

Sitecore CMS 6.6 Report Designer Cookbook

A Guide to Working with Engagement Analytics Reports

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Chapter 1

Introduction

The instructions in this cookbook are for .NET developers working with Sitecore reports. Anyone working with Sitecore reports should also have a good knowledge of SQL and have access to a local development instance of Sitecore.

Sitecore Engagement Analytics contains a selection of pre-defined reports such as recent visits, sales leads, site health, visitor searches, page goals and events, top external keywords and top traffic sources. You can view these reports in Engagement Analytics or on individual content items and can customize them using Sitecore and the Stimulsoft Report Designer.

The examples used in this cookbook come from the Nicam demo site and Office Core running on Sitecore CMS with the Sitecore Engagement Analytics and a SQL Server database. Both websites use a large amount demo data which makes it easier to test different report scenarios without the need to deploy them to a live environment.

Note - The instructions in this guide include SQL queries based on SQL Server syntax which may not be compatible with other database management systems such as Oracle.

• Chapter 1 — Introduction

This chapter is a description of the content, aims, and the intended audience of this cookbook.

- Chapter 2 Report Design Tools This chapter provides an overview of the tools that you need to create and edit reports.
- Chapter 3 Editing Reports
 This chapter covers the basics, from changing font styles to adding charts and images and hyperlinks to reports.
- Chapter 4 The Analytics Database This chapter provides an overview of the Analytics database outlining some useful table groupings to use when designing reports.
- Chapter 5 Creating and Modifying Reports
 This chapter explains how to create a report using the Web Reports Designer and
 how to make some simple modifications.



1.1 Security Roles and Sitecore Engagement Analytics

You must be a member of certain Sitecore security roles to access the functionality in Sitecore Engagement Analytics.

The important Sitecore Engagement Analytics security roles are:

Security Role	Grants
Client Authoring	Access to the Marketing Center.
Analytics Reporting	Access to the Engagement Plan Monitor and to the Executive Dashboard. Requires membership of the <i>Client Authoring</i> role.
Analytics Maintaining	Access to the Engagement Plan Designer and Supervisor. Requires membership of the <i>Client Authoring</i> role.
Analytics Testing	Access to the Test Lab in the Marketing Center as well as access to the test functionality in the Page Editor and in the Content Editor. Requires membership of the <i>Client Authoring</i> role. Members of this role can create and edit test variations. Users who are not members of this role can switch test variations. Members of the <i>Minimal Page Editor</i> role cannot switch test variations.
Analytics Personalization	Access to the personalization functionality in the Page Editor and in the Content Editor. Requires membership of the <i>Client Authoring</i> role. Members of this role can create and edit personalization rules. Users who are not members of this role can switch personalization variations. Members of the <i>Minimal Page Editor</i> role cannot switch personalization variations.
Analytics Content Profiling	Access to the content profiling functionality in the Page Editor and in the Content Editor. Requires membership of the <i>Client Authoring</i> role.

All of the analytics roles are members of the Client Users security role.

Note

These roles do not allow you to edit report definition items. To edit report definition items you must either be an Administrator or a member of the *Sitecore Client Developing* role. This role gives you permission to rename, move, copy or sort report definition items.



Chapter 2

Report Design Tools

This chapter gives you an overview of the two Stimulsoft client options available for creating and editing reports in Engagement Analytics.

- Stimulsoft Web Reports Designer
- Stimulsoft Windows Reports Designer



2.1 Stimulsoft Web Reports Designer

Official name: Stimulsoft Reports.Web

The Web Reports Designer is the standard report designer available in the Sitecore Engagement Analytics. In Engagement Analytics, to access the Web Reports Designer client, click the *Design* button at the top of any report.

2 of 2 ▶ ▶ Q 100%	2 of 2 ▷ ▷ I Q 100%	2 of 2 ▶ ▶∥ Q, 100%

In the Web Reports Designer, you can edit the format of existing reports or create new reports by making and editing a duplicate copy. Also, you can use the Web Reports Designer to add images, hyperlinks, and charts to your reports.

The Web Reports Designer has some limitations. For example, you cannot use keyboard shortcuts and you cannot easily create SQL queries using this tool. Use the Windows Reports Designer for more advanced report editing functionality.

The Web Reports Designer user interface displayed in Internet Explorer:



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2.2 Stimulsoft Windows Reports Designer

Official name: Stimulsoft Reports.Net

The Stimulsoft Windows Reports Designer is available as a free trial download from the Stimulsoft Web site. It is a richer and more powerful reports design tool suitable for developers or report analysts. It gives more precise control over the report design process. Ultimately, you can achieve the same end results using the Web Reports Designer but if you want to develop a significant number of reports for your Web site, we would recommend that you purchase this tool or download the trial version.

Advantages of using the Windows Reports Designer:

- Create new reports from scratch
- Use wizards to quickly create new reports
- Reports load quickly (the client does not run in a browser window)
- Keyboard shortcuts (including Ctrl Z)
- Preview functionality
- Import and export formatting styles

The Windows Reports Designer client user interface:



Note

The free trial version of the Windows designer (*Stimulsoft Reports.Net*) may not include all the same functionality as the version in Sitecore. For example, in more recent versions there may be some additional properties available. However, this should not affect the running of your reports.



Chapter 3 Editing Reports

This chapter introduces basic report designer concepts such as editing text and adding charts and images to existing reports:

- **Engagement Analytics Reports** •
- Formatting Text
- Adding Charts to Reports .
- Adding Images to Reports .
- Adding Links to Reports



3.1 Engagement Analytics Reports

In the Sitecore Engagement Analytics, a report consists of three components:

- Sitecore report definition item
- Sitecore report query item
- Stimulsoft .mrt report file

3.1.1 Sitecore Report Definition Item

A Sitecore report definition item is like any other content item stored in the Sitecore content tree. To access report definition items, open the Content Editor and navigate to the following location:

/sitecore/system/Settings/Analytics/Reports/Reports

Each report item contains the following fields:

Field	Description
File Name	Path to the report Stimulsoft .mrt file. This field links the Sitecore definition item to the Stimulsoft mrt file.
Report Title	Enter the title that you want to display on the report.
Report Description	Enter the description that you want to display on the report.
Daily Report	Check box that filters the report to show daily data.
Queries	All reports are bound to one or more SQL queries. In the first field enter the word <i>DataSource</i> . In the second field, use the drop-down to select a SQL or Oracle query.

Classified Organizations report definition item showing the Queries field:

Settings	Content	- L	
Unsert Rules	😭 🏠 Classified Organizations		
Analytics			
Campaign Organic Settings	Ouick Info	F	
Dashboard Reports	Thata	-	
Engagement Automation		-	
U Filters	File Name [shared]:		
E Ucokups	/sitecore/shell/Applications/Analytics/Reports/TopLeadsByActivity.mrt		
Marketing Automation Evaluation			
Multivariate Test Strategies	Report Title:		
B Organic Branded Keywords	Top Leads by Activity - Classified Organizations		
Page Events			
Pattern Matching Types	Show Editor · Suggest Fix · Edit Html		
Preset Types	Report Description:		
📧 🥥 Profile Key Controls	This report helps you answer the following question:	•	
🗷 🧐 Profile Types			
📧 🧐 Reports SQL Queries	Which classified organizations have shown an increased interest and a greater amount of activity on the	=	
🖲 🧐 Rules	website during a specified period of time?		
🗉 🥥 Traffic Type		-	
Visitor Identification Types	= This report lists the classified organizations that have the highest activity score. This report helps you identify		
Visitor Identifications	the organizations that may be moving towards the <i>Top Leads by Value</i> report and could become prospects. The		
🗉 🥥 Reports	organizations listed in this report have a high level of activity, but may not have accumulated high values yet.	-	
Item Reports			
Reports			
Sales	Daily report [shared]:		
Top Leads by Activity			
A Classified Organizations		_	
🖂 Unclassified Organizations	Queries [shared]:	1	
🗉 🥥 Top Leads by Value	DataSource Top Leads By Activity - Classified	•	
🗉 🔋 Site Health	Coloristics Netfection Coloristics	-	
Recent Activity	Subscription Nourication Subscription	4	
Subreports		-	
🗷 🗐 Laurauta		J	



3.1.2 Sitecore Report Query Item

A Sitecore report query item contains a SQL query used by report definition items. All report query items are stored in the Sitecore content tree:

/sitecore/system/Settings/Analytics/Reports SQL Queries

Each report query item contains the following fields under the Queries group:

- SQL Server
- Oracle

Assets		
Average Time on Page	Not Found Urls	
Item Bounced		
Latest Failures	G Quick Info	÷
Latest Visits	E Queries	Ξ
Latest Visits with Failure	SOL Server (dyred)	
Local Searches Leading to this Page	Set Server (analised).	
Local Site Search	select top 25	
New Page Visitors	Pages.Url,	
Not Found Urls	Count (Pages.Url) as Total	
Not Found Urls Previous Referrers	from	
Not Found Urls Previous Urls	Pages, Visits	
Notification Subscription	AND Pages.VisitId = Visits.VisitId	
Organization	AND Visits.StartDateTime BETWEEN @StartDate AND @EndDate	
Organization Goals	group by	
Organization Maps Coordinates	Pages.Url	
Organization Units	order by	
Organization Visitors	Iotal desc	
Organization Visits		-
Page Assets		
Page Goals	Oracle [charad]	
🗾 Page Url	Viauc (anarcu).	
Pages that Report Errors		
Pages Visits		
Profiles		
Searches from Page		Ŧ

Create SQL queries in a tool such as *SQL Server Management Studio* and paste the query into the SQL Server field. Use the Stimulsoft Web Reports Designer to create a report and to test queries before adding them to the content tree.

3.1.3 Stimulsoft .mrt File

When you save a report, you save all the configuration data for the report in an XML file with the .mrt extension. This data in this file includes the following:

- Connection string
- Layout and presentation
- Text formatting

The *report.mrt* file is a Stimulsoft file type and is stored in the following location in your Web site file system:

wwwroot\<sitename>\WebSite\sitecore\shell\Applications\Analytics\Reports\

When you edit a report in either the Web or Windows report designer you save the changes you make directly to the .mrt file. You can base several reports on the same report .mrt file, so it is easy to overwrite an existing report.

Note

If you create multiple new reports create a new folder for your reports to avoid confusion with the standard Sitecore reports.

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3.1.4 Opening a Report in the Stimulsoft Web Designer

You can open and edit a report in Engagement Analytics using the built-in Stimulsoft Web Reports Designer. Use the Designer to duplicate or create new reports. To edit or create new reports you need the appropriate permissions to gain access to the Sitecore content tree and file system.

Note

Some reports share the same .mrt report file, so changes to one report file can affect several reports. Duplicating a report and saving it with a different name helps to avoid this problem.

For more detailed steps on how to create or duplicate a report, see Chapter 6, Creating and Modifying Reports.

To open a report in the Stimulsoft Web Reports Designer client:

- 1. In Engagement Analytics, select the report you want to edit.
- 2. Click **Design** at the top of the report.

012 👻	Filter	Des	sign	
14 4	Page	1 of 1		Q 10

View the report in the Stimulsoft Web Reports Designer.



3.1.5 Opening a Report in the Stimulsoft Windows Reports Designer

The Windows reports designer allows you to open and edit a report directly from the .mrt report file and allows you to create new reports from scratch.

To open a report in the Windows Designer client:

1. Click the Start menu on your computer and then open the Windows reports designer from the Stimulsoft group in All Programs.



2. Click the Stimulsoft menu, then click **Open Report** and browse to the .mrt file you want to edit.



3. Select a report .mrt file to open



4. View the report in the Windows Designer.

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		-	Properties Dictionary 🚡 Report Tree
ters .	PerformanceReport X:18.56 Y:10.10		

All report the .mrt files are stored in the following location:

wwwroot\<Web site name>\WebSite\sitecore\shell\Applications\Analytics\Reports

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3.2 Formatting Text

This section explains how to format text in an existing Engagement Analytics report. Using the Web Designer, you can easily change:

- Text colors
- Font style
- Font-size
- Bold
- Underline
- Italic

3.2.1 Formatting Text Using the Ribbon

Open an Engagement Analytics report in the Web Reports Designer. Make a duplicate of the report first and then make the following changes:

1. In the report layout, click on a text box and then in the **Font** group, click **Text Color**.



2. Select a different text color, such as red.



3. In the Stimulsoft menu, click **Save Report** to save your changes.



- 4. Click Exit to close the report designer.
- 5. In **Engagement Analytics** preview your report.

You can use the Stimulsoft ribbon in exactly the same ways as you would use the Microsoft Word ribbon to change text size and to apply other styles such as bold, underline and italic.

3.2.2 Formatting Text Using Properties

To format text using the **Properties** panel:

1. In the report layout, click on a text box and then in the **Properties** panel, in the **Text Brush**, **Color** field select *Red*.

