GenesisOne 🖉 GenesisOne 🦪 GenesisOne 🦪 GenesisOne GenesisOne 🦲 GenesisOne 🧖 GenesisOne 🧖 GenesisOne GenesisOne 🔃 GenesisOne 🔄 GenesisOne 🔄 GenesisOne GenesisOne 🔍 GenesisOne 🤍 GenesisOne 🔍 GenesisOne GenesisOne 🦲 GenesisOne 🤍 GenesisOne 📃 GenesisOne 🗆 nesisOne 🔃 GenesisOne 📄 GenesisOne 📄 GenesisOne 🗆 nesisOne 🔃 GenesisOne 🔃 GenesisOne 🔃 GenesisOne 🛛 🗠 💭 GenesisOne 🔃 GenesisOne 🔃 GenesisOne 📖 💭 GenesisOne 🖉 GenesisOne 🥏 GenesisOne 💿 🕖 GenesisOne 📃 GenesisOne 📃 GenesisOne 💷 🕐 🔄 GenesisOne 🔃 GenesisOne 🔃 GenesisOne 🗤 🔄 GenesisOne 🔍 GenesisOne 🔃 GenesisOne anOeicene@ 💭 GenesisOne 🦲 GenesisOne 🛛 GenesisOne 🔃 GenesisOne 📃 GenesisOne 🔜 📄 sOna 🔃 GenesisOna 🔃 GenesisOna 🔜 One 🔔 GenesisOne 🥏 GenesisOne 🖉 GenesisOne 🥏 GenesisOne GenesisOna 🦲 GenesisOne



# GenesisOne T-SQL Source Code Unscrambler ™

User Manual

### GenesisOne Revolutionizing Software Innovation

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### 1. Introduction

This user manual provides instruction on how to get started with the GenesisOne T-SQL Source Code Unscrambler. The Unscrambler creates detailed, accurate documentation of objects within a database with just a few simple mouse clicks. Each object is rendered in three different views:

- Flowchart Diagram View
- Tabular View
- Pseudo-code Summary View
- Dependency View

The Unscrambler documents the following types of objects:

- Tables
- Views
- Stored Procedures
- User-defined Functions

And with a single menu selection an entire collection of database objects can be exported to a PDF file thereby eliminating the manual documentation process which is:

- Costly
- Time-consuming
- Error-prone
- Not much fun

So let's get started!

### 2. Setup & Installation

If you've gotten this far you've probably already downloaded and run the installation file, GenesisOneSetup.exe, but if not, please go to our site <u>http://www.genesisonesolutions.com</u> and download the software.

### 2.1. Launch the Setup

Right-click the GenesisOneSetup.exe file and select 'Run as administrator'. Click 'Yes' if prompted with the User Access Control pop-up. You'll be presented with the following:

🖞 GenesisOne Unscrambler Setup	×
GenesisOne Unscrambler	
PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THIS PRODUCT. BY DOWNLOADING, INSTALLING OR USING THIS PRODUCT, YOU INDICATE ACCEPTANCE OF AND AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS AND	
I agree to the license terms and conditions	

### 2.2. Include SQL Server Management Studio (SSMS) add-in

To install the SSMS add-in that will allow you to launch the Unscrambler from within SSMS, click the 'Options' button, then the check the 'Include add-in for SQL Server Management Studio' checkbox and finally click 'OK':



#### 2.3. Install

Check the 'I agree to the license terms and conditions' checkbox to enable the 'Install' button, then click the 'Install' button to initiate the installation. Note that in addition to installing the Unscrambler software, the .NET 4.5 Framework will also be installed if it is not already on your machine.

😾 GenesisOne Unscrambler Setup	x
GenesisOne Unscrambler	
PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THIS PRODUCT. BY DOWNLOADING, INSTALLING OR USING THIS PRODUCT, YOU INDICATE ACCEPTANCE OF AND AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT	*
AGREE TO THE TERMS AND	Ψ.
I agree to the license terms and conditions         Options       Install	

If you elected to install the SSMS add-in, the Red Gate SSMS Integration Pack Framework (SIPF) will also be installed. If the Red Gate SIPF were already installed you'll be presented with the following; click 'Cancel' to continue with rest of the Unscrambler installation.

