SQL Report – Samples – How to keep last parameter values in SQL Query Report

Summary	
Module	Universal functions
Level	Advanced
Requirements	B1UP 2015.08 or higher

Description

This sample will show you how to keep the last parameter values entered so that there is no need to enter the value every time. You will only need to update the fields required if you need changes.

Pre-Requisite

In this example we have a query on Sales Orders information with 4 parameters, 'From Date', 'To Date', 'From BP' & 'To BP' please see query below.

```
SELECT T0.[DocDate], T0.[CardCode], T0.[CardName], T0.[DocNum], T0.[DocTotal]
FROM ORDR T0
WHERE T0.[DocDate] >[%0] AND T0.[DocDate] <[%1] AND T0.[CardCode] >[%2] AND
T0.[CardCode] <[%3]
```

This Query when run will pop up the following screen prompting user to fill in the values every time. If user wants to run it with a different set of BPs then they have to enter the Dates again.

		_ ×
Posting Date	Greater than	8
Posting Date	Smaller than	
Customer/Vendor Code	Greater than	
Customer/Vendor Code	Smaller than	

So in order to help user to save this hassle, we will first create a User-Defined Table with 4 fields. Each field will correspond with each of the parameters and put in some values to start.

uery Report Parameter									
Code	Name	From Date	To Date	From BP	To BP	Z			
0001	0001	01/01/2007	02/17/2017	C30000	C50000	-			
	Code 0001	Code Name 0001 0001 I I I I I I I I I I I I I I I	y Report Parameter Code Name From Date 0001 0001 01/01/2007	Code Name From Date To Date 0001 0001 01/01/2007 02/17/2017 I I I I I I I I	Code Name From Date To Date From BP 0001 0001 01/01/2007 02/17/2017 C30000 Image: Construction of the const	Code Name From Date To Date From BP To BP 0001 0001 01/01/2007 02/17/2017 C30000 C50000 Image: Complex Street Stree			

In my example above I called it QRY_PARA which means in SAP it is called @QRY_PARA

<u>Note:</u> you are welcome to call it something else but please remember to change the table name in the query below.

Add and Edit Menu

We will now create a Menu Item for the SQL Report. (<u>Note:</u> you can assign this function to a button or any other Validation event, it is optional to create a menu item)



Under the Function Column, we will create our new Universal Functions.

Universal Functions

We will create a Universal Function of the type SQL Report. We will create 4 variables making them equal to the fields from the User-Defined Table that we just created. The Query is as below:

Declare @fromdate datetime = (select U_FromDate from SBODemoUS.dbo.[@QRY_PARA]) Declare @todate datetime = (select U_ToDate from SBODemoUS.dbo.[@QRY_PARA]) Declare @fromBP nvarchar(20) = (select U_FromBP from SBODemoUS.dbo.[@QRY_PARA]) Declare @toBP nvarchar(20) = (select U_ToBP from SBODemoUS.dbo.[@QRY_PARA])

SELECT T0.[CardCode], T0.[DocDate], T0.[CardName], T0.[DocNum], T0.[DocTotal] FROM ORDR T0 WHERE T0.[DocDate] >= @fromdate AND T0.[DocDate] <= @todate AND T0.[CardCode] >= @fromBP AND T0.[CardCode] <= @toBP

We also need to make sure select the Refresh Data Button option.

B1 Usability Package Sample

Universal Function	n Configuration (v.2016.1.2.0) [920	140]				_ 🗆 ×
Code	UF-001	Remarks				^
Name	Sales Order					×
Туре	SQL Report 🔻	Category				•
Form Title	Sales Order SQL Report		Form State	Normal		*
Width/Height	800 600		Collapse Level	0 (No groupin	g)	▼ ?
View type	Grid		 Format 			Wizard ?
CRM for Outloo	<pre>pectare @tooate datett Declare @fromBP nvarch Declare @toBP nvarchar SELECT T0.[CardCode], FROM ORDR T0 WHERE T0.[DocDate] >= AND T0.[CardCode] >=</pre>	me = (Select L ar(20) = (select (20) = (select T0.[DocDate], @fromdate AND @fromBP AND T	To.[CardName], To.[CardName], To.[CardName], To.[CardName], To.[CardName], To.[DocDate] <= @	emoUS.dbo.[@Q SBODemoUS.dbo emoUS.dbo.[@Q 0.[DocNum], T @todate HtoBP	RY_PARA]) .[@QRY_PARA]) RY_PARA]) 0.[DocTotal]	
SQL Variables						Wizard ?
	✓ Start Collapsed Fixed	col. count 1	Selec	ct Data Target		?
	Banded row color Refres	h option Refresh	n Data Button 🔻		First column is select	ction checkbox
ОК С	ancel Auto F	Refresh Do not	auto-refresh 🔻 Form	ntype Suffix	UF-001 / Imp	port Export