🔄 Code 🛛 🔂 Preview 🔍	F	roperties	A
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	1	ext8 : Text	
	A 1	SAL 🖼 🧭 🖂	
	(e	1. Text	
ageHeader		Text	2 Goals
ReportTitle		Color	Solid Net
Reportine		CODI	Ked V
ormat "(0.yyyy-MM-6d)", TotalVisits Parameters ("@StartDate"), ParameterValue)) - (Format("(0.yyyy-MM-6d)", TotalVisits Parameter		East Name	Cambria, 12pt; style=bold, italic, orid
		Font Size	12
ata4; Data Source: Totalvisits		Font Bold	The
ntalV/isits IntalV/isits InString("# ####")) visits		Foot talls	True
		Font Underline	True
		Font Strikeout	False
		Horizontal Alignment	Left
roupHeader2; Condition:		Vertical Alignment	Center
oals		Text Format	General
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ata1: Data Source: Goals		Allow Html Tags	False
anis Name) [Grais Total) is Total) (is its * 100) ToString("#0.0") [84		Angle	0
		Editable	False
		Hide Zeros	False
rouprieaders; Condition: (Profiles:ProfileName)		Lines of Underline	None
		Margins	0;0;0;0
rofile: (Profiles.ProfileName)		Max Number of Lines	0
		Only Text	False

- 2. To save your changes, click **Save Report**.
- 3. Click Exit to close the report designer.
- 4. In Engagement Analytics preview your changes.

The **Properties** panel gives you more control than the ribbon over formatting text. For example, you can enter hexadecimal values directly into the **Text Brush**, **Color** property. You can also set additional properties to make more advanced changes. For example you can allow HTML tags to be



used to format text by setting Allow Html Tags property to True.

8	21 🗉 🖉 🖾		
Ξ	1. Text		~
	Text	Σ Goals	
Ξ	Text Brush	Solid	
	Color	Red	
-	Font	Cambria; 12pt; style=Bold, Italic, Und	
	Font Name	ab Cambria	
	Font Size	12	
	Font Bold	True	
	Font Italic	True	
	Font Underline	True	
	Font Strikeout	False	
	Horizontal Alignment	Left	
	Vertical Alignment	Center	
	Text Format	General	
Ξ	2. Text Additional		
	Allow Html Tags	False	
	Angle	0	
	Editable	False	
	Hide Zeros	False	
	Lines of Underline	None	
	Margins	0;0;0;0	
	Max Number of Lines	0	
	Only Text	False	
	Process at End	False	
	Processing Duplicates	None	
	Render to		
	Shrink Font to Fit	False	
	Shrink Font to Fit Minimum S	1	
	Text Quality	Standard	
-	Text Options	HotkeyPrefix=None; LineLimit=False	
	Distance Between Tabs	20	
	First Tab Offset	40	
	Hotkey Prefix	None	<u>×</u>

3.2.3 Styles

You can also control the format of your text, headings, and charts using *Styles*. In the Stimulsoft ribbon, **Style** group you can access all your style options.

Conditions Syle Sorders Text Format G	[None] - Subtitle - IIIIP. -			
		Pr	operties	
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] [I. Text Text Text Brush	Σ Goal
:terValue)} - {Format("(0:yyyy+MM-dd)", TotalVisits.Parameter		B	Color Font Font Name Font Size	Cambria; ab Cam 12
			Font Bold	True
			Font Italic	True
			Font Italic Font Underline	True True
	=		Font Italic Font Underline Font Strikeout	True True False
	-		Font Italic Font Underline Font Strikeout Horizontal Alignment	True True False Left
	-		Font Italic Font Underline Font Strikeout Horizontal Alignment Vertical Alignment	True True False Left Center



To view all styles or to add a new style, open the Style Designer window.

Subtitle		. 2↓	
		1. Main	
(Titlo		Name	Subtitle
<u> </u>	i	Description	
ColumnHeader	•	2. Appearance	
containineater		Text Brush	Solid
EvenBow	Đ	Brush	Solid Solid
Lveintow	🗉	Border	None
	•••••	Font	Cambria; 12pt; style=lt
UddRow		Horizontal Alignment	Left
		Vertical Alignment	Тор
GroupHeader	E	3. Parameters	
		Allow Use Border	True
Normal		Allow Use Brush	True
		Allow Use Font	True
Style1		Allow Use Image	True
		Allow Use Text Brush	True
		Allow Use Text Options	True
		Allow Use Hor Alignme	False
		Allow Use Vert Alignme	False

All the styles contained in the Style Designer are stored in a .sts file. You can export styles that you want to save or import new styles from a saved .sts file.

The **Conditions** window allows you to create conditional formatting conditions based on values or expressions.

	Conditions X
Add Condition	X Remove Condition 🛛 🐟 🗇
Add Level	
Field Is Value EqualTo	Data Type Column * String * * [No] *
AaBbCcYyZz	B ∑ ∑ Change Font Select Style ~ ♥ Component is Enabled
	OK Cancel



3.2.4 Applying Styles

To apply a different style to a report:

- 1. Click on a text box in a report that you want to edit.
- 2. Select a text box and click on one of the styles visible in the right hand side of the **Styles** panel. For example, *GroupHead*.



3. Save your changes and preview your report in **Engagement Analytics**.



3.3 Adding Charts to Reports

By providing a visual overview of data, charts and graphs can make reports more meaningful at a glance. This can be particularly useful to marketing and sales executives who quickly need to identify trends or potential leads.

You can easily add a chart or graph to a report using the Web Reports Designer.

The following example explains how to add a bar chart to an existing Sitecore report.

Start by opening a report such as *Page - Goals and Events*. To open this report, first select a content item, then in the Sitecore ribbon, select the *Analyze* tab and in the *Behavior* group click *Reports*.

It is easier to use an existing report so you can re-use the data contained in the report. Before making any changes to an existing report, you must first duplicate the Sitecore report definition item, Sitecore SQL query item and report .mrt file first. To do this you need the appropriated permissions to access the Sitecore content tree and file system.

Note

Some report files, such as TopLeadsByValue.mrt are used by multiple reports, so changes to one report file can affect several reports. Duplicating a report and saving it with a different name helps to avoid this problem.

For more detailed steps on how to duplicate a report, see Chapter 5, Creating and Modifying Reports.

You are going to make a simple bar chart that only displays information related to conversions, so first remove any information about profiles that appears on this report. If you wish, you can also change the heading.

3.3.1 Creating a Bar Chart

To create a new bar chart:

- 1. In the Content Editor, under Item Reports, open the Page Goals and Events report.
- 2. Click **Design** at the top of the page, to open the report in the Web Reports Designer.
- 3. In the report designer toolbox, click **Chart** and with the pencil tool draw a container for your bar chart.



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4. Double click the box you created to open the Series Editor window.



- 5. Select *Clustered Column* as your chart type.
- 6. Once you have chosen a chart type, the right hand panel of the **Series Editor** window displays properties that you can set on your chart. Select property **4. Argument**.
- 7. In the **Argument Data Column** field, enter the name of an Analytics database table followed by a column name. For example, enter *Goals.PageEventName* in the pop-up **Text Editor** window. This is how you set the X axis which appears at the base of your chart.

	Se	ries	Editor	× [No] Page Wera	igeTimeOnPage	×	
Image: Second	Image: Series 1 [Clustered Column]		2 1. Data Filters Format Sort by Sort Dir Auto Se Auto Se Auto Se Auto Se Show Z Brush 3. Beha Border (Brush 3. Beha Border (YAxis Show Z Width 4. Argumen List of A Argumen List of A Title gument	A A Second	olun solur	geTimeOnPage hesFromPage aource i geEventName sitsCount ilue Aasets 5 Sourced ageVisitors Goals.PageEventNam series 1		
0				ne arga				1

- 8. In the **Value Data Column** property, enter the name of the same table but this time a different column name. For example, *Goals.Value.*
- 9. Select any other field in the **Series Editor** and then click **Close** to save your changes and exit the **Series Editor** window.



10. Save your report, close the designer and preview the report in **Engagement Analytics**. Your chart should now look something like this:



Next you can try to improve the formatting of your chart.

3.3.2 Formatting Charts

In the Web Reports Designer, using the bar chart that you created, add styles and set properties to add color and other formatting.

You can place a chart on any other component of a report such as a report header, group header, data source or text box but usually charts appear above or below the other components on the report.

Resizing a Chart

To re-size a chart:

- 1. Click on the chart you created earlier.
- 2. Make sure you place your chart directly below the data band. Then move the mouse over the chart to see the re-size arrows.





3. Adjust the chart size to fill the full width of the report work area.



Changing Chart Colors

In the Web Reports Designer, you can change the color scheme of a chart using pre-defined styles. You can also create your own custom color schemes.

To change a chart color scheme:

- 1. In the Web Reports Designer, select your chart.
- 2. Click the **Properties** tab on the right-hand side of the page to view the chart properties.
- 3. In property number **1. Chart**, click **Style**, and then click the drop-down menu to see all the available chart styles.



4. Select Style 08.



When you select a style, you see a preview of the selected color scheme displayed in the report designer.

- 5. Save your changes and close the report designer.
- 6. Preview your report in **Engagement Analytics**. Your report should now look something like this:

'	age - Goals a	and Events	;		Report General	ted: maj. 13, 201
ep	ort description					
ag	e URL: <u>/~/xaml/sitecore.she</u>	II.applications.analytics.tra	ickingfield.profil	es		
	Visits 24566	Value 13000	Valu	e per Visit 0,00		
	Bounce Rate 3,83%	New vs. Returning 83,72% / 16,28%	Avg. T	ime on Page 54 sec.	Searches from Pag 24	e
ie ial II i	following table lists the imp by placing that conversion not convert until they have o	ortant activity of visitors v opportunity or a link to th leveloped trust in your we	who viewed this nat conversion ebsite—but the	page. You may opportunity on th y will want the o	r be able to accelerate th iis page. Keep in mind, t ption to convert when the	e conversion of a hat often visitors ey are ready.
	Goal	% Total Value	Value	Visits	Value per Visit	
	Instant Demo	50,25%	2500	18	138,89	
	Register	22,11%	1100	18	61,11	
	Pricing Quote Request	19,60%	975	1	139,29	
	Newsletter Signup	0,0370	325	4	01,25	
DC 5C	0 					
50	o					
	2500					
JC	U					
	0		975		25	
50					75	

Tip

The Web Reports Designer takes a few seconds to load each time you open and close it. Keep a second instance of Engagement Analytics open to make it quicker to preview your changes.

Adding Chart Labels

You can add labels to your charts. For example, add labels to the X and Y axis, a title or add a legend. A legend is like a key that you can refer to if you have multiple columns of different colors

Overview of Chart Labels:

Use the **Properties** panel to add labels to your chart. There are many different properties that you can set on a chart, so start by adding the following:

- Titles to the X and Y axis
- A key or legend
- Labels to appear on each column

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To do this, use property 1. Chart.

The following table gives you an overview of some of the main properties in Chart.

Property (example)	Description	Value
Area • X Axis • Title • Text • Y Axis • Title • Text • Color Each	Area contains several properties that allow you to control the format of the chart area. This could include the border, the background, or labeling the X and Y axis. Color Each lets you decide whether you want all columns to be the same color or different.	Enter a title to appear on the X axis (below the horizontal line at the base of the chart) Enter a title to appear on the Y axis (alongside the vertical line at the side of the chart) <i>True</i> or <i>False</i>
Legend • Title	<i>Legend</i> refers to the key. This is particularly useful in Pie Charts when the key provides more information about the different colored segments of the chart.	Enter a title to appear in the key. For example, <i>Goals</i>
Series Labels • Visible	Set Series Labels properties to add labels or to change the formatting of the columns that appear in your chart. For example, you can add a label to each column and choose whether to make them visible or not.	<i>True</i> or <i>False</i>

To add a chart legend label:

- 1. In the Web Reports Designer, select your chart.
- 2. In the **Properties** panel, select **Chart**, and then expand the **Legend** node.
- 3. In the Title field enter Goals.

	<u></u> 2↓		
Ξ	1. Chart		
	ChartType	Clustered Column	
÷	Area	(Area)	
Ξ	Legend	(Legend)	
	Border Color	238, 32, 45, 70	
	🗄 Brush	Gradient	
	Columns	2	
	Direction	Top to Bottom	
	Font	Arial; 8pt	
	Horizontal Alignmen	Left	
	Horizontal Spacing	4	
	Labels Color	238, 32, 45, 70	=
	Marker Alignment	Left	
	Marker Size	10; 10	
	Marker Visible	True	
	Show Shadow	True	
	Size	0: 0	
1	Title	Goals	
	Title Color	238, 32, 45, 70	
	Title Font	Arial; 14pt; style=Bold	
	Vertical Spacing	2	
	Vertival Alignment	Тор	
	Visible	True	
	Series	(Series)	
÷	Series Labels	Labels Center	
	Style	Style08	
Ð	2. Chart Additional		-

To add labels to the X and Y axis of your chart:

1. In the report designer, select your chart.



- 2. In the **Properties** panel, select **Chart**, and then expand the following properties:
 - o Area
 - o X Axis
 - o Labels
 - o Angle
- 3. In the Angle property, enter 45.

