# **Intuit**

# QuickBooks Advanced Reporting User Guide

by Angela Browne and the QuickBooks Advanced Reporting team

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## **Acknowledgements**

No single person can write a guide of this size and scope. I'd like to thank the other members of the QuickBooks Advanced Reporting team. Without you, this wouldn't have been possible.

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# CHAPTER 1 Welcome to QuickBooks Advanced Reporting

Welcome to Intuit QuickBooks Advanced Reporting! We're glad you're here.

### About QuickBooks Advanced Reporting

QuickBooks Advanced Reporting lets you use your QuickBooks data to create interactive reports and gain better insights into your business.

In this guide, we'll walk you through some of the basic principles and features of Advanced Reporting. We know it's a bit of a challenge, but there's so much you can do with once you know how it generally works. Then, you can explore, experiment, and build reports on your own.

You can choose from some reports we've created or build your own report from scratch. Either way, you're able to gain powerful insights into how your business runs

#### **QlikView® Resources**

QlikView®, a specialized reporting tool, powers QuickBooks Advanced Reporting. We've made it so QlikView® works within QuickBooks and uses your company data. Here are resources that you may find useful as you use QuickBooks Advanced Reporting, since the reporting portions (expression and dimension building, Properties window, etc) are QlikView®.

Please note that not all the Qlik<sup>®</sup> documentation will 100% apply to Advanced Reporting since we integrated it into QuickBooks. The Library in Advanced Reporting is an example of that. However, it will give you a great start in understanding how to build reports.

Set Analysis Expression builder: http://tools.qlikblog.at/SetAnalysisWizard/QlikView-SetAnalysis\_Wizard\_and\_Generator.aspx?sa=

<u>QlikView® Community: https://community.qlik.com/community/qlikview</u>

Website: http://www.qlik.com/us/explore/products/qlikview

Demo Apps: http://www.qlik.com/us/explore/products/qlikview/demo-apps

Video Resources: http://www.qlik.com/us/explore/resources/how-to-videos?language=english

New to QlikView Community: https://community.qlik.com/community/qlikview/new-to-qlikview

QlikView® Resource Library: https://community.qlik.com/community/qlikview/resource-library

# снартев ₂ Learn the basics

### Give a user access to Advanced Reporting

Note that this is an "all or nothing" situation. If you give a user access, they will be able to use (and therefore, see) all your company data to create reports within Advanced Reporting.

For example, if you set the user up as a Sales Person who can only see Customer and Sales data and you give them access to Advanced Reporting, they can see everything in Advanced Reporting (but their permissions remain the same throughout the rest of QuickBooks).

- **1** Sign in as the Admin.
- 2 Under the Company menu, select Users > Set up Users and Roles.
- 3 Click the Role List tab.
- 4 Select the role to give Advanced Reporting access to.
- 5 Alternatively, you can click New to create a new role.
- 6 Click Edit to edit your selected role.
- 7 Under Area and Activities, select File > QuickBooks Advanced Reporting.
- 8 Under Activity Access Level, click Full.
- 9 Click OK

#### Open up a report template or create your own from scratch

- 1 Click List.
- 2 Click any report.
- **3** Reports with **S** are templates that load with your data.
- 4 Start From Scratch opens a blank report.
- 5 Open your saved reports from here.
- 6 Click Open.

## The Library

The Library contains many pre-made objects that you can use to build your reports. We've already made charts, date ribbons, Current Selection boxes, and much more.

- 7 If you don't see the Library (a menu on the left side of the screen) click Library at the top.
- 8 Double-click an object to add it to the report.
  - List Box: helps you filter charts and tables you have on the report
  - Tables/Charts: display your data so it's easy to understand
  - Date: includes multiple Date Ribbons and List Boxes to filter your reports by date (see Date)
  - Text and Utility: These objects help you filter even further, search for something specific, or add titles and comments
- 9 Drag and drop to move the object around the report

#### Date

One section of the Library that is a bit more complicated than just adding objects is the Date section. It contains date ribbons and list boxes that you can use to filter chart objects with specific dimension. These date ribbons and list boxes are built around the concept that QlikView calls <u>Master Calendars</u>.