🔂 SQL Toolbelt	- • -
Selecting the tools to install	
Select any tools you want to install:	
Install (or upgrade)	
SSMS Integration Pack Framework 1.0 Already installed SSMS Add-in manager	
	Cancel

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However, if the Red Gate framework is not yet installed, you'll be presented with the following. Click the checkbox and then the 'Next' button to initiate the Red Gate SIPF installation:

🔂 SQL Toolbelt	- • •
Selecting the tools to install	
Select any tools you want to install:	
Install (or upgrade)	
SSMS Add-in manager	
1	Lext > Cancel

Click the checkbox to aacknowledge agreement with the EULA and then 'NEXT' to continue:

🖞 SQL Toolbelt 💿 🗉 💌		
End User License Agreement		
To continue you must accept the terms of this agreement. If you do not want to accept the license terms, dick Cancel.		
License agreement		
The software is subject to Red Gate Software's full License. The full License is either: (i) set out below and included in the software; or (ii) set out in <u>http://www.red-gate.com/purchase/license.pdf;</u> or (iii) available in the doc directory under the installation root directory.		
IMPORTANT NOTICE: Please read the full License carefully as it is a legally binding agreement.		
THE PERSON DOWNLOADING, INSTALLING AND/OR USING THE SOFTWARE, OR CLICKING "I ACCEPT" WHEN PROMPTED IN CONJUNCTION THEREWITH, ACCEPTS ALL OF THE TERMS AND CONDITIONS OF THE LICENSE. IF THEY ARE ACCEPTING THE TERMS ON BEHAL F OF ANOTHER PERSON OR I EGAL ENTITY THEY REPRESENT AND I accept the terms in the license agreement		
< Back Next > Cancel		

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You can accept the default location of the Red Gate SIPF or click 'Browse' to select an alternate folder. Click 'Install' to proceed:

🔂 SQL Toolbelt	- • •
Customizing the installation folder	
Install SSMS Integration Pack Framework 1.0 to:	
C:\Program Files (x86)\Red Gate\SSMS Integration Pack Framework 1	Browse
Restore Defaults Sack Install	Cancel

Once the SIPF installation completes, click the 'Close' button to continue with the Unscrambler installation:

SQL Toolbelt		- • •
Installation summary		
Tool	Outcome	
SSMS Integration Pack Framework 1.0	✓ Installation succeeded	
		Glose

#### 2.4. Unscrambler Installation Wizard

Following the the installation of the SIPF, the Unscrambler wizard will appear:

🖞 T-SQL Source Code Unscrambler V2.1 Setup	
Ð	Welcome to the T-SQL Source Code Unscrambler V2.1 Setup Wizard
	The Setup Wizard will install T-SQL Source Code Unscrambler V2.1 on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
	Back Mext Cancel

Click the 'Next' button to proceed to the installation folder, then click the 'Change' button to select an alternate folder. Click 'Next' to proceed:

🔁 T-SQL Source Code Unscrambler V2.1 Setup
Destination Folder Click Next to install to the default folder or click Change to choose another.
Install T-SQL Source Code Unscrambler V2.1 to:
C:\Program Files\GenesisOne\ 
<u>B</u> ack <u>Next</u> Cancel

The setup wizard is now ready to perform the actual Unscrambler installation. Click 'Install' to proceed:

波 T-SQL Source Code Unscrambler V2.1 Setup	
Ready to install T-SQL Source Code Unscrambler V2.1	
Click Install to begin the installation. Click Back to review or change any of your installation settings. Click Cancel to exit the wizard.	
<u>B</u> ack <u>Install</u>	Cancel

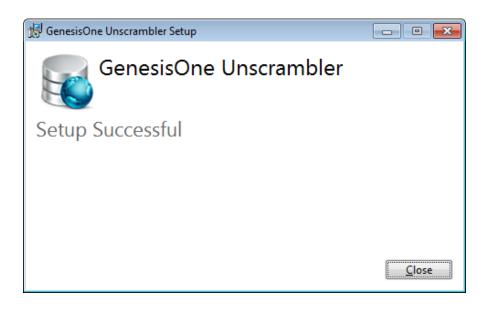
The Unscrambler installation is now complete. Optionally check the 'Launch' checkbox to launch the Unscrambler when the wizard is finished, then click 'Finish':