-	Z *			
-	1. Chart			4
	ChartType		Clustered Column	1
3	Area		(Area)	
	Border Co	olor	238, 32, 45, 70	
	🗄 Brush		Gradient	
	Color Eac	h	False	
	Grid Line:	s Horizonti	(Grid Lines Horizo	ntal)
	Grid Line:	s Horizo	(Grid Lines Horizo	ntal)
	Grid Line:	s Vertical	(Grid Lines Vertica	al)
	Interlacing	g Horizont:	(Interlacing Horizo	ntal)
	Interlacing	Vertical	(Interlacing Vertic	al)
	Reverse Horizontal		False	
	Reverse Vertical		False	
	Show Shadow		False	
	X Axis		(X Axis)	
	Arrow Style		None	
	Labels		(Labels)	
	An	gle	45	
	An	tialiasing	True	
	Co	lor	238, 32, 45, 70	
	🕀 Fo	nt	Tahoma; 8pt	
	Fo	rmat	Empty	
	Pla	cement	One Line	
	Te	kt After		
	Te	kt Before		
	Wi	dth	0	
	Line C	olor	238, 32, 45, 70	-

This means that you can display all labels on the X Axis at an angle of 45 degrees, so that all text is visible in the chart.

To add a chart title:

- 1. In the designer, select your chart.
- 2. Expand the following properties:
 - o Chart Additional
 - o Title
 - o Text
- 3. In the **Text** property, enter a name, such as *Conversions*
- 4. Set the Visible property to True.



Chart Additional allows you to set several other properties.
 Set the following additional properties on your chart:

Property	Value
Alignment	Center
Dock	Bottom
Font Size	18
Font Bold	True

Constant Lines	(Constant Lines)
Process at End	False
Horizontal Spacing	10
Vertical Spacing	10
Strips	(Strips)
I Title	(Title)
Alignment	Center
Antialiasing	True
🗄 Brush	Solid
Dock	Тор
Font	Tahoma; 18pt; style=Bold 🛛 🛄
Font Name	ab Tahoma
Font Size	18
Font Bold	True
Font Italic	False
Font Underline	False
Font Strikeout	False
Spacing	2
Text	Conversion Tracking
Visible	True

6. Save your chart and preview it in Engagement Analytics.





3.3.3 Creating a Pie Chart

Create a report that displays visitor goals as a pie chart.

Preparation:

1. In Engagement Analytics, select a report. For example, Page - Goals and Events.

You will use this report as the basis for your pie chart report. This report already contains a Goals data source that you can re-use.

2. Find the report definition item in the content tree.

/sitecore/system/Settings/Analytics/Reports/Item Reports/Page - Goals and Events

- 3. Duplicate this report and rename it Visitor Goals Chart.
- 4. Locate the .mrt file associated with this report: PageGoalsEvents.mrt. wwwroot\<site name>\WebSite\sitecore\shell\Applications\Analytics\Reports\ItemReports
- 5. Rename the copy of PageGoalsEvents.mrt to VisitorGoalsChart.mrt.

To create a new pie chart:

- 1. In **Engagement Analytics**, refresh the reports content tree.
- 2. Select the report Visitor Goals Chart.
- 3. Click **Design**, to open the Web Reports Designer.
- 4. Remove all data bands and headers that refer to profiles. To do this, click on a data band and then in the ribbon, click **Delete**. Your report layout should now only display goals:

Sitecore Analytics		
J.8		
Home Page Li	ayout View	
Paste Delete	The first sector of the	
Based (2 Decision		
E Pager (Se Preview	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	
_		
•		
-	◆ PageHeader	
-	{Report litle}	
-	[Formatl"[0,yyyy-MM-dd]", TotalVisits.Parameters["@\$tartDate"].ParameterValue]] - (Formatl"[0,yyyy-MM-dd]", TotalVisits.Parameters["	
N		
-	Data4; Data Source: TotalVisits	
m	{TotalVisits.TotalVisits.ToString("#,##0")} visits.	
-		
4		
-	▼ GroupHeader2; Condition:	
10	Goals	
-		
0	Data1; Data Source: Goals	
-	{Goals.Name} {Goals.Total} {((double)Goals.Total / TotalVisits.Tota	
N		
φ.		
1		

5. In the toolbox, click **Chart**.



6. Using the pencil tool, draw a box for your chart on the report layout.



7. Select the empty box and in the **Properties** panel, select *Pie* from the **Chart Type** property.

				Properties Dictio	nary Report Tree
6 7 8 9 1	<mark>0 11 12 </mark> 13 14 15	16 17 18		Chart1 : StiChart	
				A 1	
				E 4 Chart	
				ChartType	Clustered Column 🔹
		T		Area	Clustered Column
ameters) (wotartDate].Param	recervaruery - cronnati (0.9999-wiwi-dd) ,	inotarivisits.Parameters	_	E Legend	Stacked Column
				Series	Full-Stacked Column
				E Series Labels	Pull-Stacked Column
0")} visits.				Style	Clustered Bar
				Constant Lines	Stacked Bar
				Process at End	Full-Stacked Bar
				Horizontal Spacing	Pie
				Vertical Spacing	Doughnut
				Strips	Line
{((double)Goals.Total / To	otalVisits.Tota			H Title	Stepped Line
,				Data Source	Stacked Line
				Data Relation	Full-Stacked Line
				Count Data	Spline
				Filter On	Stacked Soline
				Filters	Full-Stacked Spline
	•			Sort	
				ChartType	

8. Double click the pie chart to open the Series Editor window.



9. In the Series Editor window, click Pie to display the properties of the pie chart.



10. In the **Series Editor** window, choose columns to display in your pie chart. Select *Goals.PageEventName* from the *Argument Data Column* property drop-down.

🚵 🛪 🗙 🐟 🗇 🛛 Close	Series Editor X [No] X B Page AverageTimeOnPage
W Series 1 [Pie]	Argument Show Li
	Argument Data Column Gets or sets a name of the column that contains the argument value.

- 11. In the Value Data Column property, enter Goals. Value.
- 12. To save your changes, select any field in the Series Editor window and then click Close.



-

.

-

13. Select your pie chart. In the **Properties** panel, click **Chart**, **Style** and then select *Style08* from the drop-down list.



14. To add a legend and to format it, set the following properties in the Properties panel:

Property	Value
Legend, Title	Goals achieved
Legend, Columns	1
Legend, Direction	Right to Left
Series Labels	Outside
Series Labels, Legend Value Type	Argument

15. In the Stimulsoft menu, click Save Report.



In Engagement Analytics, preview your Goals pie chart.





3.4 Adding Images to Reports

In the Web Reports Designer, if you want to add an image to report, enter a URL link to the image. If you use the Windows Web Reports Designer, you can also browse your computer for images.

In this section, add an image to the *Visitor Goals Chart* that you created in the previous section. This is a duplicate of the Stimulsoft file <code>PageGoalsEvents.mrt</code>.

Alternatively, add an image to any of your existing reports.

3.4.1 Linking to an Image in the Media Library

To add an image to a report:

- 1. Open the Visitor Goals Chart in the Web Reports Designer.
- 2. In the tool box, click Image and drag a new image placeholder onto your report.

	•HeaderIPOwners {ReportTitl	e}
	Score	Organization
-	▼ DataIPOwners; Data Sou	rce: IPOwners
4		{IPOwners.Name}, {II {IPOwners.VisitCount} sess
-		visitor(IPOwners VisitorCou
	• • •	
-	*	
00		
] _		
) 💁	e e -	
1 -		
8		

- 3. Double click the box to open the Image dialog box.
- 4. In the **Image** dialog box, you get the following options:

Option	Description
Data Column	Link to a BLOB image stored in a database
Image Data	Enter an image variable, for example {MyImageVariable}
URL	Enter a URL string that links to an image in the Media Library or on an external server.



5. Link to an image stored in the Media Library. Open the Media Library and locate the image *Sitecore* in the content tree.

h 🔍 🔻	💽 Content	1 -
🔤 Media Library 🖃 🧊 Files	O MINITE Sitecore	Â
Case Study 2011	• Quick Info	
🗆 🥥 Images	Item ID: {C9E8D258-9C1A-4E19-B7EF-18A078B1CE41}	
Banners	Item Name: Sitecore	=
Hash Grocoss	Item Path: /sitecore/media library/Images/Reports/Sitecore	
G Reports	Template: /sitecore/templates/System/Media/Unversioned/Image - {F1828A2C-7E5D-4BBD-98CA-320474871548}	
Sitecore	Created From: [unknown]	
🗉 🍏 Sidebar	Item Owner: sitecore\admin	
Services		
Gients		
Partners	Attach · Detach · Download	
About	ricula (starco).	
🗉 🍯 News		
🗉 🥥 Brochures		
🗉 🥥 Logos		
Register Form	compelling web experiences	
Ioolbox		
G System		
	File Path [shared]:	

6. Select the image and in the ribbon, **Media** group, click **View**.



7. Right-click the pop-up window and select properties.



8. In the Properties window, in the Address field, highlight and copy the image URL.

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9. In the report designer Image dialog box, paste the URL into the Image URL field.



The URL for the Sitecore logo in the Media Library is:

```
http://<website>/sitecore/shell/Applications/Content%20Manager/~/media/Images/Reports/
Sitecore.ashx?db=master&la=en&vs=1&ts=20110513T1402420511
```

10. Move your image to a better position on your report. For example, in the top right corner, next to the report title.

You can easily add an image box to a report header or any other component of an Engagement Analytics report.

- 11. Click **OK** to close the **Image** dialog box.
- 12. Save your changes and preview your report in **Engagement Analytics**.

Pa	age Goals			(〕 sıtecore	,
					compelling web experiences	s
					Report Generated: maj. 13, 20	011
Rej	port description					
The cor mir cor	e following table lists the impo inversion of a goal by placing t nd, that often visitors will not o wert when they are ready.	ortant activity of visitors v hat conversion opportuni convert until they have de	who viewed this p ty or a link to tha eveloped trust in y	age. You may b it conversion opp your website—bi	e able to accelerate the vortunity on this page. Keep in ut they will want the option to	
The cor mir cor	e following table lists the impo iversion of a goal by placing t id, that often visitors will not o ivert when they are ready. Goal	ortant activity of visitors v hat conversion opportuni convert until they have de % Total Value	who viewed this p ty or a link to tha eveloped trust in y Value	age. You may b it conversion opp your website—bu Visits	e able to accelerate the xortunity on this page. Keep in it they will want the option to Value per Visit	
The cor mir cor	e following table lists the impo wersion of a goal by placing t nd, that often visitors will not o wert when they are ready. Goal Instant Demo	ortant activity of visitors v hat conversion opportuni convert until they have de % Total Value 50,25%	who viewed this p ty or a link to tha eveloped trust in y Value 2500	age. You may be tt conversion opp your website—bu Visits 18	e able to accelerate the xortunity on this page. Keep in it they will want the option to Value per Visit 138,89	
The cor mir cor 1.	e following table lists the impo tversion of a goal by placing t d, that often visitors will not o tvert when they are ready. Goal Instant Demo Register	ortant activity of visitors v hat conversion opportuni convert until they have de % Total Value 50,25% 22,11%	who viewed this p ty or a link to tha eveloped trust in y Value 2500 1100	age. You may be it conversion opp your website—bu Visits 18 18	e able to accelerate the xortunity on this page. Keep in it they will want the option to Value per Visit 138,89 61,11	
The cor mir cor 1. 2. 3.	e following table lists the impo rversion of a goal by placing t d, that often visitors will not o rvert when they are ready. Goal Instant Demo Register Pricing Quote Request	ortant activity of visitors v hat conversion opportuni convert until they have de % Total Value 50,25% 22,11% 19,60%	vho viewed this p ty or a link to tha eveloped trust in y Value 2500 1100 975	age. You may b it conversion opp your website—bu Visits 18 18 7	e able to accelerate the xortunity on this page. Keep in it they will want the option to Value per Visit 138,89 61,11 139,29	
The cor cor 1. 2. 3. 4.	e following table lists the impo rversion of a goal by placing t rd, that often visitors will not o rvert when they are ready. Goal Instant Demo Register Pricing Quote Request Newsletter Signup	ortant activity of visitors v hat conversion opportuni convert until they have de % Total Value 50,25% 22,11% 19,60% 6,53%	vho viewed this p ty or a link to tha eveloped trust in y Value 2500 1100 975 325	age. You may b it conversion opp your website—bu Visits 18 18 7 4	e able to accelerate the ortunity on this page. Keep in it they will want the option to Value per Visit 138,89 61,11 139,29 81,25	

3.4.2 Linking to Images on an External Server

If you have images stored on an external server or website, you can link to them using the URL field.

To add a link to an image on an external server:

- 1. Use the toolbox to add an image box to your report.
- 2. Double click the image box to open the Image dialog box.
- 3. In the **URL** field, enter a link to the location of your image. In this example, there is another version of the Sitecore logo stored on an external website. Most images stored in this way have a full URL string in their properties. Open the image properties and copy the image URL string.



