder:

- ◊ iframeResizer.min.js
- ◊ qvtResizer.min.js
- iframeResizer.contentWindow.min.js
- o qvtResizer.contentWindow.min.js



Not all of these .js files are required for all Autosizing scenarios. See the in depth section for details

7.2 SharePoint, Cognos and Browser support

QueryVision Resizing is supported for SharePoint 2013/2016 for Cognos 10.2.0 (FP2+), 10.2.1 (FP3+), 10.2.2 (RTM+) and IBM Cognos Analytics 11.0 (current to 11.0.3.0).

Cognos Content support:

- SharePoint Page Layout Modification Tools are supported for any Cognos content
- Dynamic and Fixed/Static resizing is supported for Report Studio reports only.

Dynamic and Fixed/Static resizing is supported for Web Browsers/Versions:

- Microsoft Internet Explorer (8*/9/10/11), Microsoft Edge* (Windows 10)
- Firefox version 32 and later
- Google Chrome* version 32 and later

* Support for IE 8, Chrome and Microsoft Edge have exceptions

- IE 8
 - Multiple Report Viewers on a web part page with dynamic resizing on reports in both Report Viewer.

While general resizing will occur, vertical and horizontal scroll bars will appear as a result of the page footer and navigation controls at the bottom of the page.

- Nested reports where the container report has more than a single iframe will only render one of the iframes.
- Google Chrome Cognos (and therefore QueryVision) provides limited support for Chrome – Chrome support is primarily targeted as a report execution/view environment.
 - Cognos 10.2.2 FP1 and later Client tools are limited to WorkSpace, WorkSpace Advanced, Report Studio and Drill-through Definitions
 - Pre Cognos 10.2.2 (e.g. Cognos 10.2.0) Client tools are limited to Cognos Workspace and Drill-through definitions.
- Microsoft Edge Cognos does not currently acknowledge or list information on Windows 10 Microsoft Edge support and compatibility. Testing with Microsoft Edge shows the same capabilities and behavior as Google Chrome. Essentially this should only be considered for executing or viewing Cognos Report Studio reports in HTML mode.

7.3 Report Viewer Web Part Properties & Autosizing

The Report Viewer Web Part properties can be set by selecting to Edit Web Part from the drop down menu at the right of the web part.



Quer	yVision R	eport Viewer	Webpart [2]		_	•	V
Optio	ons Actions	;				Minimize	
						Close	-
Year	Month	Product line	Product type	Open invent	×	Delete	
2004	January 2004	Camping Equipment	Cooking Gear	2			
2004	January 2004	Camping Equipment	Tents		Ð	Edit Web Part	
2004	January 2004	Camping Equipment	Sleeping Bags			Connections	
2004	January 2004	Camping Equipment	Packs				
2004	January 2004	Camping Equipment	Lanterns			Export	
2004	1	Deserved.	W-1-6			0 70.040	

There are two key properties that need to be set to enable Autosizing:

QueryVision Report Viewer Webpart [2]
QueryVision Report Viewer Prop
Login Page Address
🔲 Redirect To Login Page
Login Redirect Delay
5 💌 seconds
Report Path
/content/folder[@name='Qvttr
Report Title
🖉 Run Report Automatically
Show Toolbar
🗑 Show Menu
Enable Studios
Report Style Properties
overflow:auto;width:100%;heig
Default Report Execution Mode
HTML
Enable Interactive Run Mode

• **Report Style Properties** –allow setting HTML "style" attribute properties for the iframe that contains the Cognos Report.

Any CSS style property type can be included using the style 'string' format of

<property_name>:<property_value>;<property_name>:<property_value>;...<property_name>:<property_value>;</property_value>;

There are 3 mandatory property types: *overflow, width* and *height* which must specified or the properties and their default values will be added by the Report Viewer web part. The following are the default values

- overflow:auto
- ◊ width:100%
- ◊ height:700px



The overflow and width values are recommended, the height value is used as the default height for reports without Autosizing enabled (for setting height during Autosizing, see **Specifying embedded resizing options**, below, for details). It is recommended to specify the default height in pixels (e.g. 1250px) vs. percentage (100%).

The default value of the Report Style Properties reflects the individual default properties/values:

overflow:auto;width:100%;height:700px

• **Default Report Execution Mode** – must be set to HTML for Autosizing (dynamic or fixed/static).

7.4 Enabling Reports for Autosizing

Note: Only Report Studio reports support Autosizing. For IBM Cognos Analytics 11, reports which are identified as "interactive" (runInAdvancedViewer = true) will have any embedded JavaScript stripped out prior to execution.

To enable Autosizing requires insertion of an HTML item containing JavaScript to specify the embedded resizing options and to include the required JavaScript libraries. Which libraries to include are dependent on whether the current report is being autosized or whether this is a Container Report (see Advanced Autosizing – Multi-Tabbed Dashboard, later in this document)

Page layers:	here to cre	eate page la	ayers			Context filter:	members h	ere to creat	e a context	filter (slicer)		
					< HTML it	em > Pro	oduct l	<u>ine (S</u>	Source) - with Au	itosizing &	rowsPerP
Product line	Product type	Product	Product number	Product key	Introduction date	Product brand code	Product brand key	Product brand	Product size	Campaign	Revenue	Gross margi
⊕ ≤ <mark>∎ Product line></mark>	Product type>	Product>	<product number></product 	<product key></product 	<introduction date></introduction 	<product brand code></product 	<product brand key></product 	<product brand></product 	<product size></product 	< <mark>-</mark> Campaign>	<revenue></revenue>	<gros margin</gros
HTML <script <br="" type="text/j;
var QvtReport
</script>
<script language="><script language="</td><td>avascript" StyleProp javascript javascript</td><td>'> berties = '{ " type="te " type="te</td><td>"report":{"runAsH xt/javascript" src: xt/javascript" src:</td><td>łtml":{"dynan ="/queryvisi ="/queryvisi</td><td>nicSize":{"conf on/qvtResizer on/iframeResi</td><td>īg":{"sizelv .contentWi zer.conten</td><td>lode":"dyn indow.js"> tWindow.j</td><td>amicSize" </script> s"> <td>,"maxHeigi ></td> <td>ht":"2600", "if</td> <td>rz_logging":"</td> <td>Contraction of the second seco</td>	,"maxHeigi >	ht":"2600", "if	rz_logging":"	Contraction of the second seco								
										OK	Са	ncel

Note that the HTML item is added to the Title.

The 'var QvtReportStyleProperties = <JSON parameters>' JavaScript and including scripts for the .js libraries must be rendered only once per page definition. The definition to be included should be identical for each page definition.

The following is an example of the full set of scripts in the HTML item

<script type="text/javascript">

```
var QvtReportStyleProperties =
'{"report":{"runAsHtml":{"dynamicSize":{"config":{"sizeMode":"dynamicSize", "maxHeight":"2600", "if
rz_logging":"true", "qv_addHeight":"18px", "qv_rowsPerPage":"14"}}};
```



</script>

<script language="javascript" type="text/javascript" src="../queryvision/qvtResizer.contentWindow.min.js"></script>

```
<script language="javascript" type="text/javascript"
src="../queryvision/iframeResizer.contentWindow.min.js"></script>
```

Important Note for IBM Cognos Analytics 11 and later

While the installation folder location for the .js libraries is the same for ICA 11 as for 10.X, the relative folder location of for the embedded script src= statement for ICA 11 reports is slightly different from 10.X

10.X

```
<script language="javascript" type="text/javascript"
src="<mark>../</mark>queryvision/iframeResizer.contentWindow.min.js"></script>
```

11.X

```
<script language="javascript" type="text/javascript"
src="<mark>../../</mark>queryvision/iframeResizer.contentWindow.min.js"></script>
```

7.5 Specifying embedded resizing options

To specify height within a Cognos Report Studio "Report/object" specification requires the use of an HTML item. Example:

<script type="text/javascript">

```
var QvtReportStyleProperties =
'{"report":{"runAsHtml":{"dynamicSize":{"config":{"sizeMode":"dynamicSize","qv_addHeight ":"25px"}}}};
```