If you're not familiar with the concept of Master Calendar and how it works, we suggested that you head over to the <u>Master Calendar</u> section of this User Guide to learn more.

The table below shows all the objects that appear in the Date section of the Library. It gives a description as well as the table or field that the object is made of.

Note: In order to see the data you expect, use these Date Library objects in tandem with other objects that contain the appropriate or "matching" table or field in the Dimension. See the "Other objects must have a Dimension that's built using this Table/Field" column.

Date Library Object	Description	Table/Field it's made of	Other objects must have a Dimension that's built with fields from this Table
Canonical	(Date Ribbon) Filter on	CanonicalCalendar	CanonicalCalendar table
	date for multiple	table	
	transaction dates.		
Canonical (M/Y)	(List Box) Filter on date	CanonicalCalendar.Mon	CanonicalCalendar table
	for multiple transaction	th Year field	
	dates. Shows last		
	payment made on		
	invoice by Month and		
	Year		

Canonical (Q/Y) Customer Last Invoiced	(List Box) Filter on date for multiple transaction dates. Shows last payment made on invoice by Quarter and Year (Date Ribbon) Filter on the date for the last Invoice created for a	CanonicalCalendar.Qua rter Year field CustomerLastInvoicedD atesCalendar table	CanonicalCalendar table CustomerLastInvoicedDate sCalendar table
Customer Last Invoiced (M/Y)	Customer:Job (List Box) Filter on the date for the last Invoice created for a Customer:Job. Shows Month and Year.	CustomerLastInvoicedD atesCalendar.Month Year field	CustomerLastInvoicedDate sCalendar table
Customer Last Invoiced (Q/Y)	(Date Ribbon) Filter on the date for the last Invoice created for a Customer:Job. Shows Quarter and Year.	CustomerLastInvoicedD atesCalendar.Quarter Year field	CustomerLastInvoicedDate sCalendar table
Customer Last Payment	(Date Ribbon) Filter on the date for last payment made on a Customer:Job.	CustomerLastPayment DatesCalendar table	CustomerLastPaymentDate sCalendar table
Customer Last Payment (M/Y)	(List Box) Filter on the date for last payment made on a Customer:Job. Shows Month and Year	CustomerLastPayment DatesCalendar.Month Year field	CustomerLastPaymentDate sCalendar table
Customer Last Payment (Q/Y)	(List Box) Filter on the date for last payment made on a Customer:Job. Shows Quarter and Year.	CustomerLastPayment DatesCalendar.Quarter Year field	CustomerLastPaymentDate sCalendar table
Transaction	(Date Ribbon) Filter on all transactions.	Year, Month, Quarter fields	_TransactionDateCalendar table
Transaction (M/Y)	(List Box) Filter on all transactions. Shows Month and Year	Month Year field	_TransactionDateCalendar table
Transaction (Q/Y)	(List Box) Filter on all transactions. Shows	Quarter Year field	_TransactionDateCalendar table

	Quarter and Year.		
Transaction Last Invoiced	(Date Ribbon) Filter on the last invoice created from a Sales Order.	TransactionLastInvoice dDatesCalendar table	TransactionLastInvoicedDat esCalendar table
Transaction Last Invoiced (M/Y)	(List Box) Filter on the last Invoice created from a Sales Order. Shows last invoiced for Month and Year.	TransactionLastInvoice dDatesCalendar.Month Year field	TransactionLastInvoicedDat esCalendar table
Transaction Last Invoiced (Q/Y)	(List Box) Filter on the last invoice created from a Sales Order. Shows last invoiced for Quarter and Year.	TransactionLastInvoice dDatesCalendar.Quarte r Year field	TransactionLastInvoicedDat esCalendar table
Transaction Last Payment	(Date Ribbon) Filter on the last payment made on an invoice or bill.	TransactionLastPaymen tDatesCalendar table	TransactionLastPaymentDa tesCalendar table
Transaction Last Payment (M/Y)	(List Box) Filter on the last payment made on an invoice or bill. Shows last payment for Month and Year	TransactionLastPaymen tDatesCalendar.Month Year field	TransactionLastPaymentDa tesCalendar table
Transaction Last Payment (Q/Y)	(List Box) Filter on the last payment made on an invoice or bill. Shows last payment for Quarter and Year	TransactionLastPaymen tDatesCalendar.Quarter Year field	TransactionLastPaymentDa tesCalendar table
Transaction Last Ship	(Date Ribbon) Filter on the last ship date for a Sales Order. This date is pulled from the Ship Date field on an invoice that's associated with the Sales Order.	TransactionLastShipDat esCalendar table	TransactionLastShipDatesC alendar table
Transaction Last Ship (M/Y)	(List Box) Filter on the last ship date for a Sales Order. This date is pulled from the Ship Date field on an invoice that's associated with the Sales. Shows last invoiced for Month and	TransactionLastShipDat esCalendar.Month Year	TransactionLastShipDatesC alendar table