The URL for the image in this example is:

http://lh5.ggpht.com/_0xuwaz1htow/Svghj9admCI/AAAAAAAACog/6pSI0dJ1ps0/sitecore.png

4. In the Image dialog box, paste the URL into the Image URL field.

	Image	x
Data Column Image Data	http://lh5.ggpht.com/_0xuwaz1htow/Svghj9admC I/AAAAAAAACog/6pSI0dJ1ps0/nicam_100.jpg	Data Sources Will Variables Emilia System Variables
Image URL		Ξ Σ Totals
		OK Cancel

- 5. Click **OK** and save your report.
- 6. Preview your report in Engagement Analytics.

3.4.3 Uploading Images

In this section, upload an image from your local computer. Use the same report and add a second image to the title section. To do this you need to use the Stimulsoft Windows Reports Designer client.

- 1. Open the Windows Reports Designer client.
- 2. Add another image box to the title header of your report.





3. Double click on the image box to open the **Image** dialog box.



- 4. In the **Image** field, click **Open** to browse your computer for suitable images. Find an image and then click **OK**.
- 5. Preview your report in Engagement Analytics.



Note

The Image dialog box in the Windows Reports Designer has more options than the Web Reports Designer. For example, you can also use the File tab to link to a locally stored image. You can specify a variable name for your image in the Image Data field. Developers can then use this variable or expression when working with images.


3.5 Adding Links to Reports

In Sitecore Engagement Analytics, there are three types of hyperlinks you can use:

- Link to another page on the same Web site
- Link to an external Web site
- Link to another report in Engagement Analytics

For example, the *Top Leads by Value* report contains a link to the *Business Overview* report from the visitor organization name.





The Business Overview report for Sky Broadband appears in a new window.

The Top Leads By Value report.

3.5.1 How to Link to a Web site

Select a suitable report. For example, the *Visitors Goal Chart* which we created earlier. This report lists goals achieved for visitors that have visited the Office Core Web site, also listing value, visits and total number of visits (relevance).



To create an internal link from the Sitecore logo on this report to the home page of the Office Core website:

1. Open your chosen report in the Web Reports Designer.

Pa	age Goals			(
					Report Generated: maj. 13, 2011
Re	port description				
The cor mir	e following table lists the impo nversion of a goal by placing th nd, that often visitors will not o	ntant activity of visitors what conversion opportuni convert until they have de	who viewed this p ity or a link to tha eveloped trust in y	age. You may b t conversion opp your website—bu	e able to accelerate the ortunity on this page. Keep in ut they will want the option to
The cor mir cor	e following table lists the impo rversion of a goal by placing th nd, that often visitors will not o rvert when they are ready. Goal	ntant activity of visitors v hat conversion opportuni convert until they have de % Total Value	who viewed this p ity or a link to tha eveloped trust in y Value	age. You may b t conversion opp your website—bu Visits	e able to accelerate the ortunity on this page. Keep in at they will want the option to Value per Visit
The cor mir cor	e following table lists the impo nversion of a goal by placing th nd, that often visitors will not o nvert when they are ready. Goal Instant Demo	ntant activity of visitors v hat conversion opportuni convert until they have de % Total Value 50,25%	who viewed this p ity or a link to tha eveloped trust in y Value 2500	age. You may b it conversion opp your website—bu Visits 18	e able to accelerate the ortunity on this page. Keep in ut they will want the option to Value per Visit 138,89
The cor mir cor 1.	e following table lists the impo wersion of a goal by placing th d, that often visitors will not c wert when they are ready. Goal Instant Demo Register	ntant activity of visitors what conversion opportuni convert until they have de % Total Value 50,25% 22,11%	who viewed this p ity or a link to tha eveloped trust in y Value 2500 1100	age. You may b it conversion opp your website—bu Visits 18 18	e able to accelerate the ortunity on this page. Keep in it they will want the option to Value per Visit 138,89 61,11
The cor mir cor 1. 2. 3.	e following table lists the impo wersion of a goal by placing t d, that often wistors will not overt when they are ready. Goal Instant Demo Register Pricing Quote Request	rtant activity of visitors v hat conversion opportuni convert until they have de % Total Value 50,25% 22,11% 19,60%	who viewed this p ty or a link to tha eveloped trust in y Value 2500 1100 975	age. You may b t conversion opp your website—bu Visits 18 18 7	e able to accelerate the ortunity on this page. Keep in it they will want the option to Value per Visit 138,89 61,11 139,29
The cor mir cor 1. 2. 3. 4.	e following table lists the impo version of a goal by placing ti d, that often visitors will not co wert when they are ready. Goal Instant Demo Register Pricing Quote Request Newseletter Signup	ntant activity of visitors what conversion opportuni convert until they have do % Total Value 50,25% 22,11% 19,60% 6,53%	vho viewed this p ty or a link to tha eveloped trust in y 2500 1100 975 325	age. You may b t conversion opp your website—bu Visits 18 18 7 4	e able to accelerate the ortunity on this page. Keep in at they will want the option to Value per Visit 138,89 61,11 139,29 81,25

2. Click on the text or image you want to make into a hyperlink. In this example, click on the Sitecore logo.

			1	roperties	Diction	iary	Report Tree
I 14 I 1 <mark>5</mark>	16 17 18	<u> </u>	In	nage1 : StiIr	nage		
				ŧ			
				Can Grow		False	
				Can Shrink		False	
Im	age URL:			Grow to Heigh	ıt	False	
ehttp	o://localhost/sitecore/s=			Can Break		False	
				Dock		None	
				Enabled		True	
		=		Interaction		(Intera	ction)
	ΤΤ			Bookmark			
tCount	PageCount			Drill Down	Enabled	False	
				Drill Down	Page		
				Drill Down	Report		
	{IPOwners.PageCount}			🗄 Drill Down	Paramete	0	
vners.VisitCount}				🗄 Drill Down	Paramete	0	
				🗄 Drill Down	Paramete	0	
				Hyperlink			
	- T			Sorting Ena	abled	True	
				Sorting Col	umn		
				Tag			
				ToolTip			
				Printable		True	
			Ð	Shift Mode		Increas	sing Size
				Print on		All Page	15

- 3. In the **Properties** panel, expand the following properties:
 - o Behavior
 - \circ Interaction
 - o Hyperlink
- 4. Click the box next to the Hyperlink field and open the Text Editor.

E Drill Down Paramete	0
Hyperlink	
Sorting Enabled	True
Sorting Column	



5. In the Text Editor window, enter a URL string that links to the Office Core home page.



http://<website name>/en.aspx

- 6. Click **OK** to close the **Text Editor** window.
- 7. Save you report and in **Engagement Analytics** preview your report and check your link.

How to Link to an External Web site

Use the same report and create a link to the www.sitecore.net Web site from the Sitecore logo.

Follow the same steps and enter the full address of the Web site that you want to link to. For example, enter the address of www.sitecore.net in the **Text Editor** window:

http://www.sitecore.net/

3.5.2 How to Create a Link to another Report

Creating a link to another report in Engagement Analytics requires a little more thought. In this scenario use the *Top Leads by Value* report. This time we will re-create the link from the organization name that appears in the body of the report to the *Business Overview* report.

Linking to the *Business Overview* report is useful because it gives you more information about each organization visiting the website, such as Visits, Value of Visits, Recency, location and a link to the *Visit* (session) report.

To make a link to the Business Overview report:

- 1. Make a duplicate of the Top Leads by Value report or another report of your choice.
- 2. In the Web Reports Designer, select the text box that contains the organization name.

{Repor	tTitle	ł	L
✓ HeaderIPOwn	ers		
Name		Country	VisitorCo
DataIPOwners	;; Pata Source	(POwners Country)	T {IPOwners \
•		•	
 FooterIPOwne 	ers	_	

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- 3. In the Properties panel, select the Hyperlink property and open the Text Editor.
- 4. In the Text Editor window, enter the following URL string to create a link to the Visit report.

/sitecore/shell/applications/analytics/default.aspx?r={"{"}FBF574CD-F970-4459-8260-D49A76FE7165{"}"}&p=1&locationid={DataSource.LocationId}

I GAL EUITOI	^
'sitecore/shell/applications/analytics/default.aspx?r=("(")FBF574CD-F970- 4459-8260-D49A76FE7165(")-')&p=1&locationid={DataSource.LocationId}	
OK Cancel	

The format of this URL string is quite different from a normal hyperlink. The following table explains each part of the URL.

String	Description
/sitecore/shell/applications/analytics/default.aspx?	Sitecore page that executes the report runner
r={"{"}FBF574CD-F970-4459-8260-D49A76FE7165	Business Overview report Item ID
&p=1&	Opens a pop-up window
<pre>locationid ={ DataSource.LocationId }</pre>	Links the visitor session to the organization name displayed in the report.

DataSource.LocationId refers to the data sources configured in your report. This part of the URL can be edited depending on what data sources you have configured.

The item ID will be different depending on what report you want to create a link to.

- 5. Click **OK** to close the **Text Editor** window.
- 6. Save your report and in Engagement Analytics run your report and test your link.



Chapter 4

The Analytics Database

This chapter introduces the Analytics database and provides information that may be useful for SQL developers working with reports. All Engagement Analytics reports use SQL queries or views that access tables in the Analytics database.

- Understanding the Analytics Database
- Analytics Database Tables
- SQL Views

Warning

If you have a good understanding of the Analytics database and are expert at writing SQL queries it is possible create your own Sitecore reports. Writing SQL queries by hand and creating additional views is the best way to ensure optimum performance. Using third party tools to generate SQL statements can produce inefficient queries and have a negative effect on the performance of reports.



4.1 Understanding the Analytics Database

When you create a new report consider the following:

- What information do I want to display in the report?
- What tables do I need to use?
- Is there a report that I can adapt that already uses these tables?
- How do I want to display this information in the report layout?

4.1.1 Main Table Groupings

To understand the Analytics database, start by getting an overview of the important table groupings. The following pages in this chapter provide diagrams of each table grouping with a brief explanation of the purpose of each table.

4.1.2 The Visits and Visitors Tables

The *Visits* and *Visitors* tables are key tables in the Analytics database. You can think of them as the first point of access for all the information you want to retrieve from the database.



All Web site visitors create a new session every time they visit the Web site. All these visits appear in the *Visits* table. Most reports need to access this table first before accessing information contained in other tables.



The Visits and Visitors tables both use the VisitorId column to store a global cookie value.

Column Name	Description
VisitorId	SC_ANALYTICS_GLOBAL_COOKIE value

If you study any of the existing reports in Engagement Analytics, you can see that many standard SQL queries use the *Visits* or Visitors tables. The following SQL query comes from the *Failures* data source that creates the *Slow Pages* report.

Organization Maps Coordinates	Content
Organization Units	E Slow Pages
Organization Visitors	
Organization Visits	Quick Infa
Page Assets	
Page Goals	E Quenes
Page Url	SQL Server [shared]:
Pages that Report Errors	select top 25
Pages Visits	Pages.Url,
Profiles	MAX (Pagetvents.Timestamp) as TimeTaken,
Searches from Page	from
Slow Pages	Pages,
Top External Keywords	PageEvents,
Top Leads By Activity - Classified	Visits,
Top Leads By Activity - Unclassified	PageEventDefinitions
Top Leads By Value - Classified	where Pages VisitId - VisitS VisitId
Top Leads By Value - Undassified	AND Pages. PageEvents. PageEvents.
Top Traffic Sources	AND PageEventDefinitions.PageEventDefinitionId = PageEvents.PageEventDefinitionId
Traffic Types	AND PageEventDefinitions.Name = 'Long Running Request'
Unit	AND Visits.StartDateTime BETWEEN @StartDate AND @EndDate
Linit Visite	group by
Vieit	Pages.Url
Weit Eally roo	FailCount desc
Weik Coole	
Visit Opene	11
J visit Pages	

This query accesses *Pages*, *PageEvents*, *PageEventDefinitions* as well as the *Visits* table to retrieve the data it needs.

4.1.3 SQL Queries

If you are using a SQL Server database, all the data that you display in a report you retrieve from the Analytics database using the SQL query language. When you create a report, you also need to create or adapt a SQL query.

You can either write SQL queries by hand or use a tool such as SQL Server Management Studio to help you.

Before you edit or create a new query, we recommend that you study the standard reports in Sitecore Analytics to help you to understand the structure of each query. Each report consists of one or more data sources and each data source contains a SQL query. Examine the existing queries first to decide which tables you want to access and which columns you want to display.

Although you can create reports with a limited knowledge of the SQL query language, particularly if you use a tool like the Stimulsoft Query Builder, an understanding of SQL and the table structure of the Analytics database is a great advantage.

Optimizing SQL Queries

A SQL expert can re-write most queries by hand to make them more efficient. Also, consider creating views and indexes for reports. Views are basically SQL queries that enable you create other queries more quickly and efficiently. For example, views enable you to re-use joins between tables.

Note

If you intend to upgrade from a SQL Server database to an Oracle database, be aware that the SQL query syntax used in Oracle is slightly different from SQL Server. Also, Transact SQL (TSQL) is not compatible with an Oracle database.