</script>

The report size information is packaged in a JavaScript block as a JSON string (orange) assigned to a JavaScript variable with the name QvtReportStyleProperties

This **must be a single line of JavaScript** (as multi-line string support in JavaScript is potentially error prone). It is recommended to build your JSON in multi-line form (to avoid missing brackets, quotes, etc.) and then to convert to a single line with a utility like http://www.freeformatter.com/json-formatter.html

Dynamic Size

The structure must include "dynamicSize" as the JSON structure containing the "config" properties (highlighted below). This example shows all possible JSON properties that can be specified



```
{
    "report": {
        "runAsHtml": {
             "dynamicSize": {
                 "config": {
                     "sizeMode": "dynamicSize",
                      "htmlStyle": "overflow:auto;width:100%;",
                      "minHeight": "199px",
                      "maxHeight": "1449px",
                      "ifrz autosize": "true",
                     "ifrz_logging": "true",
"ifrz_heightCalcMode": "lowestElement",
                      "ifrz bodyMarginStr": "0 0 0 0",
                      "qv addHeight": "20px"
                 }
            }
        }
    }
}
```

The following shows a more typical example where the default values are acceptable for most properties:

Properties

- sizeMode (mandatory, value must be "dynamicSize")
- htmlStyle (optional) can contain any CSS html *style* properties, except *height* (will be removed).

See the Special Note: height & htmlStyle, below

- minHeight (optional, default is 200px) must be in px (pixels) vs. percent.
- maxHeight (optional, default is 1320px) must be in px (pixels) vs. percent.
- height if this JSON property is included in a dynamicSize configuration, it will be ignored
- **ifrz_autosize** (optional, default is true) it is not recommended to specify this value without consulting QueryVision.
- ifrz_logging (optional, default is false) turn on to see log messages on auto sizing in the browser console log



- **ifrz_heightCalcMode** (optional, default is "lowestElement") it is not recommended to specify this value without consulting QueryVision.
- ifrz_bodyMarginStr (optional, default is "0 0 0 0" sets the HTML body margin for the iframe
 it is not recommended to specify this value without consulting QueryVision.
- **qv_addHeight** (optional, default is 0px) adds height to compensate for Cognos report rendering for page footers and multi-page page navigation See the section *qv_addHeight List Frame Footer/Navigation Controls "Icing"*, below for details
- qv_rowsPerPage (optional, see section 7.5.2 qv_rowsPerPage Specify rows per page for SharePoint for details and default) – this allows setting of the rows per page for multi-page reports containing list or cross tab report components when rendered in SharePoint pages.

Fixed Size

The structure must include "fixedSize" as the JSON structure containing the "config" properties (highlighted below)

A more typical example would only specify the *height* property, which will use the default *htmlStyle* value

Properties

- sizeMode (mandatory, value must be "fixedSize")
- htmlStyle (optional) can contain any CSS html style properties, except height (will be removed).

See the Special Note: height & htmlStyle, below





- height (optional) states the fixed size height in pixels (e.g. "1320px")
- **qv_rowsPerPage** see definition for Dynamic Size, above

Special Note: height & htmlStyle properties

HTML element attributes allow setting of the height via the "height" attribute or as part of the "style" attribute (e.g. style.height=<value> or style= "overflow:auto;height:700px"). Current browsers will use "style.height" in preference to the "height" value.

 The QueryVision Report Viewer web part "Report Style Properties" property provides the default value for the "style" attribute for the iframe containing the IBM Cognos content and will accept all CSS style properties, *including* height.

☑ Show Menu
Enable Studios
Report Style Properties
overflow:auto;width:100%;heig
Default Report Execution Mode
HTML
Enable Interactive Run Mode

• The **QvtReportStyleProperty** JSON *htmlStyle* and *height* properties can be used to override the QueryVision Report Viewer web part "**Report Style Properties**" value

It is recommended to use the JSON *htmlStyle* property to specify any CSS style property **except** height. Specify the height value using the JSON *height* property

- htmlStyle this will accept any valid CSS style attributes including height, but the height property will be discarded
- beight is used to specify the height in pixels (e.g. 1250px) for fixed/static Autosizing

7.5.1 qv_addHeight - List Frame Footer/Navigation Controls "Icing"

Cognos renders HTML interactive output with some dynamic resizing of its own: the [page] footer and navigation controls (first, prev, next, end) are placed at the lowest limit of the current window/iframe.

The result is that the interaction with dynamic resizing of the iframe within SharePoint may result in that the page is approx. 15 to 20 pixels longer than the dynamic resizing code can detect, which results in a vertical scroll bar which user has to scroll and see the page footer/navigation bar. This is particularly true of long (multipage) list and cross tab reports.

To address this issue, the QvtReportStyleProperties includes the optional parameter qv_addHeight to add additional height in pixels or percent to the height, which will resolve this issue.

This can also be used for nested "container" reports to avoid vertical scroll bars where nested reports are used.

7.5.2 qv_rowsPerPage – Specify rows per page for SharePoint

Dynamic sizing has the option of setting the rows per page via the qv_rowsPerPage parameter when rendering IBM Cognos reports within SharePoint according to the formula outlined below.



As long as the rows per page are not explicitly specified in the report specification, this allows overriding the default Cognos Connection rows per page setting.

Rows per page can be specified for Cognos reports with the following priority order

- 1. In the Report specification for list or cross-tab report components
- 2. When a "rows per page" parameter is included via a URL run request (which QueryVision uses)
- 3. In Cognos Connection as a default run property (default: 20 rows per page)

7.6 Drill up/down Behavior

Resizing for drill up/down behavior within a report is fully supported.

This includes an Analysis Studio or PowerPlay Studio report converted to Report Studio report or a Report Studio report designed with drill up/down behavior.

However, due to the behavior unique to Cognos reports, report size can only increase. Actions that decrease the height will render with the default blank color (e.g. white) below report content within the QueryVision Report Viewer web part.

7.7 Autosizing reports with multiple page definitions (including prompt pages)

A typical simple Cognos report only has a single page definition, regardless of whether the rendered report spans multiple pages due to result size.

Reports with authored prompt pages have one or more additional (prompt) page definitions in addition to the report page.

Reports can have multiple prompt page and report page definitions to accommodate different layouts and other features.

The embedded JavaScript must inserted in the page definitions as HTML items as follows:

• The 'var QvtReportStyleProperties = <JSON parameters>' JavaScript must be rendered only once per page definition (e.g. in the page header or footer. The definition to be included should be identical for each page definition.

Different definitions, including a mix of dynamic and fixed/static resizing or fixed/static resizing with different heights **cannot** be mixed, but the qv_addHeight value can be different for each page definition for dynamic resizing.

• The JavaScript to include the .js libraries should be rendered only once per page definition and ultimately only once per HTML page (e.g. in the page header or footer).

7.8 Behavior of Reports with prompt pages

For Report Studio objects/reports, optional and mandatory parameters in the report can be serviced by prompts on the report or on authored prompt pages prior to report execution or be automatically generated when rendered.

Reports WITHOUT QueryVision Autosizing enabled

Automatic or authored prompt pages and report pages will be rendered according to the size specified in the QueryVision Report Viewer configuration Report Style Properties values (default 700px).

Reports WITH QueryVision Autosizing enabled



Authored Prompt Pages – To ensure correct fixed/static sizing of all page definitions within a report, including authored prompt pages, ensure that the embedded script specifying the QvtReportStyleProperties JavaScript is included, specifying the height in pixels on each prompt page (e.g. page header)

Automatically generated Prompt Pages

Fixed/static Autosizing – the prompt page will be treated as a non-Autosize enabled report page and will use the Report Viewer configuration Report Style Properties value (e.g. default of 700px)

Dynamic Autosizing – the prompt page will be treated as a non-Autosize enabled report page and will use the minHeight property specified by the dynamic size version of the QvtReportStyleProperties JavaScript embedded elsewhere in the report (e.g. '200px').

7.9 Drill-Through Behavior

Autosizing options for drill-through source and target reports

QueryVision recommends that dynamic Autosizing be enabled in all source and target reports.

The first report presented in a QueryVision Report Viewer Web Part (e.g. source report) determines the Autosizing behavior – whether dynamically auto-sized, fixed/static Autosize enabled or not Autosize enabled. Drill target settings will be ignored with the exception of the qv_addHeight property.