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	Year.		
Transaction Last Ship (Q/Y)	(List Box) Filter on the last ship date for a Sales Order. This date is pulled from the Ship Date field on an invoice that's associated with the Sales Order. Shows last invoiced for Quarter and Year.	TransactionLastShipDat esCalendar.Quarter Year	TransactionLastShipDatesC alendar table

## Find the help center

- 1 Open QuickBooks Advanced Reporting
- 2 On the top right, click the (?).



# CHAPTER 3 USE Objects

Objects are the main items that you use in your report. They range from charts and tables to text and list boxes.

### Edit an object in a report

- 1 Right-click on the object.
- 2 Select Properties.
- **3** Use the tabs at the top to edit the object

### Delete an object in a report

- 1 Right-click anywhere in the blank space on the report. If you right-click on an object, you won't be able to see the correct option.
- 2 Click Properties.
- 3 Click the Objects tab

She	eet Properti	ies []				1	2
(	General Fie	lds Objects	ecurity Triggers				
	ObjectID	Туре	Caption	ShowMode	CalcTime	Layer	Memory
	LB03	List Box	INCOME ACCOUNTS	Normal	0	0	0 KB
	LB04	List Box	EXPENSE ACCOUNTS	Normal	0	0	0 KB
	•		III				Þ
					Delete	e Pr	roperties
				OK Cano	cel Ap	ply	Help

5 Select the object you want to delete. You can select more than one object using CTRL + click.

4

6 Click Delete.

General Fi	elds Objects	Security Triggers				
ObjectID	Туре	Caption	ShowMode	CalcTime	Layer	Memory
LB03	List Box	INCOME ACCOUNTS	Normal	0	0	0 KB
LBU4	List box	EAF ENGE ACCOUNTS	Noma		U	U KB
•		III		Delet	e _ []	roperties

8 Click **OK** to close the window.

# Add a custom object

7

- 1 Right-click on any blank space in the report.
- 2 Select New Sheet Object.
- **3** Select the object you'd like to add.

# CHAPTER 4 Expressions and Dimensions

#### **Overview**

Two key items to building your report are Expressions and Dimensions. You'll use these to set up your data in tables, charts, and other objects in Advanced Reporting.

Expressions: Requires a calculation and is what gives bars and lines in charts their height. Think of this as what comes before the "per" in the statement "sales per country". **Sales** is the expression.

Dimensions: How the data should be grouped. This think of this as what comes after the "per" in the statement "sales per country". **Country** is the dimension.

For example, here are the Properties for the chat in the Customer List template. The dimension is **Customer:Full Name**, as seen under **Used Dimensions**.

Dimensions	Dimension Limits	Expressions	Sort	Presentation	Visual Cues	Style	Number	Font	Layout	Car 🔹 🕨
Available Fiel	ds/Groups				Used Dimensio	ons				
Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Account. Acc	Account List ID Account Number Account Type Active Balance Balance Adjustmer Balance Adjustmer Class Full Name Class Full Name Currency List ID Description Full Name Has Attachments Last Statement Da Name Next Display Index Online III tem Fields from Table	nt Exchange R ount te		Add >    < Remove	<ul> <li>■ =[Custom</li> <li>Add Calc</li> <li>Settings for S</li> <li>■ Enable C</li> <li>■ Suppress</li> <li>■ Show All</li> <li>♥ Suppress</li> <li>■ Show Leg</li> <li>♥ Label</li> <li>Custom</li> <li>Comment</li> <li>Page Breaks</li> <li>No Breaks</li> </ul>	er Full N ulated D Selected ondition: When N Values gend her	ame] imension Dimensior al Value Is Nu	ull Adv	Edit	

One of the Expressions used is Balance. You can see what the syntax for Balance is if you look under Definition and click [...] to open it.