The following section outlines some useful table groupings. When writing your SQL queries this may help you to identify the correct tables and columns that you need in your report.

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4.2 Analytics Database Tables

This section divides the Analytics database into key groups and examines each one in turn. The following diagram shows the main tables, relationships and groupings.

- 1 = Visitor Information
- 2 = Profile Information
- 3 = MV Testing
- 4 = Campaigns

- 5 = Page Events
- 6 = Automation
- 7 = System Information





4.2.1 Visitor Information

This group of tables captures information about site visits and visitors.



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Table	Description
Visitors	The Visitors and Visits tables relate closely to each other. Each new visitor to the website becomes an entry in the Visitors table and adds one or more visits to the Visits table.
	 The following columns are extension points for integration with a CRM or similar system: ExternalUser IntegrationId IntegrationLabel
Visits	The <i>Visits</i> table records the visits made by each visitor. The <i>Visits</i> table is the point of access to several other tables that record specific visitor details such as IP address, screen resolution, browser and operating system. Visitor IP information comes from an IP lookup service which finds information such as city, post code, latitude or longitude. The <i>Visits</i> table itself stores the ISP name, business name and city where the visit originated.
Visitor Tags	Tags are additional information that you can add to make an item more memorable – You can also use this field in Web forms.
Visitor Classifications	In Engagement Analytics, unclassified visitors can be classified into one of the following categories: Unidentified Business ISP Existing Customer Analyst Press Supplier Business Partner Competitor My Company Bot - Feed Reader Bot - Search Engine Bot - Unidentified Bot - Auto Detected Bot - Malicious
Locations	Visitor country of origin and business name.
Browsers	Type of browser and model used by the site visitor.
User Agents	Client applications that access the web site, such as browsers and web crawlers.
Geo Ips	Provides the geographical location of the site visitor.
Referring Sites	Web site where the visitor originated.



Table	Description
Traffic Types	In Engagement Analytics all visits are segmented into different traffic types: Direct Email Search Engine - Organic Search Engine - Branded Paid Referred – Analyst Referred – Blog Referred – Community Referred – Conversations Referred – News Referred – Other Referred – Wiki RSS Unknown Traffic types help marketers to see which of their marketing channels are most effective
OS	Type of operating system used by the site visitor.
Keywords	Search engine search terms used by the site visitor.
Screens	Screen size of the site visitor.



4.2.2 Profiles

The *Profiles* table contains records related to visitor profiles and is connected to the *Visits* and *Visitors* tables.



Table relationships:

- The Visitors table has a one to many relationship with the Profiles table.
- The Visitors table has a one to many relationship with the Visits table.
- The Visits table has a one to many relationship with the Profiles table.

The Profile table contains the ID of the profile item and the pattern value for each visitor profile:

Column Name	Description
ProfileDefinitionId	ID of profile item
PatternId	ID of the matched pattern item

When a visitor comes to your website, pattern values for each profile key that you create are stored in this table. The *Profiles* table also contains the ids of the visitor, visit, profile and profile definition item.



4.2.3 Multi-Variate Testing

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The *TestDefinitions* table stores multivariate test data. You can trigger multi-variate tests from pages or campaigns.

The TestDefinitions table contains the IDs of the multivariate test variables for each MV test.

Column Name	Description
TestSetId	ID of MV Test Definition Item
VariableId	ID of Test Variable item
ValueId	ID of Test Variation item

. ..

When you run a test, on a control such the *Register Form*, the MV test variables are bound to the page where you execute the test.

When you trigger an MV test in an automation plan, such as for an email newsletter, the MV test variables are bound to the automation state record where you execute the test.

The TestSetId column creates a logical link between *TestDefinitions*, *Visits*, *Pages* and *AutomationStates*. There is no actual link between these tables in the database schema.



The TestDefinitions table can have a many to many relationship with each of these tables.



Test combinations are stored as a byte array in the *TestValues* column in the *Visits*, *AutomationStates* and *Pages* tables.

4.2.4 Campaigns

When you create a campaign in the Marketing Center, all your campaigns, campaign categories and configuration data is stored in this table. The *CampaignId* column in this table corresponds to the campaign item in Sitecore database. The *Campaigns* table is also connected to the *Visits* and *Automations* tables.



Table relationships:

- The Campaigns table has a one to many relationship with the Visits table.
- The Campaigns table has a one to many relationship with the Automations table.

Note

The standard campaign reports are only available to view in the Executive Insight Dashboard.



4.2.5 Page Events

Every visitor session is linked to the *Pages* table. For example, columns and fields from the *Pages* table create a session trail for each site visitor which you can see in the *Visit Detail* report.



Table	Description
Pages	Records information on pages viewed during each visit and links to the <i>Visits</i> table. The <i>Pages</i> table also links to the <i>Visits</i> table.
PageEvents	For example, <i>Page Visited</i> , <i>Page Not Found, Campaign.</i> Each page event links to the <i>Pages</i> table by <i>Pageld</i> .
PageEventDefinitions	Contains all the configuration information for page events that you define in the Content Editor.

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4.2.6 System Information

System tables are mainly for internal Sitecore use. However, the *NotificationSubscriptions* table is also used in the SQL query used to create the *Top Leads by Activity* reports.

lotificationSubscriptionsId
ocationId
1ailRecipients

Table	Description
Status	Used to log errors.
NotificationSubscriptions	Used when visitors subscribe to a report.

4.2.7 Marketing Automation

Tables used for setting up and configuring marketing automation. The *Automation States* table links to *Visits, Visitors* and *Profiles* tables and the *Automations* table links to the *Campaigns* table.



Table	Description
Automations	Linked to Automation States and Campaigns tables.
AutomationStates	Linked to Visitors and Automations tables.



Table relationships:

- Automations may be connected to campaigns: The *Campaigns* table has a one to many relationship with the *Automations* table.
- AutomationStates may be connected to Visitors: The *Visitors* table has one to many relationship with the *AutomationStates* table.

Column	Description
AutomationId	ID of the Engagement Plan Item in Sitecore database. This column is in the <i>Automations</i> and <i>AutomationStates</i> tables.



4.3 SQL Views

Creating some additional views for your SQL queries, can help to improve the performance of your Engagement Analytics reports. The following section lists the standard views used in Engagement Analytics reports:

CampaignsOverview - Visit and Value analysis for campaigns and campaigns categories over time.

Columns	Description
Date, Month	Day and month of the visits.
CampaignId	ID of the campaign.
CampaignName	Name of the campaign.
Category1Id, Category2Id, Category3Id	Campaign category IDs for the first three levels. Each campaign belongs to a campaign category.
ItemId, Url	ID and Url of the landing page.
FirstVisit	New visitors vs. Returning visitors (FirstVisit = 1 for new visitors' visits).
Keywords, KeywordsId	Search keywords used to find the campaign (if applicable).

TrafficOverview - Visit and Value analysis for traffic types (marketing channels).

Columns	Description
Date, Month	Day and month of the visits.
TrafficType	Traffic type – a classification used to segment site visitors. For example, <i>Referred Analyst</i> or <i>Search Engine - Organic</i> .
Keywords, KeywordsId	Search keywords, if the visitor came to the site from a search engine.
ReferringSite, ReferringSiteId	Referring site, if the visitor came to the site from another internet resource.
FirstVisit	New visitors vs. Returning visitors (FirstVisit = 1 for new visitors' visits).
CampaignId	ID of the related campaign, if applicable.
ItemId, Url	ID and Url of the first page of the visit.

ValueBySource - Visit and Value analysis by the traffic type of the first visit.

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Columns	Description
Date	Date of the visitors' first visits.
TrafficType	Traffic type – a classification used to segment site visitors. For example, <i>Referred Analyst</i> or <i>Search Engine - Organic</i> .
Visitors	Number of visitors who made their first visit on this date for this TrafficType.
Visits	Total number of visits made by these visitors.
Value	Total engagement value earned by these visitors.



Columns	Description
FirstVisitValue	Engagement value earned by these visitors during the first visit.

VisitEventsByDefinition Searches - Visit and Value analysis for Goals, Asset Downloads and Local Site.

Columns	Description
Date, Month	Day and month of the visit.
TrafficType	Traffic type of the visit.
CampaignId	Campaign id, if the visit originated from a campaign.
VisitId	ID of the visit.
PageEventDefinitionId	ID of the Page Event.
PageEventDefinitionName	Name of the Page Event (for example, Download).
Value	Value earned during the visit.
IsGoal	Check box to show that a page event is a goal.
NumberOfEvents	Number of page events of this type in this visit.
Date, Month	Day and month of the visit.

VisitEventsByPage - Visit and Value analysis for Goals, Asset Downloads and Local Site Searches, by Page.

Columns	Description
Date, Month	Day and month of the visit.
TrafficType	Traffic type of the visit.
CampaignId	Campaign id, if the visit originated from a campaign.
VisitId	ID if the visit.
PageEventDefinitionId	ID of the Page Event.
PageEventName	Name of the Page Event (for example, Download).
ItemId	ID of the page item where the page event occurred.
Value	Value earned during the visit.
IsGoal	Check box to show that a page event is a goal.
NumberOfEvents	Number of page events of this type in this visit.
Date, Month	Day and month of the visit.

VisitEventsByDataKey - Visit and Value analysis for Page Events by Data Key. Useful for analysis of Asset Downloads and Local Site Searches.

Columns	Description
Date, Month	Day and Month of the visit.
TrafficType	Traffic type of the visit.

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Columns	Description
CampaignId	Campaign id, if the visit originated from a campaign.
VisitId	ID if the visit.
PageEventDefinitionId	ID of the Page Event.
PageEventName	Name of the Page Event (for example, Download).
DataKey	Value of DataKey field in the page event. For Download this is the path to the asset, for Local Site Search this is the search string.
Value	Value earned during the visit.
IsGoal	Check box to show that a page event is a goal.
NumberOfEvents	Number of page events of this type during the visit.

VisitorsByLocation - Base view for analysis of business activity (lead and activity reports). Includes the number of unique visitors, visits and earned engagement value over time classified by business unit. You can join this view to the Visits table and related attribute tables to obtain the necessary attributes.

Columns	Description
Date	Day of the visit.
VisitorClassification	Classification code of the business.
LocationId	ID of the business in Engagement Analytics.
Country	Country of the business.
Region	Region of the business unit.
VisitorId	ID of the visitor.
Visits	Number of visits.
Value	Total value earned for this criteria.

TrafficByDay – This is an internal view containing daily aggregated visit information. The TrafficOverview view is based on TrafficByDay.

VisitEvents - Internal view containing page event information for all visitEventsByDefinition, VisitEventsByPage and VisitEventsByDataKey also use this view. You should not access this view directly.

Note

These views are not available in the collection database.

Note

You can join these views with the Visits table or attribute tables to retrieve attribute values, but we strongly recommend that you analyze queries for performance and define appropriate indexes in the database.



Chapter 5

Creating and Modifying Reports

This chapter demonstrates how to make simple changes to Sitecore reports. It uses scenarios to explain how to use Sitecore and the Stimulsoft Web Reports Designer to create new reports, localize report text and how to modify a SQL query.

This chapter contains the following sections:

- Introduction
- Creating a Report
- Localizing Report Text
- Modifying a Report SQL Query

Warning

If you have a good understanding of the Analytics database and are expert at writing SQL queries it is possible create your own Sitecore reports. Writing SQL queries by hand and creating additional views is the best way to ensure optimum performance. Using third party tools to generate SQL statements can produce inefficient queries and have a negative effect on the performance of reports.



5.1 Introduction

In Engagement Analytics, a report consists of three components:

- Sitecore report definition item
- Sitecore SQL query item
- Stimulsoft .mrt report file

You can create reports using Sitecore CMS and the Stimulsoft Web Reports Designer.

Some report files, such as *TopLeadsByValue.mrt* are used by multiple reports. For example, in Engagement Analytics, all the *Top Leads by Value* reports are based on a single file called *TopLeadsByValue.mrt*. Changes you make to one file can affect more than one report.

We therefore recommend that instead of creating a new report from scratch you make a duplicate of an existing report and edit this version.

A benefit of using this approach is that you can re-use the existing report functionality and strip out the functionality you do not need.



5.2 Creating a Report

This section outlines the steps you need to follow to create a new report by making a duplicate of an existing report and SQL query.