UT-SQL Source Code Unscrambler V2.1 Setup	
Ð	Completed the T-SQL Source Code Unscrambler V2.1 Setup Wizard
	Click the Finish button to exit the Setup Wizard.
	Launch T-SQL Source Code Unscrambler V2.1
	Back Finish Cancel

User Manual – GenesisOne T-SQL Source Code Unscrambler Tool

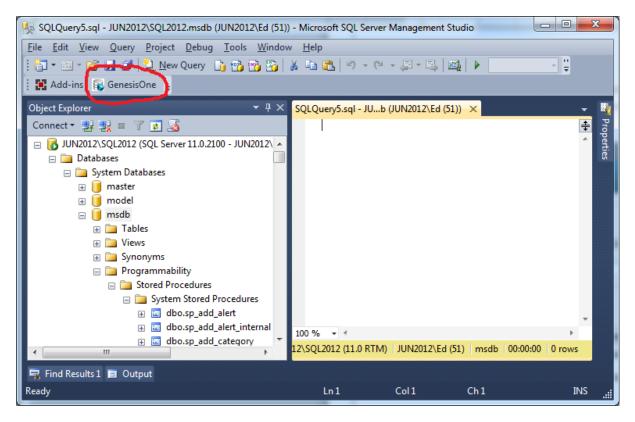


The Unscrambler setup is complete; click 'Close' to terminate the installer:



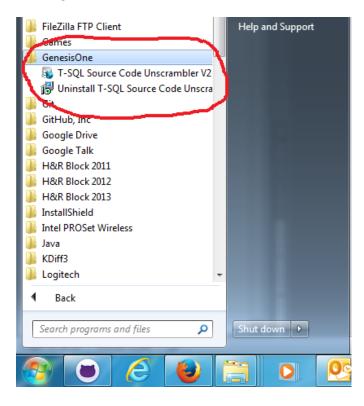
### 3. Launch the Unscrambler

From SQL Server Management Studio (SSMS), click on the 'GenesisOne' icon on the Red Gate toolbar:



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If you have not installed the SSMS add-in, then launch the Unscrambler from the GenesisOne folder in the Programs menu:



### 4. Activation

After launching the Unscrambler, give it a moment to communicate with the GenesisOne server to verify your account. If you have not yet activated your account or you click the 'Register Product' link you will see the following:

Activation Form			×
GenesisOr	ie		
Registration Status:	Trial ve	rsion	
Registration Data			
License	Key:	74339-07658-10315-73694-72036	
Activation	Key:	[]	
Activation Hardwa	re ld:	BFEBFBFF000206A7	
C	ontinue	14-Day Trial Activate E	Buy

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Enter your Activation Key and then click the 'Activate' button:

Sectivation Form		×
GenesisOne		
Registration Status: Trial	version	
Registration Data		
License Key:	74339-07658-10315-73694-72036	
Activation Key:	FmOC6T1zKAxDyHo2	
Activation Hardware Id:	BFEBFBFF000206A7	
Continu	e 14-Day Trial Activate	Buy

If your activation key is valid your license will be activated, the Activation form will close, and you will be presented with the main Unscrambler window with all of the buttons/links enabled and an empty Server Explorer navigation tree:

🚯 GenesisOne T-SQL Source Code Unscr	ambler [Premium version]
GenesisOne	
<u>V</u> iew <u>W</u> indows <u>H</u> elp	
	Connect To Server
Server Explorer 4	
Ready JUN2012\SQL2012	GenesisOne: Premium version licensed until 09/04/2015.
1000y JONEDIE (JQEEDIE	Geneasone, riemum version neersed until 05/04/2013.

If your activation fails, you can still run the Unscrambler in an off-line mode which is effectively like the Trial version.