Chart Properties [ ]					×
Dimensions Dimension Limits Expressions Sort	Presentation \	Visual Cues S	Style Nu	mber Font	Layout Car · ·
🗈 🏢 Balance	Enable	Conditiona	al		
🖈 🥅 Addr2					
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		Balance			
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Main Phone     Finail		II(RowNo())	,Custome	er.Balance)	
Imary Contact		Comment			
Add Promote Group	Relative				
	- Neiduve				
Delete Demote Ungroup	- Dieplay Option			- Total Mode	
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No Accumulation     Eul Accumulation	Representatio	n	_	Expression	on Total
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				of Rows	
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Polynomial of 2nd d 👻	Fill with Aspe	Aspect -			
	Hide Text	When Image N	Missing		
			Consel		
			Cancel	Apply	Help

So if we were to apply the same logic as "Sales per Country" here, we would say "Balance per Customer" or "The balance for my customer."

## Create a chart

- 1 Right-click any blank space in the report.
- 2 Select New Sheet Object.
- 3 Select Chart.

(D)	Intuit Quick	Books Enterpris	e: Advanced Rep	orting 1.5			-	□ x
🔲 Reports 🔻 📑 List							Feedback	•
Library 📇 🖆 🍐 🖣								
Table	EXPENSE ACCOUNTS P 🕏 🖉		Properties					
Vendor	Bad debt		Select Field				_	
Purchase Transactions	Bank Service Charges		New Sheet	Object 🕨 🕨	B	List Box		
Sales Transactions	Dues and Subscriptions		Copy Sheet		Σ	Statistics Box		
	Union Dues		Paste Sheet	Object	E	Multi Box		
			Paste Sheet	Object as Link		Chart		
			Print	to Clinhoard		Input Box	-1	
			Export Image	e to File		Current Selections Box		
			Customize	Foolbar		Button		
			Help		A	Text Object		
			Ba Remove		3	Line/Arrow Object		
			in inclusive		•	Slider/Calendar Object		
						Bookmark Object		
		Vendors				Search Object		
		Vendor		_ City St	a	Custom Object		
		A Cheung Limite	d	Berkeley C/		System Table	imited.com	
		Bank of Anycity Bayshore CalOil	Service	Bayshore C/	7 9	8323 415-555-7378	name.com	
		Bayshore Water Bruce's Office N	fachines	Bayshore C/ Millbrae C/	4 9 4 9	4326 415-555-0111 4030 650-555-8923 banderson@	@myemail.com	
		C.U. Electric Cal Gas & Electr	ic	Bayshore C/	4 9 3 0	4326 415-555-0797 cu-service@	gsamplename.com	
		Cal Telephone	10	Middlefield C/	, 9 )	4482 415-555-5555		
		CalOil Company City of Bayshore	9	Middlefield C/ Bayshore C/	4 9 4 9	4482 650-555-0912 4326 415-555-1000		
		City of East Bay City of Middlefiel	shore	East Bayshore C/ Middlefield C/	4 9 4 9	4786 650-555-0101 4482 415-555-8500		
		Custom Kitchens	s of Bayshore	Bayshore C/	4 9	4326 415-555-2828 CKBservice	@samplename.com	
II Chart		Davis Business	Associates	midaleneia C/	~ 9	415-555-2874 kdavis@sar	nplename.com	
▲ Text & Utility		- · · · · ·		4			•	
C Last Refresh: 1/2/2015 at 11:58 AM	1					Save Sa	ve As Close	

- 4 The chart building wizard starts with the title and type of chart you want.
- 5 Enter your chart title under the Show Title in Chart checkbox
- 6 Window title can be the same if you like. It just is what appears on the top bar of the chart window.
- 7 Select the type of chart you'd like to see your data in.