5.2.1 Duplicating an Existing Stimulsoft Report File

To create a duplicate of an existing Stimulsoft report:

1. In your website folder structure navigate to the folder that contains all your report definition (.mrt) files. Use the following path:

Website\sitecore\shell\Applications\Analytics\Reports

🔾 🗢 🔰 C:\inetpub	\www.root\ <website name="">\Website\sitecore</website>	\shell\Applications\Analytic	:s\Reports	
Organize 🔻 Include i	n library 🔻 Share with 💌 Burn	New folder		
🔆 Favorites	Name	Date modified	Туре	Size
🧮 Desktop	鷆 ItemReports	22-08-2012 13:24	File folder	
〕 Downloads	퉬 My Reports	05-09-2012 12:09	File folder	
🔛 Recent Places	퉬 Summary	22-08-2012 13:24	File folder	
湪 Dropbox	BadPages.mrt	12-03-2012 17:34	MRT File	20 KB
	BusinessOverview.mrt	21-05-2012 14:26	MRT File	62 KB
🥽 Libraries	BusinessVisits.mrt	21-05-2012 14:26	MRT File	34 KB
Documents	CommonMistakes.mrt	12-03-2012 17:34	MRT File	23 KB
J Music	LatestFailures.mrt	11-04-2012 12:57	MRT File	22 KB
Pictures	NotFound.mrt	12-03-2012 17:34	MRT File	27 KB
📑 Videos	SlowPages.mrt	12-03-2012 17:34	MRT File	21 KB
	Styles.sts	12-03-2012 17:34	STS File	4 KB
💻 Computer	TopLeadsByActivity.mrt	11-04-2012 12:57	MRT File	30 KB
🏭 Local Disk (C:)	TopLeadsByValue.mrt	11-04-2012 12:57	MRT File	28 KB
	UnitsBusinessVisits.mrt	21-05-2012 14:26	MRT File	34 KB
	🗐 VisitDetail.mrt	16-07-2012 12:38	MRT File	52 KB
	VisitorOverview.mrt	21-05-2012 14:26	MRT File	44 KB
	Visits.mrt	12-03-2012 17:34	MRT File	28 KB

Note

You could create a folder called My Reports to save any new reports that you create.

- 2. Copy an existing report. For example, copy Visits.mrt, save it in your *My Reports* folder and rename it Test report.mrt.
- 3. Save your changes.

5.2.2 Duplicating a Report Definition Item

To create a duplicate of an existing report definition item:

- 1. In the Content Editor, navigate to the Stimulsoft report definition items. Use the following path:
 - /sitecore/system/Settings/Analytics/Reports/Reports/Recent Activity
- 2. Make a duplicate of an existing report definition item. For example, *Latest Visits*. To duplicate this report, right click the item and click **Duplicate**.
- 3. Enter the name *Test report* for your duplicate item.
- 4. In the **File Name** field, enter the path to the duplicate .mrt file. To do this, copy and edit the path from the original report definition item.
- 5. Enter a name in the **Report Title** field and add a description if appropriate.





sitecore

6. Save your changes.

5.2.3 Duplicating a SQL Query Item

If you decide to make changes to the SQL queries associated with your report then you also need to duplicate the report query items. This will ensure that you do not overwrite the originals.

To duplicate a Sitecore SQL query item:

- In the Content Editor, select your duplicate report Test report: /sitecore/system/Settings/Analytics/Reports/Reports/Recent Activity/Test report
- 2. In the Data section, Queries field you can see which queries are linked to your report:
 - o Latest Visits
 - Notification Subscription
- 3. Use the following path to navigate to the SQL queries folder: /sitecore/system/Settings/Analytics/Reports SQL Queries



4. First, select the query item, Latest Visits. Right click the item and then click Duplicate.



- 5. Accept the default name, Copy of Latest Visits.
- 6. Do the same for the second query, Notification Subscription.
- 7. Save your changes.
- 8. Select your duplicate report item, Test report.
- 9. In the **Data** section, **Queries** field, use the drop down to link to the duplicate queries that you just created:
 - o Copy of Latest Visits
 - Copy of Notification Subscription



Select 'Copy of Latest Visits' in the Queries drop down:



10. Save your changes.

Note

Each Sitecore SQL query contains one or more data sources. The report in this example has two data sources: *DataSource* and *Subscription*. Data sources use SQL queries to retrieve columns from the Analytics database.

For more information on data sources, see Adding Data Sources.

5.2.4 Opening a Duplicate Report

To test your duplicate report, open it in Engagement Analytics and then open the Stimulsoft web designer. To open a duplicate report:

- 1. Open Engagement Analytics and expand the report tree until you see your duplicate report.
- 2. Click on the duplicate report.

□	August 29 -	September 05, 2012 🔻 Filter Design	
Site Health Site Health Site Activity Activity	int 🥞 Print	Save	▶∥ Q 100% [
Test report		Latest Visits	
		Report description	
		Organization	Value
		 IP_NOT_FOUND(N/A) <u>Classify</u> / <u>Subscribe</u> / <u>CRM</u> 	0



3. To open the duplicate report in the web designer, click **Design**.



4. In the web designer, you can now change the layout or data that you use with this report without overwriting any of your other reports.

5.2.5 Adding a Connection String

After creating a duplicate report definition item and a duplicate Stimulsoft .mrt file, you can either keep the same connection string or edit it to connect to another Analytics database.

To connect to an Analytics database:

- 1. Open your new report in the Stimulsoft Web Reports Designer.
- 2. To view an existing SQL Connection string or to create a new connection, open the **Dictionary** panel to the right of the report. If this panel is not visible, on the Web Designer, report ribbon, click **View**, **Panels** and then click **Dictionary**.
- 3. In the Dictionary panel, click on the Data Connection and then click Edit.





4. To add a new data connection, click **New Item** and then select **New Connection** from the drop-down.



5. Enter a connection string in the following format:

user id=<username>;password=<password>
;Data Source=<name of datasource>
;Database=<name of database>

6. Click **Test** to test the connection.

Name:	Connection
Alias:	Connection
	Build
Connection String:	userid=sa.password= Source=.VSQLEXPRI e_Analytics
	Prompt User Name and Password
Test	OK Cancel

5.2.6 Adding Data Sources

The next step after you have created a report and connected to the analytics database is to configure a data source.

In the Dictionary Panel, each data source appears below the data connection node.

Actions 🗸 🔄 🖌 🌠 🗙 🐟 😤 🤶 🗸	
Data Sources	
DataConnection [SitecoreAnalytics]	
🖶 🔲 DataSource	
🗄 🛄 Subscription	
+	
- ∱ Functions	

Data sources use SQL queries to retrieve columns from the Analytics database. Use data sources to extract the data that you want to display in your report layout.

You can create your own names for data sources and can also use aliases in the SQL query to make the names of columns more meaningful.



If you examine any of the standard reports in Engagement Analytics, you can see that each report contains one or more data sources.

Note

After you have created SQL queries for each data sources in the Web Designer, you must move each query to the Sitecore content tree. This helps to improve the overall performance of your reports.

Viewing a SQL Query in the Windows Designer

In the Windows Designer, you can right click a data source and click Edit to see a SQL query.





The Edit Data Source window displays the SQL query and columns returned from the database.

fit Data Source	— × —	
e in Source: DetaConnection		Dictionary
e: DataSource		Actions 🝷 🏪 👻 🔀 🔺 🛷 👰 🗸
a: DataSource		Data Sources
Set 70 di Due Oussi Builder		DataConnection [SitecoreAnalytics] DataSource
uery Text	_	. Subscription
LECT	<u>^</u>	
TopLocations.*,		- Elli System Variables
VisitorClassifications.Text,		
Locations.Country,		
Locations.BusinessName,		
Locations.VisitorClassification		
om de la companya de	=	
(
select top 50		
LocationId,		
MAX(Date) as RecentDate,		
COUNT(*) AS TotalVisitors,		
SUM(VISITS) AS TotalVisits,		
SOM(Value) AS TotalValue,		
CONVERS(FIGAT, SUM(VISITS)) * CONV(*) / 1000 Rating		
NUEDE		
WHERE DITE DETMEEN CONVERT (Rearborn (8) & Start Data (112) AND CONVERT (Rearborn (8) & Fradrat		
DATE DETWEEN CONVERT (INVECTION (6), STATEDATE, 112) AND CONVERT (INVECTION (6), SEMIDATE	'	
VISICOLORSSILLATION - 0	-	
111	P.	
🖓 🖏 🕅 💟 🛛 Patriaus Calumna		
a 40 48 × I realities columns		
Columns		
- BusinessName		
- Country		
- LocationId _		
- VisitorClassification		
· Text		
- TotalVisitors		
- TotalVists		
- TotalValue		
- RecencyYears		
🖓 IsToday		
- RecentDate		
OK Can	cel	Create Field on Double Click
		Create Label
		Use Aliases

You can use this window to create your own queries. The Query Builder allows you to drag and drop columns to make SQL queries. It creates the correct SQL syntax. However, you might need to optimize your queries afterwards to improve performance.



Viewing a SQL Query in the Web Designer

In the Web Designer, select a data source and on the toolbar, click **Edit Z** to see the SQL query.



The Web Designer uses the light version of the Edit Data Source window.

Note

The Query Builder is not available in the Web Designer.

5.2.7 Creating a SQL Query

To retrieve the correct data from the Analytics database to display in your report you must create a SQL query. All the SQL queries in Engagement Analytics reports are contained in separate Sitecore content items. Each query has also been optimized for performance and some queries use additional views and indexes.

Testing SQL Queries in the Web Reports Designer

When you create a new report from scratch, it is good practice to test the SQL query in the Stimulsoft Web Reports Designer. You can hand code a SQL query or use a dedicated tool such as the Query Builder or SQL Server Management Studio. Create a separate query for each data source that you want to add to your report.



For example, the *Visit Detail* report consists of multiple data sources and each data source uses a separate SQL query.



In this example, like all standard Engagement Analytics reports the SQL queries have been moved to the Sitecore content tree.

If you have created a SQL query using another tool, first create a new data source and then copy and paste your SQL query into the data source. In the Edit Data Source window, click *Retrieve Columns*. If there are any errors in your query, you will not see any columns returned and you will also see an error message.

5.2.8 Moving SQL Queries to Sitecore Items

In Engagement Analytics all SQL queries are stored in the Sitecore content tree.



Creating a new content item for each query improves performance, allows queries to be re-used and makes it easy to add new SQL queries. Each *ReportQuery* item contains fields for adding SQL or Oracle queries.

To add a new report query item to the content tree:

1. Select the Reports SQL Queries folder: /sitecore/system/Settings/Analytics/Reports SQL Queries



- 2. On the ribbon, add the **Report Query** template to your insert options.
- 3. Create a new item based on the **Report Query** template.
- 4. Give the Report Query item a name. For example, Visitor Visits.
- 5. Select your new report query item and enter the query into the SQL Server field in plain text.

I op External Keywords Top Leads By Activity - Classified	Visitor Visits
Top Leads By Activity - Unclassified	Quick Info
Top Leads By Value - Classified	
Top Leads By Value - Unclassified	
Top Leads By Value - Unclassified - Britain	SqlServer [shared]:
Top Traffic Sources	select top 50
Traffic Types	Visits.VisitTd
I Unit	Visits.EndDateTime,
Unit Visits	Visits.City,
Visit	Visits.Region,
Vicit Failures	Visits.Value,
Visit Coale	Visits.VisitPageCount,
Visit Bager	Visits.BusinessName,
Visiter ages	Locations.LocationId
Visitor	from
Visitor Goals	Visits
Visitor Maps Coordinates	INNER JOIN
Visitor Visits	Locations on Visits.LocationId = Locations.LocationId
Visitors Classification	where Wights Wights The Wights The
Visits Filtered by Traffic Type	visits.visitoria - Gvisitoria
Visits Visitor Tags	Visits.StartDateTime_desc
# 💭 Rules	
Traffic Type	1 ¹
Visitor Identification Types	
I isitor Identifications	Oracle [shared]:
📁 Layouts	
📁 Proxies	
📁 Rules	
🧐 Security	
🕼 Subitems Sorting	
📁 Validation Rules	

6. On the ribbon, click **Save**.

5.2.9 Configuring a Report Definition Item

To bind a SQL query to a report you must select a query from the content tree and then bind it to your report definition item.

To bind a query to a report definition item:

1. Select a report definition item.

Publishing targets	test
Settings	On the f
Insert Rules	O QUICK TULO
Malytics	E Data
Campaign Organic Settings	File Name [shared]:
🗉 🥥 Dashboard Reports	/sitecore/shell/Applications/Analytics/Reports/My Reports/test.mrt
Engagement Automation	
🧼 Filters	Denot Titler
Marketing Automation Evaluation	test separt
📧 📁 Multivariate Test Strategies	Lest report
B Organic Branded Keywords	
🗉 🥥 Page Events	Show Editor · Suggest Fix · Edit Html
Pattern Matching Types	Report Description:
Preset Types	This is a test report!
🗉 🥥 Profile Key Controls	
🗉 🥥 Profile Types	
😑 🥥 Reports	
🗉 🄐 Item Reports	
Reports	
🗉 🧬 Sales	
🗉 👔 Site Health	
Recent Activity	
My Reports	E Daily report [shared]:
a test	
Subreports	
Reports SQL Queries	Queries [shared]:
G Rules	



- 2. Scroll down and enter the name of a data source in the Queries field. For example, Failures.
- 3. Select a SQL query from the drop-down list. For example, Slow Pages top 125.

