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# **CALCULATE FIELDS FOR VTIGER CRM**

## Introduction

The Calculate Fields for vtiger CRM is the tool which allows calculating values for numbered fields. The unique feature of our tool is that the calculation for particular fields is based and provided on fields of the related modules and defined filters for these modules. This makes this tool powerful and flexible to provide a lot of various business indicators. The usage of this tool is simple and requires only basic knowledge of the vtiger CRM custom fields and filters/custom views creation.

The Calculate Fields benefits are:

- supported mostly inside all modules
- provides sum, avg, min, max, count values
- automatic calculations using scheduler
- calculation based on fields from related modules
- using standard vtiger functionalities (filters, custom fields)
- your own already created filters can be used for calculated fields
- unlimited number of calculated fields

# Who needs Calculation Fields

There is no specific target group of vtiger CRM users for Calculation Fields. The Calculation Fields can be used by anybody within your organization and the usage depends only on requirement of the particular employee. The new calculated fields can be defined and will be calculated in order to obtain better overview and make quicker and better decisions in the area of interest.

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### License agreement

- The Calculate Fields License will be referred to as "The license" in the remainder of this text.
- This irrevocable, perpetual license covers all versions 1.xx of Calculate Fields.
- This license gives the holder right to install Calculate Fields on ONE productive vtiger CRM installation and ONE develop vtiger CRM installation for unlimited users.
- The license holder is allowed to make modifications to the Calculate Fields sources but in no event will the original copyright holders of this library be held responsible for action or actions resulting from any modifications of the source.
- The license holder is not required to publicize or otherwise make available any software used in conjunction with Calculate Fields.
- The license holder may not re-distribute the library or versions thereof to third party without prior written permission of the copyright holder.
- Calculate Fields License does not allow the library to be redistributed as part of another product.
- The license may be transferred to another vtiger CRM installation only with prior written permission.
- The wording of this license may change without notice for future versions of Calculate Fields.

# **Terms and conditions**

We accept all major credit cards, PayPal and Bank transfer. Our deliveries:

- Credit Card: delivered immediately
- PayPal: delivered immediately
- Bank transfer: delivered in 2 5 days

After payment you will obtain email with link for download Calculate Fields and your license key as well.

# **Private policy**

During installation it is necessary to exchange following information:

- vtigerCRM version (e.g. 5.4.0)
- Calculate Fields version (e.g. 540.1.1)
- Date and time
- Domain in md5 coding format (e.g. 916b25c201a77a6721003c0030977f3b)
- Action provided by you (INSTALL, REACTIVATE, DEACTIVATE)

# **1** How to install

The Calculate Fields tool is installed within one installation. Please provide following steps in order to install Calculate Fields:

It is highly recommended to finish the installation without any interruption. For successful installation we need to exchange following information (see previous chapter for details):

vtigerCRM version (e.g. 5.4.0)
Calculate Fields version (e.g. 540.01.01)
Date and time
Domain in md5 coding format (e.g. 916b25c201a77a6721003c0030977f3b)
Action provided by you (INSTALL, REACTIVATE, DEACTIVATE)

 Install the .zip package of the Calculate Fields module via Settings -> Module Manager. Select the *Custom Modules tab* and click on the <u>Import New</u> button.

Ċ	Manage module behavior inside vtiger CRM	
	Standard Modules	Custom Modules
		Import New
3	ConfigEditor	ð 🗹 🗉
8	CronTasks	8 R I
3	Import	ê 😿 e
8	Integration	0 R I
2	MailManager	8 R E
5	Mobile	0 R I
3	PDFMaker	8 R 🛛 🔦
5	WSAPP	e 😿 🖬
abl	British English	0 12
abl	DE Deutsch	0 🗹