Next we will run this SQL report. When the Report is displayed, we will right click and select 'B1 Usability Pack' > Add or Edit Function Button.

ales Order SQL Rep	port					-			
CardCode	DocDate	CardName			DocNum		DocTotal		
C30000	01/11/2007	Microchips			61		49,795.00		
C40000	01/14/2007	Earthshaker Corporation		Conv	,			1	
C42000	01/17/2007	Mashina Corporation		C					
C50000	01/20/2007	ADA Technologies	U	Сору	system inform	matior	n		
C30000	02/09/2007	Microchips		Ma <u>x</u> i	mize/Restore (Grid		- 1	
C40000	02/12/2007	Earthshaker Corporation		B1 Us	ability Packag	je		- F	
C42000	02/15/2007	Mashina Corporation	100	Add	B1 Validation o	onfia	uration	- F	
C50000	02/18/2007	ADA Technologies		E JULA			Ale in a standard		
C30000	03/13/2007	Microchips	-54	Editi	Unction butto	ns on	this window	v	
C40000	03/16/2007	Earthshaker Corporation	1 0	Make	ะให้is column เ	mand	atory	- 1	
C42000	03/19/2007	Mashina Corporation	2	Add	Help Informati	ion		- 1	
C50000	03/22/2007	ADA Technologies		Creat	e Template				
C30000	04/28/2007	Microchips		C-++				- 1	
C40000	05/13/2007	Earthshaker Corporation		Get t	emplate			- 1	
C42000	05/18/2007	Mashina Corporation		Make	e Items Read O)nly		- 1	
C50000	05/23/2007	ADA Technologies	-	Add	Right-Click Me	enus t	o this windo	w	
C30000	06/28/2007	Microchips		Edit t	his SOL Report	t conf	figuration	- 1	
C40000	07/05/2007	Earthshaker Corporation		D.(garación		
C42000	07/09/2007	Mashina Corporation	1	Ketre	sn				
C50000	07/15/2007	ADA Technologies	7	Filter	Ta <u>b</u> le				
C30000	08/17/2007	Microchips	_		101		4,749.47	_	
C40000	08/22/2007	Earthshaker Corporation			102		7,357.50		
C42000	08/26/2007	Mashina Corporation			103		9,142.50		

Then in the Button Configuration, we give the button a name and assign a new Universal Button which Open the User-Defined Table. This will allow user to Update the values of the parameter.

Buttons - Config	uratio	n (v.2016.1.2.0) [920140]								_ 🗆 ×
Code Formtype Description	FB-00 BOY_ Sales	01 41_SQLREPORT_UF-001 Order SQL Report	Form Width 800 ? Formheight 600 ? Buttonwidth ?	Use Cate	rs (Empty = All) egory	 Include 	e users) Exclu	de users	
Buttons	#	Caption	Function	ι	Universal Function	Multi Button	Add	Find	ОК	
	1	Set Parameter	Universal Function	•	> UF-002		~	~	v	Add
	2		P Formatted Search				~	~	✓	Remove
										•
										1 <u>1</u>
										▲
		2								r
		•	##						•	
Active										
ОК	Cancel								Impo	ort Export

We go to View > System Information and enable it.