Prompt page considerations

Prompt pages for target reports must be configured with an Autosize configuration that is compatible with the source report and target report pages.

If the source report provides all the mandatory prompt parameters then the prompt page for a target report will not be presented, so no-Autosizing is required for those prompt pages.

8. SHAREPOINT PAGE LAYOUT MODIFICATION TOOLS

The SharePoint Page Layout "toolkit" consists of a JavaScript .js/library of functions which are called from JavaScript embedded along with HTML and CSS in a SharePoint page using a SharePoint 2013 Script Editor Web Part.

Note: See the documentation and comments in the files *qvtShrPntWidthUtils.js* and *SharePoint web page layout mods snippets.htm* for details

Notice: qvtShrPntWidthUtils.js and the script samples that are included in SharePoint web page layout mods snippets.htm are available "as is" and is not supported by QueryVision. These files/code can be considered open source without license restrictions and can be extended or modified as required.

The "toolkit library" is the file qvtShrPntWidthUtils.js, which is installed during the QueryVision Web Parts installation in the same folder as the Autosizing .js files. This file is available in .min.js and .js versions.

It uses self-initializing JavaScript namespace to wrapper the functions to avoid interference with other potential .js functions.

The main entry points for the library/.js file are functions for each of:

Initialization functions are defined for each of the page elements to be shown or hidden, some of which will also include changes to related html element borders and margins. The elements



defined include the master page header, the master page side nav bar/box and the web part zone that contains a QueryVision Content Manager Navigation Web Part (if one is defined).

Each initialization function has options defined using a JavaScript option block parameter.

Each show/hide initialization function has:

- The option to automatically hide (initialHide) the specified HTML element(s)
- An optional button (or other HTML control) which will allow the user to show/hide the HTML element(s). If the button element is defined, then a function to handle toggling showing/hiding the element is attached to button/control .onclick event.

The file SharePoint web page layout mods snippets.htm provides a composite example of using all of the functions and options:

- An HTML definition for the optional buttons which will be placed within location within the Script Editor Web Part defined area on the page.
- A CSS style definition section
- Script src definition for the qvtShrPntWidthUtils.js
- Script which defines functions and sets the parameters to call the initialization functions defined in qvtShrPntWidthUtils.js and also registers them to run once the SharePoint page is loaded.

8.1 SharePoint specific JavaScript page layout manipulation considerations

In looking to optimize the SharePoint page layout for IBM Cognos reports, you should be aware of the following:

- While the general concepts of how to manipulate (e.g. show and hide) HTML elements on a SharePoint page (e.g. CSS style changes, <html element>.style.display = 'none', ...) using JavaScript apply, this is complicated by:
 - SharePoint uses its own unique and inconsistent pattern of page composition, including how it identifies HTML elements, use of CSS styles and HTML specified style related properties.
 - SharePoint itself makes extensive use of JavaScript, so (particularly on Team Sites) there are frequently conflicts when attempting to add custom JavaScript to the page. For example:

Custom JavaScript successfully hides a page element and then SharePoint provided JavaScript unhides it later in the page lifecycle.

- Using custom JavaScript in SharePoint related to overall page layout manipulation requires specialized registration and execution consideration.
- Each SharePoint page is a composite of the Master Page defined elements + individual page content.

A Master Page (<u>Introduction to SharePoint master pages</u>) defines site page layout and elements common to every page on the site, including navigation links, branding/logos, site search controls, possibly menus, etc. A site can have multiple Master pages (but doing so is not trivial).

The page content in this case is a web part page which has multiple web part zones of which only a single QueryVision Report Viewer web has been added.



- SharePoint 2013 provides a fixed set of web part page templates which use the same CSS stylesheets
- The default CSS/HTML style for web part zones are defined such that if there are no web parts added to a web part zone, then the web part zone is hidden such that it takes no space on the page.
- The default CSS specifies whitespace padding (HTML/CSS borders/margins) around all sizes of each web part within a web part zone and additional padding around each web part zone.
- Microsoft has customized the page lifecycle for SharePoint pages at least where it comes to Javascript .js file loading and loading order and initial JavaScript execution. Hint, it's not when \$(document).ready() is true.

There are various mechanisms you can use to ensure that custom javascript (that manipulates the page "in competition" with MSs SharePoint JavaScript) is executed when the page is ready, but the one QueryVIsion found reliable was:

_spBodyOnLoadFunctionNames.push("<function>");

If you are going to add your own custom JavaScript which depends on SharePoint provided .js files then you should investigate SP.SOD.executeOrDelayUntilScriptLoaded(). Some links to investigate:

Ensuring SharePoint JavaScript API is loaded (sp.js)

Execute JavaScript function after SharePoint is initialized

8.2 Example of specific techniques used

The techniques described here are due to specific issues with SharePoint specific HTML or JavaScript issues.

The following are 2 examples:

- To work around conflicts with SharePoint's "Focus on content" feature and it's manipulation by internal JavaScript, the SharePoint master page header (HTML element id "s4-titlerow") is shown and hidden by adding or removing a CSS style class "qvtS4TitlerowHide". This class uses "!important" to override any other definitions.
- In order to find the web part zone that contains a QueryVision Content Manager Navigation requires knowing the full, page instance id of the web part "ctl00_ctl40_g_d751faa9_e46e_4185_822a_105105bc5751_QVTree" and using a parent search on the element "class" attribute to see if it contains the class "ms-webpart-zone"

For other SharePoint specific techniques see the *qvtShrPntWidthUtils.js* and *SharePoint web* page layout mods snippets.htm file comments and JavaScript code.

8.3 Why the Script Editor Web Part for JavaScript?

Using a web part to inject JavaScript to the page allows use of SharePoint web parts ability to be edited directly within the browser without any additional tools (such as SharePoint Designer). When combined with use of built in browser debugging tools (the Firefox/Firebug combination is recommended), this provides a competent environment for this particular task.

At first glance, there are two candidate web parts in SharePoint 2013: the Content Editor Web Part and the Script Editor Web Part. However, the Content Editor Web Part was only intended for HTML and CSS style content and will effectively disallow any JavaScript.

The Script Editor web part will allow HTML, CSS and JavaScript.



An additional avantage of of using a web part is that it provies a container for the positioning of HTML controls (such as buttons for hide/show) which can be positioned with a web part page through simply adding the web part to any web part zone and then ordering the web part with others within the zone.

9. APPENDIX

9.1 Troubleshooting

Menu run action vs. configuration run action

If Autosizing is not occurring ensure that both the web part configuration option and the action menu bar are both set to HTML. If one or either are set to Default Output, resizing may not occur.

9.2 Select the appropriate SharePoint page layout

The first step is to create a SharePoint page with Web Part Zone(s) that provides sufficient space for the IBM Cognos Reports you want to embed.

Here we'll cover:

- Options on creating SharePoint pages with web parts
- Approaches for maximizing the screen real-estate for web parts

9.2.1 SharePoint Web Part Page templates

SharePoint supports multiple ways of including web parts on a SharePoint application page including the following in order of time and effort.

- 1. Create a SharePoint web part page by selecting from built-in or custom developed Web Part Page templates.
- 2. Create a web part page from a template then modify the page (e.g. in SharePoint Designer)
- 3. Using SharePoint Designer (or other web page editor), create a custom SharePoint page and add one or more "web part zones".

Here we will focus on Web Part Page templates, which are the core for either options 1 or 2.

There are 8 built-in web part templates of which the following is a sample.