#### 5. Server Connection

Before you can view any database objects, you must establish a connection to a SQL Server instance. Click the 'Connect To Server' link to access the 'Connection Properties' form:

GenesisOne [Connection Properties]	8 <b>x</b>
GenesisOne	
Data <u>s</u> ource:	
Microsoft SQL Server (SqlClient)	Change
S <u>e</u> rver name:	
	▼ <u>A</u> dd
Log on to the server	
Use <u>W</u> indows Authentication	
O Use SQL Server Authentication	
User name:	
Password:	
	OK Cancel

Click the 'Add' button to access the 'Add Server' form:

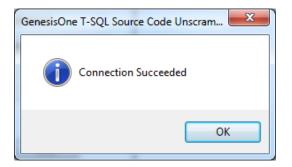
Add Server		×
GenesisOne	Plan: Premium Version Total Servers: 3	Used Servers: 1 Unused Servers: 0
Server Name : * Authentication : Windows Authentication Login : Password : Test Connection Add Server Clear	UN2012\SQL2012	emove

Enter the name of a SQL Server instance, and login credentials if 'Authentication' type is 'SQL Server Authentication'. Note that these credentials are just for testing the connection prior to adding a server. You'll have to supply valid credentials whenever you want connect to a server for analysis.

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🐞 Add Server	_		×
Genesis	Dne	Plan: Premium Version Total Servers: 3	Used Servers: 1 Unused Servers: 0
Server Name : * Authentication : Login : Password :	.\SQLEXPRESS SQL Server Authentication Test Test Test Connection Add Server Clear	UN2012\SQL2012	emove Close

Click the 'Test Connection' link to verify the connection:



Click 'OK' to return to the 'Add Server' form, then click 'Add Server' to add the SQL Server instance your list of registered servers:

Add Server		x
GenesisOne	Plan: Premium VersionUsed Servers: 1Total Servers: 3Unused Servers: 1	
Server Name : * Authentication : Windows Authentication • Login : Password : <u>Test Connection</u> Add Server Clear	UN2012\SQL2012	
	Remove Close	

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Click 'Close' to return to the 'Connection Properties' form. Select a server from the 'Server name' dropdown list:

GenesisOne [Connection Properties]	? ×
GenesisOne	
Data <u>s</u> ource:	
Microsoft SQL Server (SqlClient)	Change
Server name:	
JUN2012\SQL2012	▼ <u>A</u> dd
Log on to the server	
Output Description	
Use SQL Server Authentication	
User name:	
Password:	
ОК	Cancel

Now click the 'OK' button. If you have not yet connected to the selected server instance, you will receive the following pop-up warning:

GenesisOn	e T-SQL Source Code Unscrambler
Í	Are you sure you want to connect to JUN2012\SQLEXPRESS? Once you connect to the JUN2012\SQLEXPRESS server, it won't be removable for the duration of your current license subscription.
	OK Cancel

This is an opportunity to rethink your choice of database servers because you have a limited number of servers that you can connect to depending on how many licenses you've purchased. Of course, you can always purchase additional server licenses.

Once you click 'OK', you will be connected to the selected SQL Server instance and it will appear in Server Explorer navigation tree:

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GenesisOne T-SQL Source Code Unscrambler [Pren	nium version]
GenesisOne	
<u>V</u> iew <u>W</u> indows <u>H</u> elp	
	Connect To Server
Server Explorer	
Ready JUN2012\SQL2012	GenesisOne: Premium version licensed until 09/04/2015.

You are now ready to begin unscrambling the various objects thoughout databases that are accessible using the credentials you supplied while connecting to the server.

#### 6. Unscrambler Functions

The Unscrambler provides two levels of object analysis and rendering:

- Analyze and render individual objects on demand.
- Analyze, render and export all code (Stored Procedures/Functions/Views/Triggers) objects in a database to a PDF file.

#### **6.1. Singleton Object Analysis**

To analyze and render individual objects, simply navigate through the Server Explorer and click on a database object. Table information is different from Triggers, Views, Stored Procedures and Functions. There are no flowchart or pseudo-code views for tables whereas the other objects share a similar format with each other and do present those views.