<u>F</u> ile <u>E</u>	dit	<u>V</u> iew	<u>D</u> ata	<u>G</u> o To	<u>M</u> odules	<u>T</u> ools	<u>W</u> indow	<u>H</u> elp		
	. .[User-D	Defined F	ields			Ctrl+Shift+U		
				n Inform	ation			Ctrl+Shift+I		
Main M OEC Cor Jayson B	enu mpute Butler M <u>o</u> dul Sale Purc		S <u>t</u> ring <u>P</u> icker Boyun Boyun Boyun Boyun	Informa s Display n IT: <u>X</u> MI n IT: Forr n IT: Clea n IT: S <u>h</u> o n IT: U <u>n</u> f	tion / L Mode m Spy ar current st w current v reeze current	atusbar vindow a nt windo	message 15 XML 14		•	
22	Busi		<u>I</u> ndica	tor Displ	ay				⊁	
66	Banl		Restor	e Colum	n Width					
E	Inve		<u>F</u> it Co	lumn Wi	dth					
MM	Reso		<u>L</u> egen	d				Ctrl+L		
·•R	Prod		Tr <u>a</u> nsl	ated Valu	Ies]

Then we go to Tools > User-Defined Windows, locate our User Defined Table and hover our arrow on top of the table. We can then look at the lower left hand corner to find out about the Menu UID of this table. In my example, the Menu UID is 51285

s الم	ervice	User_Defined Values	Shift+F2	BOY_BUTTONS_DLF - Data Launcher Functions
ь н	luman Resources	User-Defi <u>n</u> ed Windows	•	BOY_DEFAULT_CONFIG - Default Data Config
··		Cockpit	•	BOY_E7_CONFIG - B1 Dashboard: Config
ш: к		Customization Tools	•	BOY_E7_DASHBOARD - B1 Dashboard: View
E	Sales Order SQL Rpt	Default Forms	•	BOY_E7_DEFDEL - B1 Dashboard: Dashboard del.
E	Financials	23		BOY_E7_DEVDASH - B1 Dashboard: Dashboard
E	Opportunities			BOY_E7_USERSET TING - BT Dashboard: User setting
E	Sales and Purchasing			BOY E7 WIDGETDATA - B1 Dashboard: Widgets
E	Business Partners			BOY_EXCHANGE_CONFIG - Exchange Rate Configu
B	Banking			BOY_HELP_ENTRY - Help system entry
				BOY_IPT_CONFIG - IPT: Config
	Inventory			BOY_PLUGINS - Boyum: Plugins
E	Production			BOY_SBO_AVERSIONS - Boyum: Addon Versions
E	MRP			BOY_SBO_DBINFO - Boyum: DB Information
E	Service			BOY_SBO_EULA - Boyum: EULA
B	Human Resources			BOY_SBO_EXTDATA - Boyum: Extended Data
	- Human Resources	~		BOY_SBO_EXTEVT - Boyum: External events
				BOY_SBO_FEEDBACK - Boyum: Feedback
				BOY_SBO_LASTVALUE - Boyum: Last Value Items
				BOY_SBO_LICASSN - Boyum License Assn
				BOY_SBO_LICCONF - Boyum License Conf
				BOY_SBO_LICDATA - Boyum License Data
				BOY_SBO_PARTNER - Boyum: Partner Information
				BOY_SBO_SCHEDULE - Boyum: Recurring Schedule
				BOY_TEMPLATE - Template System: Header
				BOY_TEMPLATE_LINES - Template System: Lines
				BOY_TOOLBOX_ACBC - Code Bp Config
			02/19/2017	BOY_TOOLBOX_ACIC - Code Imd Config
u Uid=9	51285]		15:39	BOY_TOOLBOX_CONFIG - Toolbox Config
	,			ROATIOOFROXTODM - Loolpox ODM

We will now create our second Universal Function and Assign it to the Set Parameter button that we just created. The Syntax is just Activate(51285); using the Menu UID that we just found out. Then we Add this function and another Add when back in the Button Configuration window.

Universal Function Co	onfiguration (v.2016.1.2.0) [920	140]					_ 🗆 🗙
Code	UF-002	Remarks					0
Туре	Macro 🔻	Category					•
			Command	Activate();	*	Quick insert	Wizard
	Activate(51285);						
OK Cance	Tip: You can hover mouse of	ver the macro samples to see	more info + do	ouble-click to insert	Debug ?	Import	Export