Full Page web part zone



- Title web part zone that spans the page width
- Left column fixed web
 part zone
- Right column responsive web part zone



- Title web part zone that spans the page width
- Left, Right column responsive web part zones
- Center column responsive web part zone



The following is an example using the middle web part page template (Title, Left, Right web part zones) within a standard SharePoint 2013 Master Page. The section within the red rectangle is the space on the page provided for the web part page template. The rest of the page is defined by the site Master Page

SharePoint		Newsfeed OneDrive Sites	Neil J. Thomson 👻 🍄 🤺	?
BROWSE PAGE			🖸 SHARE 🏠 FOLLOW [[0]
QueryVision Develop NavVWA	autoSize	Search this sh	۵ ۵	
Home				٦
Documents	Header			
Recent				1
ExampleYearListForPro mpts		Add a Web Part		
ProductTypeList				
Cognos BI				
Site Contents				
🖋 EDIT LINKS	Left Column	Body		
	Add a Web Part	Add a Web Part		
	QueryVision Content Manager Tree You are currently not logged in	QueryVision Report Viewer Webpart You are currently not logged in		

While it is possible to use SharePoint Web Parts on any SharePoint page, the full features (including browser editing) are supported on **SharePoint Web Part Pages**.

A SharePoint web part page consists of one or more **Web Part Zone**s, which can be arranged in table like fashion, with the ability to configure both individual zone vertical and horizontal sizing plus how they resize relative to each other and the page itself, including how they react when the browser window is resized.

SharePoint ships with several web part page templates, which can be used to create web part pages.

To see how SharePoint Web Part Pages and Web Part Zones work to provide dynamic sizing, let's first build a Web Part Page.

9.3 Leverage SharePoint Web Part Page, Web Part Zone and Web Part built-in dynamic resizing capabilities

SharePoint web page layout can be through a combination of both static configuration and dynamic (e.g. JavaScript) techniques.

9.3.1 Understanding and configuring web part zone and web part sizing

The actual width and height of individual **web parts** within the zone are governed by the web part's configuration Appearance section's Height and Width properties.



SharePoint Web Parts for IBM Cognos

 Appearance 	
Title	
QueryVision Repo	ort Viewer Wek
Height	
Should the Web Pa	art have a fixed height?
⊖ Yes	Pixels 🗸
🖲 No. Adjust heig	ght to fit zone.
Width	
Should the Web Pa	art have a fixed width?
() Yes	Pixels 🗸
No. Adjust wid	th to fit zone.

For web parts with Cognos content, it is recommended to leave the Appearance Height and Width properties as shown above in the "Adjust to fit zone" setting whether QueryVision Autosizing is used or not, which allows the web part to grow and shrink both horizontally and vertically as the browser window size changes. Effective vertical resizing requires QueryVision's Autosizing feature.

Web Part Page Layout Templates as shipped with SharePoint 2013 have **their web part zones** configured for height and width via the iframe element properties *height* and *width* (which can be examined using browser developer tools or opening and examining the page html wih SharePoint Designer).

Web Part zones are configured

- Height of web part zones are all set with the html attribute *height='100%'*. This provides the capability for web parts within the zones grow or shrink with their contents but this requires communication between the web part content anddthe web part pag, which won't occur for SharePoint/Cognos integration without QueryVision's Autosizing feature.
- Width of web part zones are governed by the html attribute *width*:
 - Fixed width (HTML attribute "width" is not defined for the web part zone) the width of the zone is defined by the widest web part in the zone.
 - Opynamic (HTML attribute width='XX%') enables growing/shrinking with the browser. A typical value is 100% width is determined by the.

It is recommended to use web part zones with Dynamic width and height for web parts with Cognos content

In a web part template which has multiple web part zones horizontally, such as:



the zones typically have a mix of dynamic and non-dynamic width settings

Left and Right web part zones as non-dynamic with the Center part zone with "width:100%" in a side by side configuration. When growing/shrinking the width of the browser window, the widths of Left/Right will not change, the width of Center will expand/shrink to take up the remaining width in the browser window.



SharePoint Web Parts for IBM Cognos



 Mix of dynamic width web part zones (Left, Center, Right) all with "height:100%" in a side by side configuration. Each of Left, Center, Right will grown and shrink, taking 1/3 of the available width.



9.3.2 Dynamic techniques

Dynamic techniques to provide more room for web parts without having to resorting to custom Master Pages or SharePoint Designer can be found in the section **8** SharePoint Page Layout **Modification Tools**.

9.4 Leveraging IBM Cognos Report height and width configuration capabilities

Cognos Report Studio report elements (e.g. list, crosstab ...) can be configured for both height and width to fit within their window/iframe by setting their values to 100%. While QueryVision Autosizing is required for vertical responsive sizing, Cognos reports can adjust column width etc. as the parent window size is changed.

There are two sets of settings – the "Size & Overflow" property for a list or cross tab, plus the "White Space" property for individual columns (list, crosstab) and/or row (crosstab)



Help X

Cancel

The following shows changing the default settings for a List report object width to 100% for the Size and Overflow property:

Properties - 🔼 List		
Contents Height	Minimal	
Column Titles	At start of list	
Pagination	(Defined)	
Render Page when Emp	ty Yes	
Box		
Border		1
Margin		
Box Type		
E Color & Background		
Background Image		
Background Color		
Foreground Color		
Drop Shadow		
Font & Text		
Font		
Horizontal Alignment		
Relative Alignment		
Direction & Justification		
Positioning		
Size & Overflow	? 100%	
Floating		
Visible		

The following shows setting shows setting the White Space property for a List Column [Body]. Note that "Normal" allows wrapping of column content (text, plus some dates/times), which is also the Default. "No wrap" prevents column content wrapping.

Ρ	roperties - 🛋 List Colum	n Body _ C	
	Data Item Value	Month	
Ξ	Data		1
	Data Format		
	Drill-Through Definitions		
	Group Span		
Ξ	Вох		
	Border		
	Padding		
	Box Type		
Ξ	Color & Background		
	Background Image		
	Background Effects		
	Background Color		
	Foreground Color		
Ξ	Font & Text		
	Font		
	Horizontal Alignment		
	Vertical Alignment		
	White Space	•	L
	Spacing & Breaking	(Default)	l
	Direction & Justification	Normal No wrap	I
٥	Positioning		1
	Size & Overflow		1

"Responsive" Width - example

While not fully "Responsive" in the multi-device web page adaptation sense, Cognos reports will adjust column width, content wrapping within the column and report height. The following shows a



Cognos list style report with the list Size & Overflow width=100% where the browser width is gradually being reduced from the right hand side (sequence is from left to right).

Note that the column width reduces and eventually column contents word wrap and as a last resort (right-most example) as the height reaches a defined max # of pixels, a vertical scroll bar is included:

Carbon		Actions	newer webpart	oduct Inventory List			Quer	yVision Re ins Actions	port Viewer W	lebpart	List		Opti	yvisio ns A: Pr	n Report	Viewer V	Vebpar	t .
90 80m 90m		Month	Product line	Product type	Opening inventory	Quantity shipped	Ven	Month	Desket Ins	Destations	Charles in antine	Duardly shinned	Year	Month	Product line	Product	Opening	Quentity
0000 00000 000000000000000000000000000000000000	5	anuary 2004	Camping Equipment	Cooking Gear	236.107	234.034	2004	January 2024	Cartring Foundation	Contract Ope	236 st/7	254 (54				type	inventory	shipped
2010 Along 2010 Open Space Memory 400 Along 400 Memory 400 <td>J</td> <td>anuary 2004</td> <td>Camping Equipment</td> <td>Tents</td> <td>51,253</td> <td>53,962</td> <td>2004</td> <td>January 2004</td> <td>Camping Equipment</td> <td>Tects</td> <td>51,253</td> <td>53.962</td> <td>2004</td> <td>January 2004</td> <td>Camping Equipment</td> <td>Cooking Gear</td> <td>236,107</td> <td>234,034</td>	J	anuary 2004	Camping Equipment	Tents	51,253	53,962	2004	January 2004	Camping Equipment	Tects	51,253	53.962	2004	January 2004	Camping Equipment	Cooking Gear	236,107	234,034
2010 Jany 2010 Oragin Spanyer Park 47.00 Park 47.00 Park	J	enuery 2004	Camping Equipment	Sleeping Bags	54,218	53,735	2004	January 2004	Camping Equipment	Steeping Beos	54,218	53.735	2004	January	Camping	Tents	51,253	53,982
2010 Annu 2010 Ann	J	enuery 2004	Camping Equipment	Packs	47,380	46,851	2004	January 2004	Camping Egytoment	Packs	47,390	46.051		2004	Equipment			
2010 Janky 2010 Parket Accession P	J	enuery 2004	Camping Equipment	Lanterna	92.036	89,098	2004	January 2004	Carrying Epoloment	Larisers	92,036	89.096	2004	January 2004	Camping Equipment	Sleeping Baga	54,218	\$3,735
900 30xx 200x Person Accession & Senser 10xx 70 20xx 1 20xx 70x 1 20xx 1 20xx 70x 1 20xx 1 20xx 70x 1	J	anuary 2004	Personal Accessories	Watches	58,299	72,540	2004	Jenuary 2004	Personal Accessories	Watches	58,299	72,540	2004	January	Camping	Packs	47,380	46,851
2010 January 2010 Personal Accessione Personal 11.01 <th< td=""><td>J</td><td>enuery 2004</td><td>Personal Accessories</td><td>Eyeweer</td><td>192,737</td><td>200,191</td><td>2004</td><td>January 2004</td><td>Personal Accessories</td><td>Eyesear</td><td>192,737</td><td>266,191</td><td></td><td>2004</td><td>Equipment</td><td></td><td></td><td></td></th<>	J	enuery 2004	Personal Accessories	Eyeweer	192,737	200,191	2004	January 2004	Personal Accessories	Eyesear	192,737	266,191		2004	Equipment			
Main Main <th< td=""><td>J</td><td>anuary 2004</td><td>Personal Accessories</td><td>Knives</td><td>140,107</td><td>139,747</td><td>2004</td><td>January 2004</td><td>Personal Accessories</td><td>Knives</td><td>140,107</td><td>129,747</td><td>2004</td><td>January 2004</td><td>Camping Equipment</td><td>Lanterna</td><td>92,036</td><td>89,096</td></th<>	J	anuary 2004	Personal Accessories	Knives	140,107	139,747	2004	January 2004	Personal Accessories	Knives	140,107	129,747	2004	January 2004	Camping Equipment	Lanterna	92,036	89,096
Object Participant Respective Table of the system State of the syste	J	enuary 2004	Personal Accessories	Binoculars	18,304	18,975	2004	Jenuary 2004	Personal Accessories	Binoculara	18,304	18,978	2004	January	Personal	Watches	59,299	72,540
Object Appendix Name1 Regularies 254:43 244:36 256:36 Appendix Description 251:43	J	anuary 2004	Personal Accessories	Nevigation	33,879	36,634	2004	January 2004	Personal Accessories	Navigation	33,879	36,634		2004	Accessories			
XXX January XXX Outsign Protection Samanan 107.105 109.005 2004 January XXX Outsign Protection 107.105 20.00 January XXX January XXXX January XXX January	J	enuary 2004	Outdoor Protection	Insect Repellents	251,413	244,385	2004	January 2004	Outdoor Protection	Insect Repellents	251,413	244,385	2004	January 2004	Personal Accessories	Eyewear	192,737	266,191
January 2004 Outdoor Protection First Add 35,128 35,437 2004 January 2004 Outdoor Protection First Add 35,125 35,437	J	anuary 2004	Outdoor Protection	Sunscreen	197,188	199,805	2004	January 2004	Oukdoor Protection	Sunicreen	197,188	199,825	2004	January	Personal	Kniums	140.107	139 747
	J	enuery 2004	Outdoor Protection	First Aid	35,128	35,457	2004	Jenuary 2004	Outdoor Protection	Pirst Aid	35.125	35,457		2004	Accessories			
2004 January 2004 Golf Epigrment Irons 6.552 6.559 2004 January 2004 Golf Epigrment Irons 6.552 6.639 2004 January 2004 Golf Epigrment	J	anuary 2004	Golf Equipment	Irons	6,582	6,639	2004	January 2004	Golf Equipment	trone	6,582	6,639	2004	January 2004	Personal	Binoculars	18,304	18,975
2004 January 2004 Oolf Epulgment Woods 4,605 4,542 2004 January 2004 dolf Epulgment Woods 4,605 4,542 2004 January 2004 Ja	J	anuary 2004	Golf Equipment	Woods	4,605	4,542	2004	January 2004	Golf Equipment	Woods	4,605	4,542	2004	January	Demonal	Necimation	33.879	36.634
2004 January 2004 Golf Egulpment Putters 25,247 25,297 2004 January 2004 Golf Egulpment Putters 25,247 25,297 2004 January 2004 Acces	J	enuery 2004	Golf Equipment	Putters	25,247	25,297	2004	January 2004	Golf Equipment	Putiers	25,247	25,297	2004	2004	Accessories			



9.5 Creating a SharePoint page with a web part template

To build a web part page from a template, do the following (SharePoint 2013):

 Ensure that the SharePoint [document] library you want to add the web part page to has had Web Part Page added to the Content Types via that library's "Library Settings" icon in the Library tab

SharePoint			Ne	wsfeed	OneDrive	Sites	Neil J. Thoms	ion 👻 🥵	?
BROWSE FILES LIBRARY						😲 SHARE	FOLLOW	SYNC	[0]
	urrent View: All Documents	<u> </u>	E-mail a Lir	ık	o			🍂 🖏	
View Quick Create Edit View	← Current Page →	Tags & Notes	Most Popu	lar Items	Connect to Outlook	Connect to Office -	Customize Library +	Library Settings	
View Format Manag	e Views	Tags and Notes	Share & T	rack	Conne	ct & Export		Settings	_
Home	🕀 new de	ocument o	or drag file	s here					^
Documents	All Document	s ••• F	ind a file		Q				
Recent ExampleYearListForPro	✓ 🗋 Na	ame		Modified		Modified	Ву		
mpts	A	ddQvWbPtTstF	age	October	09, 2014	🗆 Neil .	J. Thomson		
ProductTypeList	At	tSzTest2Vwrs		July 27		🗆 Neil .	J. Thomson		
Cognos BI	Co	qFltr RepView		July 04,	2014	🗆 Neil .	J. Thomson		

If Web Part Pages are permitted in the library they will be shown in the Content Types table as shown below. If Web Part Pages is not enabled, they can be added from the "Add from existing site content types, also shown below

	List Information			
	Name:	Cognos BI		
	Web Address:	http://w28r	2ent207/Cognos BI/Forms/A	.IIItems.aspx
rl istForPro	Description:			
	General Settings		Permissions and Manager	ment
eList				
	List name, description a	nd navigation	Delete this document libr	ary
	Versioning settings		Save document library as	template
	Advanced settings		Permissions for this docu	ment library
	Validation settings		Manage files which have	no checked in
	Column default value se	ettings	version	
	 Audience targeting sett 	ings	Workflow Settings	
	Rating settings		Generate file plan report	
	 Form settings 		 Enterprise Metadata and Settings 	Keywords
			 Information management settings 	t policy
	Content Types			
	This document library is co	nfigured to allow	v multiple content types. Use co	ntent types to
	Content Type	Vis	ible on New Button	tonowing com
	Document			
	Document	•		

• In the Library Files tab, select to add a new Web Part Page:



SharePoint Web Parts for IBM Cognos



You will now see a pallet of possible Web Part Page Layout Templates showing their Web Part Zones. Note that the Layout Templates (for the templates shipped with SharePoint) are named for the number and position of Web Part Zones:

Site Contents • New Web Part Page ©

Name

Type a file name for your Web Part Page. The file name appears in headings and links throughout the site.

Name:									
		.aspx							
Overwrite if file already exists?									

arListForPro

peList

Layout

Select a layout template to arrange Web Parts in zones on the page. Multiple Web Parts can be added to each zone. Specific zones allow Web Parts to be stacked in a horizontal or vertical direction, which is illustrated by differently colored Web Parts. If you do not add a Web Part to a zone, the zone collapses (unless it has a fixed width) and the other zones expand to fill unused space when you browse the Web Part Page.