#### Picture 1.1 Installation of Calculate Fields – step 1

2. Select the module zip (package) file that was previously exported or created. Click on the Import button.

Monogo y	nodulo bohovior incido utigor CPM	
wanage r	mouule penavior inside vliger CRIVI	
Select the Packa	age File	
* File location:	D:\ITS4You\CalculateFields540_0_0.zip	Browse
* File location:	D:\ITS4You\CalculateFields540_0_0.zip vtiger module is packaged as a zip file.	Browse

Picture 1.2 Installation of Calculate Fields – step 2

3. Verify the import details parsed from the zip file and click <u>Yes</u> to proceed or <u>No</u> to cancel.



Picture 1.3 Installation of Calculate Fields – step 3

4. Click on **Finish** to complete the module import.

Importi	ng Module			
Initializin Updating Creating SQL: CF NOT NU varchar ENGINE: SQL: CF varchar	would calculater leads g module permissions DONE Module CalculateFields EATE TABLE IF NOT EXIST: .L., 'for_field' varchar(255 (255) NOT NULL, 'from_evi InnoDB DEFAULT CHARSE 'EATE TABLE 'Vtiger_calcul (255) NOT NULL, 'license'	DNE DONE S`vtiger_calculatefie ) NOT NULL, `from_m da` int(11) NOT NULL, T=utf8; DONE iatefields_license` (`` varchar(50) NOT NUL	lds` (`for_desc` text, odule` varchar(255) N `operation` varchar(2' version` varchar(10) N .L, PRIMARY KEY (`ve	`for_module` varchar(255) IOT NULL, `from_field` 55) NOT NULL ) IOT NULL, `license_key` rsion`) ) ENGINE=InnoDB
DEFAUL	T CHARSET=utf8 DONE	nstinstall START		

Picture 1.4 Installation of Calculate Fields – step 4

In order to finish installation, please provide following validation steps.

1. Calculate Fields Validation Step. Please insert a license key and make sure that your server has internet access. Click on Validate.

inst	tallation >> Validation >> 1/2
	Welcome to the Calculate Fields Installation Wizard
	Please insert a license key you received in purchase confirmation email. Please make sure that your server have internet access in order to run validation. keykeykeykey
	Validate 2.

Picture 1.5 Validation step 1

2. If Calculate Fields is installed successfully you will see following screen. Click on Finish.

installation >> Finish >> 2/2 Your license key was successfully validated Click on the "Finish" button and You will be redirected to CalculateFields List.



Picture 1.6 Finish installation

# 2 Description of the Calculate Fields

The Calculate Fields module provides calculating values for numbered fields. This calculation for particular fields is based and provided on fields of related modules and defined filters for these modules. So in order to define calculation for field in the target module you have to provide following steps:

- 1. Define / select the field which value will be calculated in the target module.
- 2. Define the filter (custom view) for the related module.
- 3. Define the calculation within Calculate Fields settings.

The only new step from above approach is number 3. The others are the standard vtiger CRM functionalities. Please refer to the online vtiger CRM manual, web pages, forums to obtain more details for example:

https://wiki.vtiger.com/vtiger6/index.php/Configure\_fields

https://wiki.vtiger.com/index.php/Advanced filter and Advanced Search changed

https://wiki.vtiger.com/index.php/Create\_Custom\_Filters

Please see also examples described in the next chapter 3.

The Calculate Fields settings (Picture 2.1) you can find under *CRM Settings -> Other Settings*. In order to setup calculation provide following steps within settings:

- 1. Select the target module the target module is the module in which new calculated field is created.
- 2. Select the target field the result of the calculation will be stored/updated in this field.
- 3. Select related module you can select only from the group of related modules (visible also within "More Information" tab).
- 4. Select related module filter/custom view calculation is done using only group of related records which fit to filter conditions.
- Select operation we provided operations like SUM (value1+value2+...+valueN), AVG (SUM/COUNT), MIN (minimal value from all values, i.e. value1 ...valueN), MAX (maximum value from all values, value1 ...valueN), COUNT (the count of the values, i.e. N)
- 6. Select column/related field there should be list of available columns from related module and the list depends on the type of related module. You have to select one column according to your needs, e.g. from invoice you can select from: Adjustment, Sub Total, Total, Discount Amount, S&H Amount.
- 7. Describe the calculation (optional).
- 8. Click on button Save