Copyright 2011 – Boyum IT A/S

Result

When menu item of the Sales Order SQL Report is click, the SQL report will be displayed using the initial values we put in the User-Defined Table. If customer wants to change the parameter, say now they want to see Sales Order for the year 2006 as well, then all they have to do is to click the 'Set Parmeter' to open the User Defined Table to update the parameter value

s Order SQL Rep	port				
CardCode	DocDate	CardName	DocNum	DocTotal	Set F
C30000	01/11/2007	Microchips	61	49,795.00	A
C40000	01/14/2007	Earthshaker Corporation	62	9,946.25	
C42000	01/17/2007	Mashina Corporation	63	42,532.50	
C50000	01/20/2007	ADA Technologies	64	15,900.00	
C30000	02/09/2007	Microchips	69	28,145.00	
C40000	02/12/2007	Earthshaker Corporation	70	208,217.25	
C42000	02/15/2007	Mashina Corporation	71	53,987.13	
C50000	02/18/2007	ADA Technologies	72	38,955.00	
C30000	03/13/2007	Microchips	77	43,976.56	
C40000	03/16/2007	Earthshaker Corporation	78	99,462.50	
C42000	03/19/2007	Mashina Corporation	79	80,825.00	
C50000	03/22/2007	ADA Technologies	80	54,722.50	
C30000	04/28/2007	Microchips	85	5,175.71	
C40000	05/13/2007	Earthshaker Corporation	86	4,019.38	
C42000	05/18/2007	Mashina Corporation	87	1,722.50	
C50000	05/23/2007	ADA Technologies	88	463.75	
C30000	06/28/2007	Microchips	93	7,983.44	
C40000	07/05/2007	Earthshaker Corporation	94	9,537.50	
C42000	07/09/2007	Mashina Corporation	95	1,490.63	
C50000	07/15/2007	ADA Technologies	96	4,836.25	
C30000	08/17/2007	Microchips	101	4,749.47	
C40000	08/22/2007	Earthshaker Corporation	102	7,357.50	
C42000	08/26/2007	Mashina Corporation	103	9,142.50	
C50000	08/31/2007	ADA Technologies	104	7,486.25	
C30000	09/27/2007	Microchips	109	1,339.59	

In our example we are changing the FromDate to 01/01/2006 and click Update.

	C. I.		E. D.L		T. D. I.	5 DD	T- 00	7
ŧ.	Code	Name	From Date		To Date	From BP	To BP	_
	0001	0001	01/01/2006	•	02/17/2017	C30000	C50000	-
								_
								-
								_

Back in the SQL Report, user will need only to click the 'Refresh' button to see fresh data. This will save them the need to re-type the other parameters.

CardCode	DocDate	CardName	DocNum	DocTotal	Set Param
230000	01/15/2006	Microchips	2	2,976.88	
240000	01/20/2006	Earthshaker Corporation	3	12,535.00	
242000	01/30/2006	Mashina Corporation	5	18,391.00	
230000	02/15/2006	Microchips	6	8,795.31	
240000	02/21/2006	Earthshaker Corporation	7	10,573.00	
50000	03/16/2006	ADA Technologies	10	36,172.50	
240000	04/05/2006	Earthshaker Corporation	15	41,120.25	
242000	04/10/2006	Mashina Corporation	16	4,107.50	
250000	04/20/2006	ADA Technologies	17	21,412.00	
230000	05/25/2006	Microchips	21	25,114.00	
240000	06/01/2006	Earthshaker Corporation	22	6,540.00	
50000	06/10/2006	ADA Technologies	23	11,461.26	
242000	06/15/2006	Mashina Corporation	24	21,650.50	
30000	07/11/2006	Microchips	28	20,743.41	
042000	07/18/2006	Mashina Corporation	29	8,851.00	
240000	08/08/2006	Earthshaker Corporation	32	19,783.50	
250000	08/14/2006	ADA Technologies	33	22,061.26	
230000	09/09/2006	Microchips	39	7,848.13	
250000	09/15/2006	ADA Technologies	40	20,087.01	
230000	09/23/2006	Microchips	41	10,229.63	
042000	09/29/2006	Mashina Corporation	42	7,817.50	
240000	10/06/2006	Earthshaker Corporation	43	36,378.75	
042000	10/12/2006	Mashina Corporation	44	16,430.00	
230000	10/19/2006	Microchips	45	9,201.25	
C50000	10/23/2006	ADA Technologies	46	26,659.01	
250000	12/02/2006	ADA Technologies	53	17,092.48	
042000	12/03/2006	Mashina Corporation	54	27,427.50	
240000	12/05/2006	Earthshaker Corporation	55	14,973.88	
230000	12/07/2006	Microchips	56	6,900.94	
230000	01/11/2007	Microchips	61	49,795.00	
240000	01/14/2007	Earthshaker Corporation	62	9,946,25	-