Choose a Layout Template:

Header, Footer, 3 Columns Full Page, Vertical Header, Left Column, Body Header, Right Column, Body Header, Footer, 2 Columns, 4 Rows Header, Footer, 2 Columns, Top Row Left Column, Header, Footer, Top Row, 3 Columns Right Column, Header, Footer, Top Row, 3 Columns



9.6 Pitfalls with SharePoint's "Focus on content"

In SharePoint 2013, a feature was added by default to SharePoint pages called "Focus on content", which is implemented as a button in the top right corner of the page outlined in red as shown below:

SharePoint					Newsfeed	OneDrive S	ites Neil J.	Thomson 👻 🤌	¢??
BROWSE PAGE							😋 SH	IARE 🏠 FOLLO	w 🖂
QueryVision Develo	AutoSize					Search this	site	م	^
Home									
Documents									
Recent									
ExampleYearListForPro	QueryVision Content Manager Tree	QueryVision Repor	t Viewer V	Vebpart					
mpts		Options Actions							
ProductTypeList	El Bublic Folders			Penor	Title				
Cognos BI	E- Business Topic Folder			Roport					
Site Contents	E-C QvtTests	Revenue	Americas	Central Europe	Southern Europe	Asia Pacific	Northern Europe		
	- D Autosize		Revenue	Revenue	Revenue	Revenue	Revenue		
EDIT LINKS	B- D AutoSize_Shortcuts	TrailChef Water Bag	6,639,235.97	5,005,422.32	2,500,995.88	6,289,232.65	2,622,254.64		
	🛅 BarOverDonutsCharts	TrailChef Canteen	3,269,831.29	2,464,059.47	1,214,435.46	3,105,036.71	1,280,155.72		

Users can click on this button and show/hide the master page content

SharePoint						Newsfeed	OneDrive	Sites	Neil J. Thomson 🗸	Ø 3
BROWSE PAGE									😋 SHARE 🏠 FO	ulow 🕽
QueryVision Content Manager Tree	QueryVision Repo	rt Viewer V	Vebpart							
다. 🔁 Public Folders	Options Actions									
Business Topic Folder	Report Title									
examples	Revenue	Americas	Central Europe	Southern Europe	Asia Pacific	Northern Europe				
🗄 🦢 Autosize		Revenue	Revenue	Revenue	Revenue	Revenue				
AutoSize_Shortcuts	TrailChef Water Bag	6,639,235.97	5,005,422.32	2,500,995.88	6,289,232.65	2,622,254.64				
📄 BarOverDonutsCharts	TrailChef Canteen	3,269,831.29	2,464,059.47	1,214,435.46	3,105,036.71	1,280,155.72				

A bit of digging into this feature uncovers the SetFullScreenMode(T/F) which can be called directly invoke this feature there are a number of drawbacks:

- Full screen mode is for the site if full screen mode is enabled on one page by the user or through JavaScript, it remains active when navigating to other pages (via a cookie).
- Attempting to enable or disable full screen mode is subject to interference/override by SharePoint JavaScript that controls the feature. For example:

On page initialization enable/disable the feature via custom JavaScript may be overridden later in the initialization event handling by the SharePoint JavaScript.

• Attempting to use custom JavaScript to isolate the full screen mode setting to only affecting the current page was unsuccessful in QueryVision testing. It was not possible to avoid toggling full screen mode on/off during refresh of the current page as detecting refresh vs. true transition to another page was not possible (due to the way Microsoft implemented the feature) without spreading the code to other pages in the site.

For this reason we chose to implement independent show/hide of each of the master page header and master page side nav bar/box via CSS and style overrides.



9.7 Guide for Cognos Report Heights in SharePoint

Guidelines to heights and common SharePoint page layouts

Where a QueryVision Report Viewer is on a SharePoint Page with only the simple SharePoint header/menu bar (see below), then on a 1920x1080 screen, 700px is the maximum height for a list report "page" to be fully visible (blue shaded area):





SharePoint Web Parts for IBM Cognos

Using a standard web part page, with a standard SharePoint 2013 side bar to the left and a title and search area on the page, the maximum is 600px (example below):





SharePoint Web Parts for IBM Cognos

If rendering a Report as PDF using an 8.5x11 inch PDF page or in HTML report with the height set for an 8.5x11 page (List/Crosstab report with 40 rows per page or less), then use 1320px as the maximum height. If the page setup is for A4 then the maximum height will be 1404px.





9.8 Detailed Feature Specifications

Mobile Support

Neither designed nor tested for mobile devices (e.g. iPad), but may work.

Report dynamic width supported

If the Cognos report specification has dynamic width enabled (e.g. list frame width:100%) then this continues to be supported and will cause Autosizing as required (e.g. shrinking the width at some point may cause the report height to increase, for which Autosizing will recognize the height change and will increase the height

Multiple Autosize enabled reports on the same page

If there are multiple QueryVision Report Viewers on the same SharePoint page, then each will size/Autosize independently based on their web part zone, web part and Autosizing configuration

Report studio reports only

The required auto-sizing report html item can only be added in Report Studio reports. For other Cognos report "types" such as Analysis Studio, Query Studio or PowerPlay Studio, that can be opened in Report Studio and saved to (and run as) a Report Studio report can also be auto enabled.

Cognos Workspace/Business Insight dashboards, Active Reports, etc. are not supported for auto-sizing.

Cognos Report Studio page elements which have the Autosize script configured HTML element that are used in a Cognos Workspace/Business Insight dashboards will not Autosize within the dashboard.

Use Report Studio only

The Business Insight Advanced/Workspace Advanced editors do not support inserting HTML elements

Grow only

When viewing an auto-sized Cognos Report, for operations such as drill down/drill up, the page will get taller if required, but will not shrink without refreshing the page

Saved outputs (html, pdf, csv, xml ...) will not Autosize, including for Reports that have been Autosize enabled.

Only Dynamic or Fixed Size within a single report or drill-through combination

Where a report has multiple page definitions (e.g. one or more report pages plus one or more prompt pages), the Autosizing options have to be identical with the exception of the qv_addHeight property for dynamic resizing)

- Fixed reports option specification must be the same height
- ◊ Dynamic reports all pages must be dynamic size enabled
- Drill-through if a source report drills through to a target report within SharePoint, then both must be either fixed or dynamic (recommend dynamic)

Only Default Report Execution Mode = HTML supports auto-sizing

Using the Report Viewer in "Default Output" will not auto-size reports if an existing saved output exists (html/pdf) as Autosizing does not work for saved outputs. The report will Autosize in "Default Output" mode if there are no saved outputs as the report will run/execute if no outputs are available.



9.9 Advanced Autosizing - Multi-Tabbed Dashboard via Nested Reports

9.9.1 Introduction

There are multiple ways you can create BI dashboards from multiple Cognos Reports or Report elements (widgets), but one that some customers have used is to use nested Cognos reports along with simple HTML buttons to emulate tabs to allow selection from a range of reports within a single Cognos Report.

A potentially key advantage of this approach is to leverage Cognos Framework Manager session information to filter what reports/buttons to offer the user based on their IBM Cognos user or group membership.

Support Autosizing for this scenario requires an adaptation of Autosizing.

First we will look at how to construct nested reports, then we'll cover how to enable them for QueryVision Autosizing within SharePoint.

9.9.2 Container Report Configuration

The core of the nested report solution is to have a top level "container" report that is primarily a container for custom HTML which can leverage FM based user/group filtering for conditional layout/rendering of buttons and/or reports offer to users:

- One or more iframes to present the "BI content" Cognos reports
- HTML controls (in the examples we'll show using buttons) to allow selection of reports to appear in the iframes
- Setting the iframe src to the 'Default action URL" which can be found by selecting a report and properties in Cognos

9.9.2.1 STRUCTURING THE PAGE

The following is an example of a Container report page shown in Report Studio:

€ N€	estTes	it_8_8	uttons - IBM	1 Cogna	s Repo	rt Stud	lio - Wi	Windows Internet Explorer	x
File	Edit	View	Structure	Table	Data	Run	Tools	ıls Help	
D I	6 G	.	🖻 🛍 🔪	< ₪	വ	K ML	•	· •	•
Font			▼ Size	•	<u>A</u> -	в	<u>v</u>	⊻ ﷺ ﷺ ሿ ፬ ໑ ໑ ⋅	- 1
	Page	layers: Drop	members her	e to crea	te page	layers		Context filter: Select a data container to see its context filter (slicer).	
Query Explorer		frame >	9			< HTM	L Item >	m > < Contains menu definitions and report urls > 	

Create a report with a blank body along with a page header which is where the button/tab controls will be presented.