		1.	2.
Please select module and corresp	onding field in order to define calculate :	Select Module: Organizations	AVG per invoice
	3. 4.		
Filters :	Invoice  Paid Invoices		
Operation :	AVG <b>5</b> .		
Column :	Total 💽 <mark>6</mark> .		
Description :	Average value paid per invoice 7		

Picture 2.1 Calculate Fields settings

The following picture describes the usage of the tool Calculate Fields (Picture 2.2):

- 1. You can define the calculation for particular field (some existing or custom field) in the target module. This calculation is based on related module records and defined additional inputs/parameters.
- 2. First parameter which affects the calculation is defined filter (standard, advanced, custom) within related module; it means that the calculation will be finally based only on records which fit to defined filter.
- 3. Depending on the related module you can select from various columns i.e. field which will be used for calculation.
- 4. We offer following operations for calculations: SUM, AVG, MIN, MAX, COUNT. Please select one operation from the picklist.
- 5. The calculation is provided automatically based on scheduler settings (see also the web <a href="https://wiki.vtiger.com/index.php/Scheduler">https://wiki.vtiger.com/index.php/Scheduler</a> and next page).



Picture 2.2 The Calculate Fields usage

As was before mentioned, the calculations provided for calculated fields are done automatically based on scheduler settings and cannot be initiated manually. Please check the scheduler settings, i.e. check whether status for Calculate Fields is "Active". If not please change it, as well as define frequency as shown in the picture below (Picture 2.3).

Sche #	eduler Cron Job	Frequency(H:M)	Status	Last Scan Started	Last Scan Ended	Sequence	Tool
1	Workflow	00:15	Active	51 min(3) ago	51 min(3) ago	4	2
2	RecurringInvoice	12:00	Active	9 hr(s) ago	9 hr(s) ago	÷ +	ď
3	SendReminder	00:15	Active	51 min(s) ago	51 min(s) ago	÷ +	Z
4	ScheduleReports	00:15	Active	Calculate Fleids	🔀 🛛 ago	ê <b>4</b>	
5	MailScanner	00:15	Active	Statue - Activ	e 💌 🛛 ago	<b>≙ ₽</b>	1
6	Scheduled Import	00:15	Active	Status, Pier	) ago	<b>≙</b> ₹	ď
7	Calculate Fields	00:15	Active	Frequency Mins	⊸ →	÷ +	
8	EMAILMaker - Send emails	00:15	Active		) ago	÷ +	Ľ
9	EMAILMaker - Birthday email	24:00	Active	Save	icel ) ago	•	2

Picture 2.3 Scheduler settings for Calculate Fields

### 2.1 Calculate Fields ListView

The common tasks like add, delete or edit calculation have to be initiated via Calculate Fields ListView. Go to *CRM Settings -> Other Settings* and click on  $\Im$  Calculate Fields link. The following window will appear on your screen.

1	Provides of	<b>us &gt; Calculat</b> calculated fields base	e Fields ed on related mod	ule records				<u></u>
PI	ease select mo	dule and corresp	onding field in o	order to define calcu	Filter Create ne Select Module	<u>:</u> W		
#	For module	For field	From module	Filter	From field	Operation	Description	Action
1	Organizations	Count of orders	Sales Order	Orders Last 30 Days	Total	COUNT	The count of orders created within last 30 days.	Edit   Delete
2	Organizations	Annual Revenue	Invoice	Paid Invoices	Total	SUM	Sum of "Total" from the list of already paid invoices	Edit   Delete



You can find here list of the calculations, which gives you information about a calculation field, involved modules, used filter and operation. As shown in the picture, it is also possible to use links in the "Action" column in order to edit or delete already created calculations directly from the ListView. There is also button "settings" . Using "Select Module" you can filter provided calculations per target module. In order to setup calculation use "Select Module" and select the target field.