#### 6.1.1. Database Tables

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In the Server Explorer navigate to the Tables folder of a database and select a table. In the right-side viewing pane you will be presented with two grids, one with DDL information and one with the table dependencies:

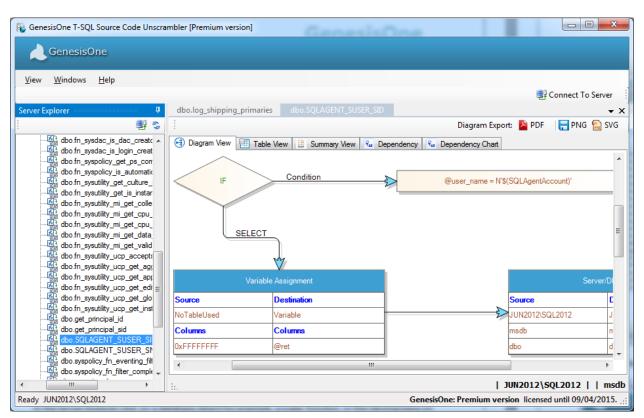
GenesisOne T-SQL Source Code Unscrambler [Premiu	ım version]						×
<u>V</u> iew <u>W</u> indows <u>H</u> elp			_		<b>⊒</b> ₽ Co	onnect To Serve	
Gerver Explorer 🛛 🕴 😂	Table Name:	ping_primaries dbo.log_shippin	g_primaries				• :
i⇔ 🔁 Tables ▲	COLUMN NAME	DATA TYPE	IS_NULLABLE	KEY	INDEX	INDEXTYPE	
i dbo.backupfilegroup	primary_id	int	NO	PRIMARY KEY	PK_log_shi	CLUSTERED	
	primary_serv	nvarchar (128)	NO	-	-	-	1
	primary data	nvarchar (128)	NO	-	-	-	
dbo.log_shipping_monitor_alert     dbo.log_shipping_monitor_error_detail     dbo.log_shipping_monitor_history_deta	Dependency \	/iew: dbo.log_s	hipping_primaries			·	
dbo.log_shipping_monitor_primary	NAME			TYPE			
dbo.log_shipping_monitor_secondary     dbo.log_shipping_primaries	dbo.sp_add_log	_shipping_primar	/	sql_stored_proc	edure		
doo.log_snipping_primaries	dbo.sp_add_log	_shipping_secon	dary	sql_stored_proce	edure		٦
dbo.log_shipping_primary_secondaries	dbo.sp change			sal stored proce	edure		1
		og shipping mor	itor info	sql_stored_proce			1
dbo.log_shipping_secondary		og_onppnig_non					_
4	÷			]	UN2012\SQL	L2012     m	sc
eady JUN2012\SQL2012			GenesisOne:	Premium vers	ion licensed u	intil 09/04/201	5.

#### 6.1.2. Triggers, Views, Stored Procedures & Functions

In the Server Explorer click on a database object for example, a scalar function. In the viewing pane on the right there are three tabs in which the object will be rendered:

- Diagram View A flowchart representation of the database object.
- Table View A tabular representation of the database object.
- Summary View A pseudo-code representation of the database object.
- Dependency View
- Dependency Chart

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The following is an example of the Diagram view of the scalar function SQL\_AGENT\_SUSER\_SID:

The following is an example of the Table view of the function SQL\_AGENT\_SUSER\_SID:

GenesisOne T-SQL Source Code Unscra	mbler [Premium vers	iion]		Electricity.			
View Windows Help Server Explorer ₽	dbo.log_shipping_	primaries dbo	.SQLAGENT_SUSEF	L_SID	Diagram Fx	ert: PDF	onnect To Server • 2 • 2 • 2 • 2
dbo.fn_sysdac_is_dac_creatc		Table View 📑			Dependency Chart	_	
Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of the system           Image: Weight of the system         Image: Weight of	INTENTCOUNT 0 0	OPERATIONTYPE INPUTS BEGIN	SOURCETABLE Variable	SOURCECOLUMN @user_name sys	DETINATIONTAB	L DESTINATION	
dbo fn_sysutility_get_is_instar dbo fn_sysutility_mi_get_colle dbo fn_sysutility_mi_get_cpu_	1	IF					@user_name =
Image: control of the second	2 1	VARIABLE ASSI ELSE	NoTableUsed	0xFFFFFFF	Variable	@ret	
dbo.fn_sysutility_mi_get_valid     dbo.fn_sysutility_ucp_accept:	2	VARIABLE ASSI END	NoTableUsed	SUSER_SID(@u	Variable	@ret	
<ul> <li>dbo fn_sysutility_ucp_get_ag;</li> <li>dbo fn_sysutility_ucp_get_ap;</li> <li>dbo fn_sysutility_ucp_get_edi</li> <li>dbo fn_sysutility_ucp_get_glo</li> <li>dbo fn_sysutility_ucp_get_inst</li> <li>dbo fn_sysutility_ucp_get_inst</li> </ul>				1			
dbo.get_principal_id     dbo.get_principal_id     doo.get_principal_id     doo.get_principal_id     doo.get_principal_id	i						
eady JUN2012\SQL2012				Genesi	sOne: Premium v	ersion licensed	until 09/04/2015.