Then add an HTML item to the header



If only presenting a single nested report at a time then add a single HTML item to the body of the report. If presenting 2 or more, it is recommended to add a table and use a table cell for each nested report. Add an HTML item to each table cell into which the iframe HTML will be added.

The next step is to obtain the URL's used to run the "BI Content" reports – which are any Standard Cognos report that can run in a report viewer. While the URL can be hand crafted, the default URL to run a report (which can then be modified as required) can be obtained from the following location in a Report's properties.

Click on "view the search path, ID and URL" then copy the contents of the Default action URL text box.

Set propert	ties - DrillableReportRe	atailers Help	۲					
General	Report	Permissions						
Specify the	properties for this entry.							
Type:	Report	Locations - Dublic Folders > OutTasts > 71 View the search path. ID an	d URI					
Owner:	Neil J. Thomson	View the search path, ID and URL						
Contact:	None Set							
Tenant:	SvsAdmin (Inherited f	Search path:						
Disable	e this entry	/content/folder[@name='QvtTests']/folder[@name='AutoSize']/report[@name='Drill ableReportRetailers']						
Hide th	nis entry	ID:						
The name, s	screen tip and description	i937F95B842824AC18FE7AF34AD4E739E						
Language	:							
English	(Canada)							
Name:		Default action URL:						
Drillable	ReportRetailers	http://w28r2ent208:80/ibmcognos/cgi-bin/cognosisapi.dll?b_action=cognosView						
Screen tip):	ert&ut.action=run&ut.object=%ztrontent%ztrolder%z5b%40name%3d%z7QvtTes ts%z7%5d%zffolder%5b%40name%3d%z7AutoSize%27%5d%zffreport%5b%4						

The following is a typical example:

http://w28r2ent208:80/ibmcognos/cgi-

bin/cognosisapi.dll?b_action=cognosViewer&ui.action=run&ui.object=%2fcontent%2ffolder%5b%40name%3d%2 7QvtTests%27%5d%2ffolder%5b%40name%3d%27AutoSize%27%5d%2freport%5b%40name%3d%27Drillable ReportRetailers%27%5d&ui.name=DrillableReportRetailers&run.outputFormat=&run.prompt=true

Notes:

- run.outputFormat= property is not specified, which defaults to "run as HTML".
- The Cognos header and toolbar that displays by default in the report viewer can be hidden with the following additions the "Default action url":
 - ♦ Hide the header: &cv.header=false
 - ♦ Hide the toolbar: &cv.toolbar=false

Adding this to the URL shown above results in the following

http://w28r2ent208:80/ibmcognos/cgibin/cognosisapi.dll?b_action=cognosViewer&ui.action=run&ui.object=%2fcontent%2ffolder%5b%40name%3 d%27QvtTests%27%5d%2ffolder%5b%40name%3d%27AutoSize%27%5d%2freport%5b%40name%3d%2 7DrillableReportRetailers%27%5d&ui.name=DrillableReportRetailers&run.outputFormat=&run.prompt=true&c v.header=false&cv.toobar=false

Iframes



Now the iframe html element can be crafted. The pragmatic approach to using an iframe is to provide it with a default report for initial viewing with the ability to change the iframe contents by the button/tab controls. This results in the following example iframe html element:

<iframe name="content" id="content" src="http://w28r2ent208:80/ibmcognos/cgi-

bin/cognosisapi.dll?b_action=cognosViewer&ui.action=run&ui.object=%2fcontent%2ffolder%5b%40name%3d%27QvtT ests%27%5d%2ffolder%5b%40name%3d%27AutoSize%27%5d%2freport%5b%40name%3d%27DrillableReportRetail ers_23_1%27%5d&ui.name=DrillableReportRetailers_23_1&run.outputFormat=&run.prompt=true" frameborder="0" scrolling="no" width="100%" height="100%" ></iframe>

Some key aspects to note here:

- Name and ID, which will be needed for Autosizing and to have an HTML button/tab controls
- The src= element which has the "Default action URL" as copied from the Report Properties
- · The setting of iframe html items such as frameborder, scrolling, width and height

Tabs/Buttons to change the iframe content

Now the controls and which reports will substitute for each iframe need to be defined. While the full HTML, including CSS style elements can be seen in the example report and snippets, we'll concentrate on the key HTML here: <script>

```
function putContent(n)
    {
         var aLinks = document.getElementsByTagName("a");
         for (i=0;i<aLinks.length;i++)
         {
              if(aLinks[i].className == "on")
              {
                   aLinks[i].className = "off";
              }
              document.getElementById("link"+n).className = "on";
         }
         switch(n)
              case 1:
              document.getElementById("content").src = "http://w28r2ent208:80/ibmcognos/cgi-
bin/cognosisapi.dll?b action=cognosViewer&ui.action=run&ui.object=%2fcontent%2ffolder%5b%40name%3d%27QvtTests%27%5d
%2ffolder%5b%40name%3d%27AutoSize%27%5d%2freport%5b%40name%3d%27DefaultNestedReport_noAutSize%27%5d&ui.n
ame=DefaultNestedReport_noAutSize&run.outputFormat=&run.prompt=true";
              break;
              case 2.
              document.getElementById("content").src = "http://w28r2ent208:80/ibmcognos/cgi-
bin/cognosisapi.dll?b_action=cognosViewer&ui.action=run&ui.object=%2fcontent%2ffolder%5b%40name%3d%27QvtTests%27%5d
%2ffolder%5b%40name%3d%27AutoSize%27%5d%2freport%5b%40name%3d%27ProductInventoryList-
multipage 23 1%27%5d&ui.name=ProductInventoryList-multipage 23 1&run.outputFormat=&run.prompt=true";
              break;
         }
</script>
<div id="demo-container">
    <a href="javascript:putContent(1);void(0);" title="DefaultNestedReport_noAutSize" id="link1"</li>
```



class="on">DefaultNestedReport_noAutSize
<la><ri>a href="javascript:putContent(2);void(0);" title="DrillableReportRetailers" id="link2" class="off">DrillableReportRetailers</ri>

</div>

The above HTML item content defines two buttons/links via the <div id="demo-container"> which correspond to the case 1 and case2 statements in the putContent(n) function.

The case statement gets the iframe by id and replaces the src attribute with the URL to the desired report. Note that there can be multiple buttons each of which can update individual iframes defined in the container report depending via specifying the iframe id.

The following is a screen shot of a Container Report with two iframes (green) with a report in each iframe and two buttons (red) to change the content of each iframe.

Option	ns Actions									
				Pro	oductinventorvLi	st ProductLine	Source			
					,,					
		Product	t Inventory	List			DefaultRepo	ortForNested	Tests	
Year	Month	Product line	Product type	Opening inventory	Quantity shipped	Product brand type				
2004	January 2004	Camping Equipment	Cooking Gear	236,107	234,034	TrailChef				
2004	January 2004	Camping Equipment	Tents	51,253	53,982	Star				
2004	January 2004	Camping Equipment	Sleeping Bags	54,218	53,735	Blue Steel				
2004	January 2004	Camping Equipment	Packs	47,380	46,851	Hibernator				
2004	January 2004	Camping Equipment	Lanterns	92,036	89,096	Firefly				
2004	January 2004	Personal Accessories	Watches	59,299	72,540	Extreme				
2004	January 2004	Personal Accessories	Eyewear	192,737	266,191	Canyon Mule				
2004	January 2004	Personal Accessories	Knives	140,107	139,747	EverGlow				
2004	January 2004	Personal Accessories	Binoculars	18,304	18,975	Husky				
2004	January 2004	Personal Accessories	Navigation	33,879	36,634	Granite				
2004	January 2004	Outdoor Protection	Insect Repellents	251,413	244,385	Mountain Man				
2004	January 2004	Outdoor Protection	Sunscreen	197,188	199,805	Polar				
2004	January 2004	Outdoor Protection	First Aid	35,128	35,457	Edge				
2004	January 2004	Golf Equipment	Irons	6,582	6,639	Seeker				
2004	January 2004	Golf Equipment	Woods	4,605	4,542	Glacier				
2004	January 2004	Golf Equipment	Putters	25,247	25,297	BugShield				
2004	January 2004	Golf Equipment	Golf Accessories	43,533	47,490	Sun				
2004	February 2004	Camping Equipment	Cooking Gear	585,040	228,827	Course Pro				
2004	February 2004	Camping Equipment	Tents	136,819	59,299	Hailstorm				
2004	February 2004	Camping Equipment	Sleeping Bags	111,647	54,462	Relief				
2004	February 2004	Camping Equipment	Packs	83,374	46,105					
2004	February 2004	Camping Equipment	Lanterns	196,317	89,382					
2004	February 2004	Personal Accessories	Watches	50,145	70,492					
2004	February 2004	Personal Accessories	Eyewear	27,307	300,382					
2004	February 2004	Personal Accessories	Knives	404,335	134,955					
2004	February 2004	Personal Accessories	Binoculars	38,116	18,420					
2004	February 2004	Personal Accessories	Navigation	67,798	42,277					
2004	February 2004	Outdoor Protection	Insect Repellents	431,141	248,908					
2004	February 2004	Outdoor Protection	Sunscreen	470,778	197,070	11-Oct-15		1		2:12:33 PM
2004	February 2004	Outdoor Protection	First Aid	81,344	35,388	≍ Top 🛳 Page up 🔻	Page down 🛎 Bottom			
2004	Eshausa 2004	O - W E	Income	45 400	0.444					,