U Reports		Content		
Item Reports		P test		
🖃 🍶 Reports			Not Found Urls	
🗄 🌮 Sales		Ouick Info	Not Found Urls Previous Referrers	
🗉 👔 Site Health			Not Found Urls Previous Urls	
Recent Activity		E Data	Notification Subscription	2
My Reports		File Name [shared]:	Organization	
(test		/sitecore/shell/Applicat	Organization Goals	
t 🗐 Subranarta			Organization Units	
			Organization Visitors	
W Reports SQL Queries		Report Litle:	Organization Visits	-
Assets		test report	Page Assets	_
Average Time on Page			Page Goals	
Item Bounced		Show Editor • Suggest Fix • Ed	it Page Url	
🗾 Latest Company Visits		Report Description:	Pages that Report Errors	
Latest Failures	=	This is a test report!	Pages Visits	
🗾 Latest Human Visits			Profiles	E
Latest ISP Visits			Searches from Page	
Latest Undefined Visits			Slow Pages	
I atest Visits Goals			Top External Keywords	
Latest Visits with Failure			Top Leads By Activity - Classified	
			Top Leads By Activity - Unclassified	
Local Site Search			Top Leads By Value - Classified	
New Days Mathem			Top Leads By Value - Unclassified	-
New Page Visitors			Top Leads By Value - Unclassified - Britain	
Not Found Uris		Daily report [shared]:	Top Traffic Sources	
Not Found Urls Previous Referrers			Traffic Types	
🛐 Not Found Urls Previous Urls			Unit Unit Visita	
Notification Subscription		Queries [shared]:	Vieit	-
Organization		E eilusee	VIDIC	
Organization Goals		rallures		•
Organization Maps Coordinates				-
Organization Units				•
Organization Visitors				

This binds your report definition item with a SQL query. If necessary add more queries to your report.

4. On the ribbon, click **Save**.

5.2.10 Creating a Report Layout

When you have configured all your data sources, you can use the Stimulsoft Web Reports Designer to create a layout for your report.

To create a report layout complete the following steps:

- Create an initial report layout
- Create text variables and format column headings
- Add a report header and format text
- Add images optional step
- Add hyperlinks optional step

Adding Data to a Report Layout

If you are re-using an existing report, first remove any text boxes that appear on the existing data band. To do this, select a text box and in the ribbon and click Delete. You can keep the report title header and add new columns to the data band.

1. To add content to your report, drag and drop the columns you need from the **Dictionary** panel to the data band.



2. Select a column from the Dictionary panel and drag it onto the report data band.

		Proper Diction Re
) Page) - 	<pre> • PageHeader { ReportTitle} [[Format]"(0:M] ``Data1; Data Source: IpOwners </pre>	
	Score (IpOwners.Sc	iù) Score (bb) Name1 (E) dh Parameters (E) 000 Variables (E) EBSystem Variables (E) Σ Totals

- 3. Notice that you have added two text boxes. **Score** and **IpOwners**. Re-size using the arrows that appear when you move the mouse over the text boxes.
- 4. In the report designer toolbox, click **Header** and drag a new header onto the report. Insert it between the Page Header and the Data band.



5. Move the **Score** text box into the header band, this is the column heading. **IpOwners** stays in the Data band and outputs the data for this column.



6. Add **Name**, **Country**, **Visitor Count** and **Visit Count** in the same way until your layout looks something like this:

_					
	▼ PageHeader				
	(Donout	E:+l_a)			
	{Report	nue}	5	[Format("{0:MM.dd.yyyy}"	, IpOwners.Parameters["@
	▼HeaderBand1		•		e
-	Score	Namo	Country	VicitorCount	VicitCount
m	Score	ivame	Country	VisitorCount	VisitCount
-	▼Data1; Data Sour	ce: IpOwners			T
4	{IpOwners.Score}	{IpOwners.Name}	{IpOwners.Country	{IpOwners.VisitorCo	{IpOwners.VisitCount
	6				
0					
-					

- 7. In the Stimulsoft File menu, Click Save Report.
- 8. Preview your report.

Formatting Column Headings

To format all your column headings as bold:

- 1. Press the SHIFT key and then click each of the header text boxes.
- 2. When you have selected all column headings, in the report designer ribbon click **Bold**.
- 3. Click Save Report.

Score Name Country Vis	itorCount VisitCour

Grouping Report Data

To make visitor organization and country appear together as a hyperlink:

1. Double click a text box, for example {*IpOwners.Name*} and click the **Expression** tab in the Text Editor.

IPOwners refers to the data source and Name refers to the column you want to display.

2. Enter the following expression:

```
{IPOwners.Name}, {IPOwners.Country}
```

This expression will display the organization name and country next to each other as a hyperlink.



You can now remove the *Country* text boxes from the Header and the Data band.


Grouping Sub Headings

To group the number of sessions and visitors below each organization name:

1. Select the data band, and then in the toolbox select text box and then drag and drop the text box from the toolbox.



Place the text box directly below the {IPOwners.Name} text box.



2. Double click the new text box. Copy and paste the following expression into the **Expression Editor** window.

```
{IPOwners.VisitCount} session{IPOwners.VisitCount == 1 ? "" : "s"},
{IPOwners.VisitorCount} visitor{IPOwners.VisitorCount == 1 ? "" :
"s"}
```

This expression displays **Visitor Count** and **Visit Count** together below the organization name. It also makes the word *session* and the word *visitor* either singular or plural depending on the number of sessions or visitors. This expression is constructed using syntax very similar to C#.





3. You can now remove all the *Visit Count and Visitor Count* text boxes from the Header and the Data band, as they are no longer needed.

Adding a Report Header

Your report already has a report header, follow these steps if you need to create a new header:

1. In the Data Dictionary, click New Item, and then click New Variable.



- 2. In the New Variable window, in the Name and Alias fields enter ReportTitle.
- 3. In the **Type** field, select *String* and click **OK**.

	New Va	iable X
Name:	ReportTitle	
Alias:	ReportTitle	
Type:	string	
Default Value:		
	Read Only Function	
		OK Cancel

- 4. Add a text box to the report header band.
- 5. Double click the text box to open the Expression Editor.
- 6. In the **Expression Editor** window, drag and drop the *ReportTitle* variable you created into the **Expression** tab.



7. Click OK.

xpression	{ReportTitle}	🛨 📑 Data Sources
Data Column		UMB Variables
		(9) StartDate
System Variable		🖽 EndDate
		abd ReportTitle
		abd I p
		abo Session
		abd ReportTitle2
		⊞ System Variables
		Ξ Σ Totals

Left align the text box and your report title should look something like this.



Note

To format text in the same way as other Sitecore reports, you must also import the same Styles from another Sitecore report.



You can use the style designer to save styles locally or use it to import other saved styles.

屋 Sty	yle Designer				X
) 📂 [📕 🕺 🗕 🧏 🖬 🔺 🔶 d	ose			
<u>4</u>	Save Style te	l] 2 ↓ 🖉 🖻		
<u>4</u>	Subtitle		1. Main Name	Title	e
<u>4</u>	ColumnHeader		Description		
<u>4</u> 4	EvenRow		Image Text Pauch	[No	t Assigned]
<u>4</u> 4	OddRow	Ð	Brush		Solid
<u>4</u>	GroupHeader	÷	Border Font	Can	tom nbria; 26,25pt
<u>4</u> 4	Detail	:	Horizontal Alignme Vertical Alignment	Left Top	
	Style1		3. Parameters Allow Use Border	True	
			Allow Use Brush	True	
			Allow Use Image	True	
			Allow Use Text Br Allow Use Text O _l	True	
			Allow Use Hor Alig Allow Use Vert Ali	False False	e e
			lame		
		1			

The completed report layout should look something like this.



8. Preview the report.



5.3 Localizing Report Text

When you add text to a report layout you can also create text variables to translate reports into different languages. In this scenario, create a new text variable to replace the static *Report Generated* text box that appears on all Engagement Analytics reports. This and all other localized text variables in the report will appear in Danish when you select the Danish language version of the report.

To create a localized text variable:

1. Choose an existing text item to localize. For example, Report Generated.

Top Leads by Activity – Classified Organizations				e: maj. 04, 20 Report Genera	oted: maj. 12, 2011 ited: maj. 12, 2011
Report description					
		Malua	Visitors	Visite	Bacangy
Business Unit	Activity Level	value	VISILUIS	VISIUS	Recency

In the Stimulsoft Web Reports Designer, select the static text box.





2. In the **Dictionary** panel, create a new variable.



- 3. Right click the variable and then click Edit.
- 4. In the New Variable dialog box, enter the following values:

Field	Value
Name	ReportGeneratedText
Alias	ReportGeneratedText
Туре	string
Default Value	Report Generated

The New Variable dialog box:

Name:	ReportGeneratedText
Alias:	ReportGeneratedText
Туре:	string
Default Value:	Report Generated
	Read Only
	Function
	OK Cancel

- 5. Click **OK** to save the new variable.
- 6. In the report body, select the existing *Report Generated* text box and double click it to open the **Text Editor** window.
- 7. In the **Text Editor** window, replace the static text *ReportGenerated* with *ReportGeneratedText* so it matches the name of the new localized variable



Static report text:

ReportGenerated:	{Format("{0:MMM. dd,	<pre>yyyy}",Today) }</pre>
	Reportoenerated.	roimat (to mar du,

Localized report text:

Expression	{ReportGeneratedText}	: {Format("{0:MMM.	dd,	yyyy}",Today)}
Data Column				
System Variable				
Summary				

8. Click OK.

When you next run the report in Engagement Analytics, the text *ReportGeneratedText* default value is localized.

To test a localized text variable:

- 1. In the Sitecore Desktop switch to the Core database.
- 2. In the Content Editor, create a new Dictionary entry item. In the content tree, navigate to:

/sitecore/system/Dictionary/R

- 3. Add a new Dictionary entry called Report Generated.
- 4. Select the new entry and in the **Key** field, enter *Report Generated*, the default value for your localized text variable.

	Report Generated
Content	
🗉 🙆 Home	A Quick Info
🗉 🧔 Settings	
🗉 🦰 Layout	E Data
🗉 🔤 Media Library	Key [shared]:
🗉 🔢 System	Report Generated
🗉 🥥 Aliases	
🖃 😒 Dictionary	
Report Generated	
🗉 🚺 Languages	1
🗉 😡 Marketing Center	Dhanse (mussioned)
🔟 Modules	Piirdse [universioned]:
🗉 🧔 Proxies	
🗉 🌘 Publishing targets	
🗉 🧕 Settings	
🗉 🚫 Tasks	
🗉 🍅 Toolbox	



5. Add a new version of the dictionary entry in Danish.



6. In the Phrase field, enter your translation of Report Generated.

Home Navigate Review Analyze Publish Versions (Configure Presentation Security View My Toolbar
rite Fields Versions and Compare Danish and Transla Transla	ate company Latest + to Latest +
Ite Precisi (register) Language Tarbat Rename Rename <t< th=""><th>Content Content Con</th></t<>	Content Con
Resolve visible notifications to display additional notifications	

- 7. Save your changes and log out of the Sitecore Desktop.
- 8. In Sitecore make Danish the default language.
- 9. View the report in Engagement Analytics and all localized text now appears in Danish.

L	Genereret rapport: naj. 13, 2011

To localize all report text follow the same steps for each text box in your report layout.



5.4 Modifying a Report SQL Query

In this scenario you will modify the SQL query used in the *Slow Pages* report to return a higher number of items. This demonstrates the steps you need to take to edit a SQL query contained in a Sitecore content item.

Note

If you create your own SQL queries or make any complex changes to existing queries you can affect performance. Always optimize queries for best performance. For example you can optimize by rewriting SQL queries by hand and by creating additional views or indexes.

To modify a Sitecore SQL query:

- 1. Open the Content Editor.
- 2. Navigate to the Slow Pages report definition item in the Sitecore content tree. /sitecore/system/Settings/Analytics/Reports/Reports/Site Health/Slow Pages
- 3. In the report definition item, you can see which SQL query this report uses by looking at the **Queries** field.

Settings	Content	/ 💽 🖬 🖬 🖬 🚺
🥥 Insert Rules	Claw Dartes	
Analytics	Slow Pages	
📧 🥼 Campaign Organic Settings		-
Dashboard Reports	Quick Into	۳
Engagement Automation	Data	-
🧔 Filters	File Name [shared]:	
Marketing Automation Evaluation	/sitecore/shell/Applications/Analytics/Reports/SlowPages.mrt	
🗉 🥥 Multivariate Test Strategies		
B Organic Branded Keywords	Deport Title:	
Page Events	E Slow Pages	
📧 🧐 Pattern Matching Types	Sour ages	
📧 🧐 Preset Types	Characteristics a Constant Characteristic a Solid Hard	
🗉 🥥 Profile Key Controls	Show Editor * Suggest Hix * Edit Html	
🗉 🥥 Profile Types	Deport description	
🖃 🧔 Reports	Report description	
🗉 🔐 Item Reports		
😑 🔐 Reports		
🗉 🧬 Sales		
🖃 📳 Site Health		
Common Mistakes		
Catest Failures		
or Found Urls		
Pages that Report Errors		
🔀 Slow Pages	Daily report [shared]:	
Recent Activity		
🗉 🎴 Latest Visits		
My Reports	Queries [shared]:	
Subreports	Failures Slow Pages	•
Reports SQL Queries		
Assets		•
Average Time on Page		

The *Slow Pages* **Queries** field contains a data source called *Failures* and a SQL query called *Slow Pages*.