General	×
Window Title Test	Object ID
V Show Title in Chart Test	Title Settings
Detached Read Only Calculation Condition	Print Settings
Chart Type $ \begin{array}{c} \hline  \\ \hline  $	Fast Type Change         Allowed Types         Bar Chart         Line Chart         Combo Chart         Scatter Chart         Pie Chart         Pie Chart         Straight Table
Reset User Sizing     Reference Mode:       Reset User Docking     Error Messages       Dimmed     •	Preferred Icon Position () In Chart () In Caption
< Back Next > Finish	Cancel Help

#### 8 Click Next.

- **9** Select your Dimension. Usually, you'll want to know more about your transactions so a good rule is to make choices from the Transaction table. We'll use it in our example so you can see it.
- **10** From the Show Fields from Table menu, click Transactions.

	•	Job Type	1		
		Lead			
R		LeadAdditionalContact			
		LeadToDo			
ſ	Din	LiabilityAccount			×
		OtherName			
l		OtherNameAdditionalContact			
		OtherNote		Used Dimensions	
I		PaymentMethod	Add >		
		PayrollItem			
I		PriceLevel	< Remove		
l		PriceLevelItem			
		SalesRep	Promote		
		SalesTaxCode			
		Serial Number	Demote		
		ShippingMethod		Add Calculated Dimension	Eda
		ShipTo		Add Calculated Dimension	
		ShipToEntity		Settings for Selected Dimension	
		SiblingAccount		Enable Conditional	
		TaxCode			
		Terms			
		TransactionItemCustomFields		Suppress When Value Is Null	
		TransactionNameCustomFields			
		Iransactions			
		Iransaction Serial Numbers		Show Legend	
		UnitOFMeasureUnit		Label	
		Vendor			
		VendorAdditionalContact		<use lield="" name=""></use>	
		VendorCustomFields		<b>c</b> .	Advanced
		vendorivote	1	Comment	
		All Tables			
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					<b>T</b>
		Animate I rellis			
	-				
			Back Nex	t> Finish Can	cel Help
	_				

**11** From the Available Fields/Groups menu, select anything you'd like to see as the Dimension, or the word after "per" in our "Sales per Country" example. In this case, we'll select Transactions.Customer Full Name.

Dimensions EX							
Dimensions Available Fields/Groups Transactions.COGS Amount Transactions.Condensed Transactions.Cost Transactions.Credit Amount In Home Curree Transactions.Credit RemainingInHomeCurre Transactions.Currency List ID Transactions.Customer Full Name Transactions.Customer Full Name Transactions.Customer Msg List ID	Used Dimensions Used Dimensions Add Calculated Dimension Edit Settings for Selected Dimension Enable Conditional						
<ul> <li>Transactions.Customer Msg List ID</li> <li>Transactions.Customer Sales Tax Code Lis</li> <li>Transactions.Customer Sales Tax Code Na</li> <li>Transactions.Debit Or Credit</li> <li>Transactions.Deposit Total</li> <li>Transactions.Deposit Total In Home Curreg</li> <li>Transactions.Deposited</li> <li>Show System Fields</li> </ul>	Enable Conditional  Suppress When Value Is Null Show All Values Show Legend Label <ul> <li><use field="" name=""></use></li> </ul>						
Show Fields from Table	Comment Advanced						
Transactions	Page Breaks						
< Back Next > Finish Cancel Help							

- 12 Click Add.
- 13 Click Next.
- 14 Now it's time for Expressions. These are the words before the "per" in our Sales per Country example. Depending on what you want to see, you could make a lot of choices here. We'll start with "Active transactions per Customer."
- **15** From the Table menu, select Transactions.
- **16** From the Field Menu, select Transactions. Active.
- 17 Click Paste.
- 18 Click OK to save.

edit Expression	or hypertex Their	
File Edit Se	ttings Help	
Expression OK		
1 Transactio	ns.Active Transactions.Active Item	^ _
		-
<b>∢</b>		4
Fields Function	is Variables Images	
Aggregation		• 0 %
Table	Transactions	▼ Show System Fields
Field	Transactions.Active	- Distinct
		Paste
		OK Cancel Help

19 Click Finish to see your chart or Next to do more with your chart.

## Expressions we've created for you

We've created some expressions (called variables) that you can use in your reports. That way, you don't have to write these Expressions yourself.