QueryVision Report Viewer Webpart

9.9.2.2 AUTOSIZING CONSIDERATIONS

So far we have talked about nested reports as they would be used in Cognos Connection. However, to get them to Autosize in SharePoint with QueryVision's Report Viewer (or any other techniques) you will need to add JavaScript elements to both the Container report and the nested "BI Content" Reports.

Enabling individual Cognos reports for Autosizing in SharePoint for use as nested "BI Content" Reports does not change.

However, the Container report requires some special treatment. It needs to be upgraded with the following components.

1. Include the following JavaScript libraries:

iframeResizer.min.js



qvtResizer.min.js

iframeResizer.contentWindow.min.js

qvtResizer.contentWindow.min.js

- 2. Include the QvtReportStyleProperties to specify the resizing configuration for the container report itself
- 3. Include JavaScript elements for the BI content reports to be presented in the iframes. This can be either for dynamic or static resizing.

Points 1 and 2 can be covered by an HTML item in the Container report page header:

```
<script type="text/javascript">
var QvtReportStyleProperties = '{"report":{"runAsHtml":{"dynamicSize":{"config":{"sizeMode":"dynamicSize","qv_addHeight":"10px"}}};
</script>
<script type="text/javascript" src="../queryvision/qvtResizer.contentWindow.min.js"></script>
<script type="text/javascript" src="../queryvision/qvtResizer.contentWindow.min.js"></script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</script</scrip
```

Note that the QvtReportStyleProperties are configured for dynamic sizing and adding an additional 10px to the height. Your requirements may vary, but we suggest starting with a value of '10px'

The following needs to be added for each case where the iframe.src is being set, including the default src specified iframe html element definition and each time the src is changed by the button/tab control.

For dynamic resizing, the following needs to be added:

```
<script type="text/javascript">
qvtResizer.setResizeOptions('leftColumnIframe',true,200,1440,'0 0 0 0',true,'lowestElement',1000);
if (qvtResizerContentWindow.get_qvtIsParent())
{
qvtResizer.doResize('content');
}
</script>
```

Parameters for both the setResizeOptions() and doResize() methods need to be configured.

The parameters are defined as follows:

- setResizeOptions(string <iframe id>, Boolean <loggingEnabled>, integer <minHeight>, integer <maxHeight>, string <bodyMargin>, boolean <autosize>, string <heightCalcMode>, integer <retryTime>)
- doResize(string <iframe id>)

The parameters for the qvtResizer.setResizeOptions set the **dynamic** Autosizing properties for the nested BI content report, and it is highly recommended that the parameter values match those embedded in the BI content report for its JavaScript embedded options

var QvtReportStypeProperties = <JSON parameters>



The parameters and how they matchup between the embedded values and setResizerOptions are defined as follows - Note that all parameters **must** have value.

setResizerOptions Parameter name	QvtReportStyleProperties parameter name	Example value	Comment
Iframe id	N/A	'leftColumnIframe'	string - Must be specified with single quotes
logging	ifrz_logging	false	boolean enables logging to the browser console for debugging
min height	minHeight	200	integer
max height	maxHeight	1400	integer
body Margin	ifrz_bodyMarginStr	ʻ0 0 0 0'	string - must be specified with single quotes
autosize	ifrz_autosize	true	boolean - Only use false under advice from QueryVision
auto height calculation method	ifrz_heightCalcMode	'lowestElement'	string - Must be specified with single quotes
			Only use other values under advice from QueryVision.
retry time	N/A	0	integer
			Parameter currently not used.

If a nested BI content report is Autosize enabled for static height (e.g. height:700px) or is not Autosize enabled, then the height must be specified in pixels as follows:

```
<script type="text/javascript">
qvtResizer.setlframeHeight('rightColumnIframe', '700px');
</script>
```

The parameters are as setIframeHeight(string <iframe id>, string <height in pixels>).

Note:

- Both are strings that must be enclosed in single quotes (as per the example, above).
- Only 'px' (pixels) is supported, setting '100%' is not effective.

For both the dynamic or static Autosizing within a container report, it is recommended to insert such script where the iframe is specified or where the iframe src is updated (e.g. on a button push).

Using the example outlined above the following specifies a dynamic resizing for a report where the iframe html element is specified:

<iframe name="content" id="leftColumnIframe" src="http://W28R2ENT205:80/ibmcognos/cgibin/cognos.cgi?b_action=cognosViewer&ui.action=run&ui.object=%2fcontent%2ffolder%5b%40name%3d%27QvtTest s%27%5d%2ffolder%5b%40name%3d%27Autosize%27%5d%2freport%5b%40name%3d%27DrillableReportRetailers_2



3_1%27%5d&ui.name=DrillableReportRetailers_23_1&run.outputFormat=&run.prompt=true&cv.header=false&cv.toolb ar=false" frameborder="0" scrolling="no" width="100%" height="100%" ></iframe> <script type="text/javascript"> gvtResizer.setResizeOptions('leftColumnIframe',true,200,1440,'0 0 0 0',true,'lowestElement',1000);

```
if (qvtResizerContentWindow.get_qvtlsParent())
     {
          qvtResizer.doResize('content');
</script>
```

The following shows examples of static resizing (case 1:) and dynamic sizing (case 2:) when the iframe.src values are updated by the button/tab html control logic.

```
switch(n)
{
     case 1:
          document.getElementById("content").src = "http://W28R2ENT205:80/ibmcognos/cgi-
```

bin/cognos.cgi?b_action=cognosViewer&ui.action=run&ui.object=%2fcontent%2ffolder%5b%40name%3d%27QvtTest s%27%5d%2ffolder%5b%40name%3d%27Autosize%27%5d%2freport%5b%40name%3d%27DefaultNestedReport_noA utSize%27%5d&ui.name=DefaultNestedReport_noAutSize&run.outputFormat=&run.prompt=true&cv.header=false&cv. toolbar=false";

> qvtResizer.setlframeHeight('content', '700px'); break;

case 2:

document.getElementBvId("content").src = "http://W28R2ENT205:80/ibmcognos/cgi-

bin/cognos.cgi?b action=cognosViewer&ui.action=run&ui.object=%2fcontent%2ffolder%5b%40name%3d%27QvtTest s%27%5d%2ffolder%5b%40name%3d%27Autosize%27%5d%2freport%5b%40name%3d%27ProductInventoryListmultipage_23_1%27%5d&ui.name=ProductInventoryList-

multipage_23_1&run.outputFormat=&run.prompt=true&cv.header=false&cv.toolbar=false";

	- /
<pre>qvtResizer.setResizeOptions('content',true,200,1440,'0 0 0 0',true,'lowestElem</pre>	<mark>ent',1000);</mark>
if (qvtResizerContentWindow.get_qvtIsParent())	

gvtResizer.doResize('content');

break;

}