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The following is an example of the Summary view of the function SQL\_AGENT\_SUSER\_SID:

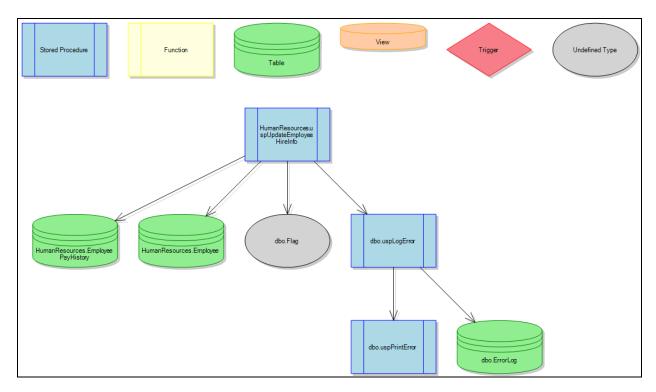
🚯 GenesisOne T-SQL Source Code Unscra	mbler [Premium version]
GenesisOne	
<u>V</u> iew <u>W</u> indows <u>H</u> elp	
	Connect To Server
Server Explorer 4	dbo.log_shipping_primaries dbo.SQLAGENT_SUSER_SID 🗸 🗙
- 	Diagram Export: 🎽 PDF 🛛 🧮 PNG 🔛 SVG
dbo.fn_sysdac_is_dac_creatc	🔁 Diagram View 🗄 Table View 🔛 Summary View 🍕 Dependency 🧏 Dependency Chart
dbo fn_sysdac_is_login_creat     dbo fn_syspolicy_get_ps_com     dbo fn_syspolicy_get_os_com     dbo fn_syspolicy_is_automatic	Step 1
dbo.fn_sysutility_get_culture_ dbo.fn_sysutility_get_is_instar	This Function has @user_name - SYSNAME as Inputs
	Step 2
dbo.fn_sysutility_mi_get_data_	IF condition @user_name = N'\$(SQLAgentAccount)'
- Al dbo fn_sysutility_ucp_accepts - Al dbo fn_sysutility_ucp_get_age - Al dbo fn_sysutility_ucp_get_app	Step 3
	Assigns 0xFFFFFFFF to the Variable @ret from the table NoTableUsed
dbo.get_principal_id	Step 4
✓ III ►	1 JUN2012\SQL2012   msdb
Ready JUN2012\SQL2012	GenesisOne: Premium version licensed until 09/04/2015

The following is an example of the Dependency view of the stored procedure dbo.uspGetBillOfMaterials:

🚯 GenesisOne T-SQL Source Code Ur	scra	mbler [Premium version]				
GenesisOne						
<u>V</u> iew <u>W</u> indows <u>H</u> elp						
Server Explorer	д	dbo.log_shipping_primaries dbo	SQLAGENT_SUSER_SID	dbo.uspGetBillOfMaterials		Connect To Server
	\$				port: 🎦 PDF	금 PNG  SVG
entureWorks2012 Tables	^	🕣 Diagram View 🔚 Table View 🗉	Summary View 😼 Dep			
Views		NAME	TYPE	COLL	MN	
Programmability  Programmability  Corred Procedures  Corred Procedures  Corred Abo uspGetEmployeeManagers  Corred Abo uspGetManagerEmployees  Corred Abo uspGetWhereUsedProductID  Corred Abo uspGetWhereUsedProductID  Corred Abo uspPrintEror  Corred Abo uspSearchCandidateResumes		Production.BillOfMaterials	user_table	Produc	:tAssemblyID	
	Ξ	Production.BillOfMaterials	user_table	Compo	nentID	
		Production.BillOfMaterials	user_table	StartD	ate	
		Production.BillOfMaterials	user_table	EndDa	te	
		Production.BillOfMaterials	user_table	BOML	evel	
		Production.BillOfMaterials	user_table	PerAss	emblyQty	
		Production.Product	user table	Produc	ProductID	
Human Resources.usp Update Emplo		Production.Product	user_table	Name	Name	
Human Resources.usp UpdateEmplo	Production.Product	user_table	Standa	StandardCost		
Functions		Production.Product	user_table	ListPric	æ	
Task			_			
etahs ∢ III ►	-	i		JUN2012\SQL2	012     Ad	ventureWorks201
Ready JUN2012\SQL2012 GenesisOne: Premium version licensed until 09/04/2015.						

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The following is an example of the Dependency Chart of the stored procedure HumanResources.uspUpdateEmployeeLogin:



Note the plus (+) sign to the right of the SP dbo.uspLogError which indicates that it is not atomic and calls other stored procedures or functions.

#### **Diagram Export**

Each time a trigger/view/stored procedure/function is rendered a new tab is created in the viewing pane, but only one of these tabs can be the 'active' tab – the one you are currently viewing. You can export the Diagram view, the flowchart of the object in the active tab in three formats:

- PDF Portable Document Format
- PNG Potable Network Graphics
- SVG Scalable Vector Graphics

Just click the any of the export icons in the upper right-hand corner of the viewing pane:



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A 'Save As' file browser window will appear:

Irganize 🔻 New folder					0
Favorites	Documents library My Documents		Arrange by:		
🚺 Downloads	Name	Date modified	Туре	Size	
💱 Dropbox	IISExpress	2/4/2014 12:34 AM	File folder		
🔄 Recent Places	Integration Services Script Component	2/4/2014 12:34 AM	File folder		
🐱 Google Drive 🁔 Favorites	Integration Services Script Task	2/4/2014 12:34 AM	File folder		
	My Music	2/3/2014 8:26 PM	File folder		
	My Pictures	2/3/2014 8:26 PM	File folder		
Desktop	🛗 My Shapes	2/4/2014 12:34 AM	File folder		
词 Libraries	My Videos	2/3/2014 8:26 PM	File folder		
Documents	My Web Sites	2/4/2014 12:34 AM	File folder		
My Documents	My Weblog Posts	2/4/2014 12:34 AM	File folder		
Public Documents	NasNavi	9/7/2013 9:17 PM	File folder		
👌 Music	Cutlook Eiler	7/27/2014 0.15 DM	Eile felder		
Pictures	+ 1				•
File name: dbo.syscollector_co	llection_item_parameter_update_trigger.pdf				
Save as type: PDF files (*.pdf)					_

You can change the name of the the output file, folder or both, or you can accept the default values. Click the 'Save' button to compete the diagram export.

#### 6.2. Database Report

To analyze, render and export all code (Stored Procedures/Functions/Views/Triggers) objects in a database, right-click on a database node in the Server Explorer then select 'Generate Report'. You will be prompted to specify the name of the PDF file to which to save the exported database:

Organize  Vew folder				::: ▼ (6
Organize 🔻 New folder				= •
★ Favorites ■ Desktop	Documents library Public Documents		Arrange b	oy: Folder 🔻
Downloads	Name	Date modified	Туре	Size
😵 Dropbox 🗐 Recent Places	DCL Technologies	2/4/2014 12:15 PM	File folder	
La Google Drive	My Music	7/14/2009 1:08 AM	File folder	
Favorites	My Pictures	7/14/2009 1:08 AM	File folder	
	My Videos	7/14/2009 1:08 AM	File folder	
🧮 Desktop				
4 演 Libraries				
Documents				
My Documents				
Public Documents				
Music Interpretation of the second	<b>•</b> •	m		
File <u>n</u> ame: TeamCity.pdf				
Save as <u>t</u> ype: Adobe Acrobat Do	ocument(*.pdf)			

You can change the name of the the output file, folder or both, or you can accept the default values. Click the 'Save' button to compete the diagram export.