### Here's where you can find them

- 1 Right-click on an object.
- 2 Click Properties.
- **3** Open an Edit Expressions window.
  - Click the Dimensions or Expressions tab
  - Select any Dimension or Expression.
    - Dimensions: Click Edit.
    - Expressions: Double-click Expressions name or click [...] under Definition.

<pre>File Edit Settings Help Expression OK  1 sum(If (Match([Transactions.Account Type], 'Accounts Receivable') and (Transactions.Pending = 0 2 if ((Match ([Transactions.Txn Type], 'Receive Payment', 'Credit Memo', 'CreditCardCredit') or ( </pre>	) or IsNull(Tran: ^ (Match ([Transac
Expression DK           1         sum(If (Match([Transactions.Account Type], 'Accounts Receivable') and (Transactions.Pending = 0           2         if ((Match ([Transactions.Txn Type], 'Receive Payment', 'Credit Memo', 'CreditCardCredit') or (	0 or IsNull(Tran: ^ (Match ([Transac
<pre>1 sum(If (Match([Transactions.Account Type], 'Accounts Receivable') and (Transactions.Pending = 0 2 if ((Match ([Transactions.Txn Type], 'Receive Payment', 'Credit Memo', 'CreditCardCredit') or ( </pre>	0 or IsNull(Tran: ^ (Match ([Transac)
Fields Functions Variables Images Paste Show System Variables	Cancel



#### Understanding how to use them

If you choose a variable from the list, you'll see what data was used to put it together.

1	o E	dit E	xpress	ion				x
	Fi	le	Edit	Settings	Help			
I	Exp	ressio	on OK					
	1	sum	ı({\$<	\$ (vExprDa	<pre>uyRangeFilter(545,365)), \$(vExprSales)&gt;} [Transactions.Quantity Wi</pre>	th Sign	])	*
	*						*	*
	Fi	elds	Func	tions Varia	bles Images			
		vExpri I Sho [Qua	Previou nw Sust	usNQuarters tem Variable )] = {\$(=Ma	Paste  ([Quarter ID]) - \$1)}, Year=, Quarter=, Month= , Period= , [Pt			
					OK Cance		Help	

- vSet: Is a complete expression on it's own and can be used in a set. Includes vExpr variables.
- vTxt: used as label, you can put it in a text area to turn it into something like a date, etc
- vExpr: meant to be used in set analysis as a part of an Expression.
  - vExprSales and vExprDayRangeFilter are used in the Item Sales Forecast report template (look under Expressions in Properties for the Sold last column). When you use something like vExprSales in a set, it already includes certain factors relating to your Sales. That way, you don't have to build the expression each time.

#### Set Analysis with variable example

Edit Expression								
· File Edit Settings Help								
Expression OK								
<pre>1 sum({&lt;\$(vExprCogs)&gt;} [Transactions.Amount With Sign])</pre>	*							
the variable.	I							
Another example: sum({<\$(vExprSales),\$(vExprPreviousNYears(0))>}[Transactions.Quantity With Sign])								
III.	······································							
Fields Functions Variables Images								
Aggregation	0 %							
Table O All Tables	Show System Fields							
Field Account.Account List ID -	Distinct							
	Paste							
ОК	Cancel Help							

#### List of pre-built expression syntax

- **vExprCogs**: This variable can be used in set analysis when you want to do anything with the cost of goods sold for sales transactions. This is used in the Sales Profitability starter report to calculate the Total Cost of Products and Services.
- **vExprDayRangeFilter**: Use this expression as a modifier in set analysis to restrict the calculation between two dates.
- **vExprLast12MonthRolling**: Use this expression as modifier in set analysis to calculate amount or quantity for last 12 months. This is used in the Library object Sales -Top 10 item- last 12 months.
- **vExprMaxYear** : Use this expressions as a modifier in set analysis to make sure that you always have value for the max year of the current selection.