# 3 Examples of usage

This chapter describes few of uncountable set of usage examples in simple way, i.e. how to define field, filter and set up calculation.

### 3.1 The Annual revenue per organization for current FY

In this example the annual revenue is calculated per organization and result is written to already existing vtiger organization module field "Annual Revenue".

In order to achieve this we need to create custom view/filter in the related module Invoice, i.e. to define that you would like to see only invoices from Current FY and in addition only Paid invoices as seen below.

Standard Fi	it <del>e</del> rs	Advanced Filters										
					Standard Fi	ilters	Advanced Filter	3				
	Simple Tim	e Filter										
			Select a Column :	Invoice - Invoice Date 💌		Advanced	Search					
			Select Duration :	Current FY								New Group
			Start Date :	2013-01-01 (yyyy-ma-dd)		Status	equais		Pa	ald	2	× F
			End Date :	2013-12-31 (yyyy-ma-dd)		New Cond	lition					

Because already existing field will be used than you can go directly to Calculate Fields settings and select all necessary fields i.e.:

- 1. Select target module Organizations.
- 2. Select target field "Annual Revenue".
- 3. Select related module "Invoice".
- 4. Select related module filter "Paid Invoices" created under module "Invoice".
- 5. Select operation "SUM".
- 6. Select column/related field "Total".
- 7. Describe the calculation in order to know what the purpose of this calculation for further usage was.
- 8. Click on button Save

		1	2.
Please select module and corresp	onding field in order to define calculate : Select Module	e: Organizations	Annual Revenue
	3 4		
Fitters :	Invoice   Paid Invoices		
Operation :	<u>sum - 5.</u>		
Column :	Total 🔄 6.		
Description :	Sum of all paid invoices within last FY		

Some examples of possible modifications:

- a) Change the period of interest using standard filter.
- b) Change the advanced filter to see not paid invoices, etc.
- c) Change the operation to see average revenue per invoice or to see the count of the invoices.

## 3.2 The count of the sales orders per organization within last 30 days

As a first step to see the count of the sales orders per organization within last 30 days will be the creation of the custom field "Count of orders". Go to the settings (() in the target module "Organization" and click on Layout Editor link. In Layout Editor click on to create custom field "Count of orders" as can be seen in the picture below.

	odule Manager > Organizations > Layout Editor signing and Modifying the layout in each of the modules						Arrange	RelatedList	1	Add	Bloc	k
Show V C Organization Viebste Ticker Symbo Member Of Employees Other Email Industry Type Email Opt Out Assigned To	rganization Information		Crea	nte (	Custom Field	Labei: Length: Decimal Places:	Count of orders 5	X X				
Count of orde	rs	÷		C	eated rime				100	- 1		

Next step is to define custom view in the related module Sales Order. So create the custom view as shown below i.e. select column "SalesOrder – Created Time" and duration "Last 30 Days" and save it as "Orders Last 30 Days".

Standard Filters			Advanced Filters			
	Simple Time Filter					
					Select a Column :	SalesOrder - Created Time
Details	6				Select Duration :	Last 30 Days 💌
	*View Na	ime:	Orders Last 30 Da	ays	Start Date :	2013-04-10 (yyyy-mm-dd)
L					End Date :	2013-05-09 (yyy-mm-dd)

Finally in Custom Fields settings set up new calculation for new custom field as:

- 1. Select target module Organizations.
- 2. Select target field "Count of orders".
- 3. Select related module "Sales Order".
- 4. Select related module filter "Orders Las 30 Days".
- 5. Select operation "Count".
- 6. Select column/related field "Total" \*Note: for count function you can use any available column from the picklist.
- 7. Describe the calculation to know what the purpose of this calculation for further usage was.
- 8. Click on button Save