#### Filtering

You can tailor the content of the report by right-clicking on a database node in the Server Explorer then selecting 'Generate Report with Filters':

Select Database Objects		
Objects of All Types         ■ Exclude Atomic Stored Procedures         Search by Object Name         HumanResources.dEmployee_Trig         HumanResources.uspUpdateEmployeeLo         HumanResources.uspUpdateEmployeePe         HumanResources.vEmployee_View         HumanResources.vEmployeeDepartment         HumanResources.vEmployeeDepartment         HumanResources.vIobCandidate_View         HumanResources.vJobCandidateEmployme         HumanResources.vJobCandidateEmployme         Person.iuPerson_Trig         Person.vAdditionalContactInfo_View         Person.vStateProvinceCountryRegion_Vie         Production.iWorkOrder_Trig	Add > < Remove Add All >> < Remove All	Objects to be Added to Report:
Production.uWorkOrder_Trig Production.vProductAndDescription_View Production.vProductModelCatalogDescrip Production.vProductModelInstructions_Vie Purchasing.dVendor_Trig Purchasing.iPurchaseOrderDetail_Trig Purchasing.uPurchaseOrderDetail_Trig Purchasing.vVendorWithAddresses_View Purchasing.vVendorWithAddresses_View Sales.iduSalesOrderDetail_Trig	<< Remove All	
		OK Cancel

From the dropdown Object Type list you can filter out all but Stored Procedures, Functions, Tables or Views.

Checking the "Exclude Atomic Stored Procedures" filters out all "atomic" stored procedures - those that do not call other stored procedures or functions. This feature is useful for filtering out CRUD operations whose purpose is fairly obvious and whose inclusion in the report might serve more to clutter than to provide useful information. You can always add back in the interesting, non-CRUD atomic stored procedures after first adding in the more complex stored procedures.

Lastly, you can filter by object name in the "Search by Object Name" text box. This search box filters out all objects that do not contain the string you've entered.

Once you've select all of the objects to be added to the report click the 'OK' button and you'll be prompted for the location to which to save the report. You can change the name of the the output file, folder or both, or you can accept the default values. Click the 'Save' button to compete the diagram export.

#### 7. Features

There are two versions of the Unscrambler software: Trial and Premium. The features and limitations of each are listed in the table below.

	Trial	Premium
	Version	Version
License Duration	14 Days	12 Months
Number of Server Connections	1	Per License
Switch to Another Server	Yes	Yes
View Object	Unlimited	Unlimited
Object's Diagram View	Yes	Yes
Object's Table View	Yes	Yes
Object's Summary View	Yes	Yes
Table View with Dependency	Yes	Yes
Dependency Chart	Yes	Yes
Export Database as PDF with object filtering	10 times	Unlimited
Export Object	20 Objects Only	Unlimited

### 8. Security

The Unscrambler only requires view definition permissions to database objects to analyze them. We recommend establishing a login and database users that do not have write capability to help minimize security risks in your environments. To assist you with this, we offer the script below that you can modify as suits your needs.

```
-- Script to add a login to be used by the Unscrambler to access object definitions
declare @sql nvarchar(max) = N''
       ,@login nvarchar(100) = N'test1'
       ,@password nvarchar(100) = N'test1'
       ,@user nvarchar(100) = N'test1'
-- Add sql server login: login, pw, db
if not exists (select * from master..syslogins where name = @login)
      exec sp_addlogin @login, @password, N'master'
-- Grant permission to login to view any object definition
set @sql = N'use master; grant view any definition to ' + quotename(@login)
exec sp_executesql @sql
set @sql = N''
-- Add user associated with the login to every database
select @sql = @sql + N'if not exists (select 1 from ' + quotename(name) +
'.sys.database_principals where name = N''' + @user + ''')
   exec sp_executesql N''use ' + name + ';create user ' + quotename(@user) + ' for login
' + quotename(@login) + '''; ' + nchar(13) + nchar(10)
from sys.databases
where database id > 4
order by name;
--print @sql
exec sp_executesql @sql
```