- For example, if you use it sum({<\$(vExprMaxYear)>}[Transactions.Amount]) and we select a particular year then the amount will be shown of that year. If you select more than two years, then the amount for the latest year shows.
- **vExprMonthRangeFilter**: This is same as vExprDayRangeFilter. It just works on monthly basis. In fact, vExprLast12MonthRolling is just a specific implementation of it.
- **vExprPreviousNMonths**: Use this is as a modifier in set analysis. It produces a value for a particular month and takes one parameter. Use 0 for current month, 1 for previous month, and so on. You need to remember that these all work based on the current selection of dates. If you select Q2 of 2013, then the expression \$vExprPreviousNMonths(0) points to the June 2013.
- **vExprPreviousNQuarters** : Same as vExprPreviousNMonths.
- vExprPreviousNYears: Same as vExprPreviousNMonths.
- **vExprSales**: Use this as modifier in set analysis to filter your data only for non-pending sales transactions.
- vExprQuarterRangeFiter: Same as vExprMonthRangeFilter.
- **vExprYearRangeFilter**: Same as vExprMonthRangeFilter.
- vSetSalesIncome: The sum of your sales income (as expressed in vExprSales).
- vSetSoldQuantity: The total quantity of your sales income (as expressed in vExprSales).
- vTxtMonthYear: This can be used to label your expressions. It goes hand in hand with vExprPreviousNMonths. If you use \$(vExprPreviousNMonths (0)) in your set analysis, then you should use \$(vTxtMonthYear(0)) as the label of this expression. If you want to have months in your dimension, then you can use [Month Year] in your dimension.
- vTxtQuarterYear: Same as vTxtMonthYear. In a dimension you can use [Quarter Year].
- **vTxtYear**: Same as vTxtMonthYear. In a dimension you can use [Year].

# снартев 5 Master Calendar

## What is a Master Calendar?

A Master Calendar table is a dimensional table that links to dates in your company file data. It includes one record per date for the minimum and maximum dates in your company file.

The first Master Calendar that was built into Advanced Reporting was for transaction creation date for all transaction types.

To get a better picture of how this looks in a table, here's an example:

						E	용XL _ O	
Month	Month Year	Transactions.Txn Date	Quarter	Quarter Year	Year	Week	Day	
Nov	Nov 2014	11/30/2014	Q4	Q4 2014	2014	48	30 ≜	
Dec	Dec 2014	12/01/2014	Q4	Q4 2014	2014	49	1	
Dec	Dec 2014	12/02/2014	Q4	Q4 2014	2014	49	2	
Dec	Dec 2014	12/03/2014	Q4	Q4 2014	2014	49	3	
Dec	Dec 2014	12/04/2014	Q4	Q4 2014	2014	49	4	
Dec	Dec 2014	12/05/2014	Q4	Q4 2014	2014	49	5	
Dec	Dec 2014	12/06/2014	Q4	Q4 2014	2014	49	6	
Dec	Dec 2014	12/07/2014	Q4	Q4 2014	2014	49	7	
Dec	Dec 2014	12/08/2014	Q4	Q4 2014	2014	50	8	
Dec	Dec 2014	12/09/2014	Q4	Q4 2014	2014	50	9	
Dec	Dec 2014	12/10/2014	Q4	Q4 2014	2014	50	10	
Dec	Dec 2014	12/11/2014	Q4	Q4 2014	2014	50	11	
Dec	Dec 2014	12/12/2014	Q4	Q4 2014	2014	50	12	
Dec	Dec 2014	12/13/2014	Q4	Q4 2014	2014	50	13	
Dec	Dec 2014	12/14/2014	Q4	Q4 2014	2014	50	14	
Dec	Dec 2014	12/15/2014	Q4	Q4 2014	2014	51	15	
Dec	Dec 2014	12/16/2014	Q4	Q4 2014	2014	51	16	
Dec	Dec 2014	12/17/2014	Q4	Q4 2014	2014	51	17	
- P++	D., 2014	11 12/10/2014	<b>A</b> 4	04.0044	23914	F 4	40.7	

Essentially what you're seeing is a detailed presentation of Dates in the company file. You can use this to filter your reports and we've built it into the Library under **Date** > **Transactions**. This will show creation date for all transaction types.