	1. 2.
Please select module and corres	ponding field in order to define calculate : Select Module: Organizations
	3. 4.
Filters :	Sales Order V Orders Last 30 Days
Operation :	COUNT - 5.
Column :	Total 6.
Description :	The count of order created within last 30 days. 7

# 4 Settings

The Calculate Fields settings can be initiated from ListView using button 4 or using same button in the *CRM Settings > Module Manager >* tab *Custom Modules*. In the Settings you can find:

- License manage all settings related to your license
- Upgrade initiate upgrade of the Calculate Fields
- Uninstall Calculate Fields completely remove Calculate Fields

### 4.1 License settings

In case that some problem occurs with license key or in case you need to reinstall Calculate Fields you have to deactivate and reactivate license key. To deactivate license key please provide following steps:

- 1. Click on Deactivate license button.
- 2. Confirm deactivation using button in next window.
- 3. You are informed about successful deactivation of the license. Just click on .

	License Key keykeykeykeykeykeykeykey Reactivate license Deactivate license	[Scroll to Top]
Moc Manag	tule Manager > CalculateFields > License	
	Licer  Licer  Cancel  Cancel	[Scroll to Top]
Moc Manag	lule Manager > CalculateFields > License se your Lik	
	You have successfully deactivated your Calculate Fields	

Picture 4.1 License deactivation

After deactivation of the license you cannot access Calculate Fields ListView and calculated fields are not updated neither.

To activate license you have to provide following steps:

- 1. Insert the license key and click on button Activate
- 2. If license key is correct you will be informed about successful activation. Just click on Finish button.

Mar Mar	odule Manager > C	alculateFields > License	
	License Key	keykeykeykeykeykey Activate 1.	[Scroll to Top]
installatio	n >> Finish >> 2/	2	
<b>You</b> Click a	<b>r license key wa</b> on the "Finish" button ar	S SUCCESSFUIIY Validated Ind You will be redirected to CalculateFields List.	
		Finish 2.	

Picture 4.2 Calculate Fields license activation

### 4.2 Upgrade of the Calculate Fields

The upgrade of Calculate Fields can be started using Supgrade link in the module settings. Please browse the package using button Browse... and click on button Upgrade. The upgrade process then continues in similar way as installation process, so please refer to chapter 1.

Manage module	behavior inside vtiger CRM		
elect the Package Fi	e		
File location:	D:\ITS4You\CalculateFields540_1_0.zip	rowse	

Picture 4.3 Upgrade of the Calculate Fields

### 4.3 Uninstall the Calculate Fields

The uninstallation of PDF Maker is fully automatic. Within uninstallation also PDF Maker license is deactivated and PDF Maker related directories are deleted. For uninstallation provide following steps ():

- 1. Click on button Uninstall Calculate Fields
- 2. Please confirm uninstallation via button  $\square$  in dialog box.

	culate Fields completely from your vtiger.	
🔰 Uninstall C	alculate Fields completely from your vtiger.	
Uninstall Calcula	re Fields	
	Uninstall Calculate Fields	
Module	Manager > CalculateFields > Uninstall Calculate Fields	
Uninstall Ca	Manager > CalculateFields > Uninstall Calculate Fields culate Fields completely from your vtiger.	
Uninstall Ca	Manager > CalculateFields > Uninstall Calculate Fields culate Fields completely from your viger.	
Uninstall Ca	Manager > CalculateFields > Uninstall Calculate Fields culate Fields completely from your vitiger. you sure to uninstall completely Calculate Fields and deactivate your license?	
Module Uninstall Ca Are	Manager > CalculateFields > Uninstall Calculate Fields         culate Fields completely from your vitiger.         you sure to uninstall completely Calculate Fields and deactivate your license?         2.	

**Picture 4.4 Uninstall Calculate Fields**