When you create a report in the Stimulsoft Web Reports Designer, you use SQL queries to create data sources. In Engagement Analytics reports, all SQL queries are removed from data sources and converted into SQL report definition items and added to the Sitecore content tree. When you create a new report, you can create the original SQL query in the Stimulsoft data source but once implemented, you must add the SQL query to the Sitecore content tree. Reports continue to run if you leave the query in the Stimulsoft data source but



we recommend that you remove it.

Properties	Dictionary	Report Tree						
°a • ∅ × + +								
🗖 🖬 Data Sources								
🖂 间 DataConnection [SitecoreAnalytics]								
🖃 🥅 Failures								
abe Url								
123 FailCount								
123 TimeTaken								
+ UAR Variables								
∓ Σ# System Variables								

4. In the content tree, navigate to the Slow Pages report query definition item:

/sitecore/system/Settings/Analytics/Reports SQL Queries/Slow Pages

5. In the *Slow Pages* SQL query, change *top 25* to *top 125*. To test this change first, you can make a duplicate of the report so that the original report remains unaffected.

Not Found Utis Not Found Utis Not Found Utis Previous Referrers Slow Pages Slow Pages Organization Subscription Organization Subscription Organization Goals Organization Maps Coordinates Organization Maps Coordinates Organization Walts Page Coals Page Goals Page Goals Page Coals Page Coals Page Coals Page Valts Pa	New Page Visitors	*	Content		- 🛄 -
Not Found Ltis Previous Naferrers Not Found Ltis Previous Ltis Nothfound Ltis Previous Ltis Organization Organization Codis Organization Goals Organization Wattrs Organization Wittrs Organization Wittrs Organization Wattrs Organization Wattrs Page Goals Page Goals Page Goals Page Stats Page	Not Found Urls				- 1
Not Found Uris Previous Uris Not Found Uris Subscription • Quick Info • Quick Info • Queries Organization Goals • Queries Organization Maps Coordinates • Pages. Url, MAX (PageEvents.Timestamp) as TimeTaken, COUNT (*) as FailCount Page Goals Pages. Page Goals Pages. Page Goals Pages. Page Goals Pages. Page Solids Pages. Page Coals Pages. Page Goals Pages. Page Coals Pages. Page Coals Pages. Page Int Pages. Profiles Pages. Profiles PageEvents.PageId = PageEvents.PageId AND PageEventDefinitions. Name = 'Long Running Request' AND Vaits.StartDateTime BETWEEN §StartDate AND §EndDate group by Top Leads By Value - Unclassfied Pages.Url order by FailCount desc Top Taffic Sources Taffic Types Oracle [shurcd]: Urit Waits Urit Waits Oracle [shurcd]:	Not Found Urls Previous Referrers		Slow Pages		- 1
 Notification Subscription Organization Organization Organization Goals Organization Maps Coordinates Organization Maps Coordinates Organization Visitors Page Coals Page Coals Page Coals Page Visits Page Visits Page Visits Page State Report Errors Searches from Page Slow Pages top 125 Slow Pages top 125 Slow Pages top 125 Slow Pages top 125 Top Leads By Value - Classified Top Leads By Value - Classified Top Leads By Value - Unclassified Top Leads By Value - Unclassified Top Leads By Value - Unclassified Top Taffic Sources Traffic Types Unit Unit Visits 	Not Found Urls Previous Urls				-
<pre>Organization Golds Organization Golds Organization Maps Coordinates Select top 125 Pages Mats Page Vents Nub Page Vents, Visits, Visits Visits Visits Visits Visits, Visits Visits Visits Visits, Visits,</pre>	Notification Subscription		U Quick Into		٠
<pre>Sofganization Goals Organization Maps Coordinates Organization Maps Coordinates Organization Mults Organization Visits Organization Visits Organization Visits Organization Visits Organization Visits Page Coals Page Coals Page Coals Page Coals Page Soft Page Coals Page Soft Page Coals Page Soft Page Coals Page Soft Page Soft Page Coals Page Soft Page Soft Page Soft Page Coals Page Soft Page Soft Page Coals Page Soft Pa</pre>	Organization		Queries		Ξ
<pre>Sorganization Maps Coordinates Organization Maps Coordinates Select top 125 Pages.Utl, Max (PageEvents.Timestamp) as TimeTaken, COUNT (*) as FailCount Page Assets Page Coals Page Coa</pre>	Organization Goals		SqlServer [shared]:		- 1
<pre>Grganization Units Grganization Visitors Organization Visitors Pages Cools Pages Cools Pages Cools Pages Visitors Pages Visitors Stow Pages Stow Pages Stow Pages Stow Pages top 125 Top Leads By Activity - Classified Top Leads By Value - Classified Top Leads By Value - Unclassified Top Leads By Value - Unclas</pre>	Organization Maps Coordinates		select top 125		~
<pre>MAX (PageEvents.Timestamp) as TimeTaken, COUNT (*) as FailCount Page Assets Page Assets Page Assets Page Sasets Page Coals Page Coals Page Unt Pages that Report Errors Pages Visits Pages Visits P</pre>	Organization Units			Pages.Url,	
Count(*) as FailCount Count(*) as FailCount Page Assets Page Coals Page Co	Organization Visitors			MAX(PageEvents.Timestamp) as TimeTaken,	
<pre>Page Assets Page Coals Visits, Visits, Page Coals Visits, Visits, Page Coals Visits, Visi</pre>	Organization Visits		-	COUNT(*) as FailCount	
Page Goals Page Coals Page Vints Pages that Report Errors Pages Visits	Page Assets		Irom	Pageg	
<pre>Page UH Pages that Report Errors Pages Visits Pages Visits Pages Visits Pages Visits Pages Visits Pages Visits Pages Visits Pages Visits. Pages Visits. Pages Visits. Searches from Page Searches from Page Top Leads By Activity - Unclassified Top Leads By Value - Unclassified Top Traffic Sources Traffic Types Unit Unit Unit Visits Top Leads By Activity - Start Top Leads By Value - Unclassified Top Leads By Va</pre>	Page Goals			PageEvents.	
Pages Visits Pages Visit = Visits.VisitId AND Pages.PageId = PageEvents.PageId AND Pages.PageId = PageEventDefinitionId Sow Pages Sow Pages Sow Pages Sow Pages Sow Pages Sow Pages Distainal Keywords Top Leads By Activity - Classified Top Leads By Value - Unclassified	Page Url			Visits,	
<pre>where Pages.VisitId = Visits.VisitId AND Fages.PageId = PageEvents.PageId AND PageEventDefinitions.PageEventDefinitionId Slow Pages Slow Pages top 125 Top Leads By Activity - Classified Top Leads By Activity - Classified Top Leads By Value - Unclassified Top Leads By Value</pre>	Pages that Report Errors			PageEventDefinitions	
Pages.VisitId = Visits.VisitId Pages.VisitId = Visits.VisitId AND Pages.PageId = PageEventDefinitionId Sow Pages top 125 Top External Keywords Top Leads By Activity - Classfied Top Leads By Activity - Classfied Top Leads By Value - Unclassfied Top Leads By Value - Unclassfied Top Leads By Value - Unclassfied Top Taffic Sources Traffic Types Unit Unit Visits Unit Visits Drade [shared]:	Pages Visits		where		
AND Pages.Page10 = Pagetvents.Page10 Searches from Page Sow Pages Sow Pages Sow Pages top 125 Top External Keywords Top Leads By Activity - Classified Top Leads By Activity - Unclassified Top Leads By Value - Unclassified Unit Unit Unit Unit Visits	Profiles			Pages.VisitId = Visits.VisitId	
<pre>Slow Pages Slow Pages Top External Keywords Top Leads By Activity - Classified Top Leads By Activity - Classified Top Leads By Value - Unclassified Top Traffic Sources Unit Unit Unit Visits</pre>	Searches from Page			AND Pages.PageId = PageEvents.PageId	a
Solv Pages top 125 AND PageEventDefinitions.Name = 'Long Running Request' Top External Keywords AND Visits.StartDateTime BETWEEN @StartDate Top Leads By Activity - Undassified group by Top Leads By Value - Undassified Pages.Url Top Leads By Value - Undassified order by Top Leads By Value - Undassified Pages.Url Top Leads By Value - Undassified Order by Top Leads By Value - Undassified FailCount desc Top Leads By Value - Undassified Order by Top Leads By Value - Undassified FailCount desc Top Leads By Value - Undassified Oracle [shared]:	Slow Pages		= PageEvents, PageEventD	efinitionId	
In on toget up Request' Top External Keywords AND Visits.StartDateTime BETWEEN @StartDate Top Leads By Activity - Unclassified and Visits.StartDateTime BETWEEN @StartDate Top Leads By Value - Unclassified pages.Url Top Taffic Sources order by Top Taffic Sources value - Unclassified - Britain Unit Unit Visits Unit Visits oracle [shared]:	Slow Pages top 125	=	ragententorragentento	AND PageEventDefinitions.Name = 'Long Running	
AND Visits.StartDateTime BETWEEN @StartDate AND Visits.StartDateTime BETWEEN @StartDate AND Visits.StartDateTime BETWEEN @StartDate AND @EndDate group by Pages.Url TopLeads By Value - Undassified Top Leads By Value - Undassified To	Top External Keywords		Request'		
AND @EndDate group by Top Leads By Value - Classified Top Leads By Value - Unclassified Top Leads By Value - Unclassified Top Traffic Sources Unit Unit Unit Visits Unit Visits Unit Visits	Top Loade By Activity - Classified			AND Visits.StartDateTime BETWEEN @StartDate	
Top Leads by Value - Unclassified group by Top Leads by Value - Unclassified Pages.Url Top Leads by Value - Unclassified order by Top Leads by Value - Unclassified - Britain FailCount desc Top Traffic Sources Image: Source - Source	Top Leads By Activity - Classified		AND @EndDate		
Top Leads By Value - Undassified order by Top Leads By Value - Undassified order by Top Traffic Sources int Unit int Visits Unit Visits oracle [shared]:	Top Leads By Activity - Unclassified		group by	D W-1	
Top Leads By Value - Undassified - Britain Top Leads By Value - Undassified - Britain Traffic Types Unit Unit Unit Visits Unit Unit Unit Visits Unit Unit Unit Unit Unit Unit Unit Unit	Top Leads By Value - Classified		order by	Pages.Uri	
Top Traffic Sources Unit Unit Unit Oracle [shared]:	Top Leads by Value - Unclassified		Sider by	FailCount desc	
Traffic Types Traffic Types Unit Unit Oracle [shared]:	I op Leads by Value - Unclassified - Britain				
I ranc rypes Unit Unit Visits Unit Visits	I op Traffic Sources				Ŧ
Unit Visits Unit Visits Unit Visits	Irattic lypes				
	E Unit		Oracle [shared]:		
	Unit Visits				
	🛐 Visit				

- 6. On the ribbon, click **Save**.
- 7. Open Engagement Analytics and navigate to the Slow Pages report.

```
Reports/Site Health/Slow Pages
```



8. Scroll down the *Slow Pages* report and you can see that this report now returns the top 125 slow pages.

Reports	August 01, 2010 - May 10, 2013	Design						
Site Health	Print							
Common Mistakes Cammon Mistakes Not Found Urls Pages that Report Errors Campon Secent Activity		Slow Pages	Date Range: aug. 01, 2010 - maj. 10, 2011 Report Generated: maj. 10, 2011					
🗄 🥥 My Reports		Report description						
		Page URL	Count	Worst Time				
		1. <u>/</u>	458	8 ms				
		 <u>News/RSS/Feeds/News.aspx</u> 	199	380 ms				
		<u>Products/Sitecore-CMS.aspx</u>	36	398 ms				
		4. <u>/en.aspx</u>	35	98 ms				
		Products/Resources.aspx	34	542 ms				
		<u>/en/Products/Sitecore-CMS.aspx</u>	32	949 ms				
		 <u>News/RSS/Feeds/Denmark-News.aspx</u> 	32	426 ms				
		 /en/Demonstration/Demonstration-Request.aspx 	31	954 ms				
		9. <u>/sitecore</u>	31	759 ms				
		10 /Community.aspx	29	639 ms				
		11 /Products/Sitecore-Online-Marketing-Suite.aspx	29	474 ms				
		12 /NotFound.aspx?item=	27	33 ms				
		13 /en/Products/Resources/Tours.aspx	26	938 ms				
		14 /Products/Sitecore-Pricing.aspx	24	230 ms				
		15 /en/Community/Technical-Blogs/John-West-Sitecore-Blog/Feed.aspx	23	192 ms				
		16 /Products/Resources/Tours.aspx	22	76 ms				
		17 /en/Products/Sitecore-Pricing.aspx	20	600 ms				
		18 /Community/Technical-Blogs.aspx	18	62 ms				

Note

It is possible to base multiple reports on the same report .mrt file. In this case you can change the SQL query to update all reports based on this file. This can cause problems but you can also use it as a quick way to update multiple reports.