Let's walk through how to use dates like this in a simple report that shows transaction date for Month/Year:

- 1 Right-click anywhere in the white space.
- 2 Choose New Sheet Object > Chart.
- **3** Click the Pivot Table button.

- 4 Click Next.
- 5 From the Available Fields/Groups column, select Month Year.
- 6 Click Add.
- 7 From the Available Fields/Groups, select Transactions.Txn Type. You can narrow down the table to Transactions only by selecting Transactions from the Show Fields from Table drop-down.
- 8 Click Add.
- 9 Click Next.
- 10 In the Edit Expression window, type sum().
- 11 Click between the parentheses so your cursor is in-between ( and ).
- 12 Under the Field tab, select **Transactions** from the Table drop-down.
- 13 In the Field drop-down, select Transactions.Amount With Sign.
- 14 Click Paste.

At this point, this chart just shows the use of Master Calendars and doesn't reflect the right amount for any transactions. Use different expressions to show that. Here's an example.

- 15 Modify the expression to read: sum({<[Transactions.Header Or Line]={Header}>}[Transactions.Amount With Sign])
  - Transactions.Header Or Line, with Header selected gives the transaction amount.
- 16 Click OK.
- 17 Click Finish.

So now you can see that you've bucketed these transactions based on month and year. There are totals based on all transactions according to the Month/Year that they were created.

# What if you wanted to see invoices, bills, or jobs based on their last payment date?

The first Master Calendar used transaction date, which is equal to the date the transaction was created. We added more Master Calendars that use different sets of dates: the transaction payment date.

These Master Calendars use the following tables:

• **TransactionLastPaymentDatesCalendar:** uses the dates Invoices or Bills were last paid. You can use it to bucket your invoice or bills according to the date of the last payment.

• **CustomerLastPaymentDatesCalendar**: uses the dates that jobs were last paid. You can use it to bucket your Customer:Jobs according to the date of the last payment. See an example of this table is the Job Activities Over Time template.

# What if you wanted to see Sales Orders or Customers based on their last invoiced date?

There are more Master Calendars that use different sets of dates: last invoiced dates.

These Master Calendars use the following tables:

- TransactionLastInvoicedDatesCalendar: uses dates based on Sales Orders. You can use it to bucket your Sales Orders according to the date of the latest invoice created from a Sales Order.
- **CustomerLastInvoicedDatesCalendar**: uses dates based on Customer:Jobs. You can use it to bucket your Customer:Jobs according to the date of their latest invoice.

# What if you wanted to see Sales Orders based on their last shipped date?

There is another Master Calendar that uses a different set of dates: last shipped dates.

This Master Calendars use the following table:

• TransactionLastShipDatesCalendar: uses dates based on Sales Orders. You can use it to bucket your Sales Orders according to the last shipped dates.

# What if you wanted to see transactions based on more than one date?

You should use the CanonicalDatesCalendar table.



Let's look at an Canonical date example that you can find in the Library:

The Dimension for this chart is CanonicalCalendar.Month Year. It's used with the expressions:

- Invoiced: (sum({<DateBridge.DateType={'TransactionDate'}, [Transactions.Txn Type]={'Invoice'}, [Transactions.Header Or Line]={'Header'}, Transactions.Pending={0}>}[Transactions.Amount With Sign])
- **Paid**: sum({<DateBridge.DateType={'LastPaymentDate'}, [Transactions.Txn Type]={'Invoice'}, Transactions.Paid={1}, [Transactions.Header Or Line]={'Header'}>}[Transactions.Amount With Sign])

Couple things to take note of in these expressions:

- DateBridge table, with the field pointing to LastPaymentDate. This table includes dates from other tables like Transactions and TransactionImportantDates. DateBridge table has a field called DateType that identifies the origin of the date. If you want to bucket your transactions according to more than one date, then use DateBridge in your expression the way it's used in Library objects "Invoices vs Paid" and "Sales Order Created vs Sales Order Shipped.".
- Transactions. Header Or Line, with Header selected gives the transaction amount.