# Creating Custom SCCM 2012 Reports

Microsoft\*

System Center

Configuration Manager 2012

## **Abstract:**

This document is a quick explanation of how to create custom reports in SCCM 2012 (Microsoft System Center Configuration Manger 2012).

## **Document Revision and History:**

version	date	description
1.0	7/5/2014	initial publication

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## **About the Author:**



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BS/CS, MCSE (NT4, 2000), MCTS (SCCM 2012), CCNA (2.0), Network+, CLP (AD R4)

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## Legend:

LC = left click LCC = left click click LD = left drag RC, RCC, RD similar

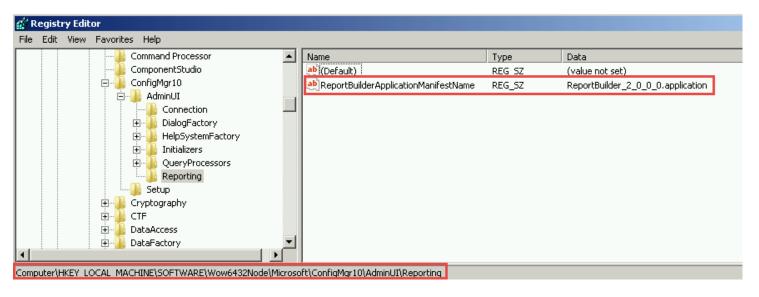
# **Configure Report Builder 3.0:**

If you are using SQL 2008 R2 with SCCM 2012 RC, you'll probably receive this error:

"Report Builder 2.0 is not installed as a click-once application on report server"

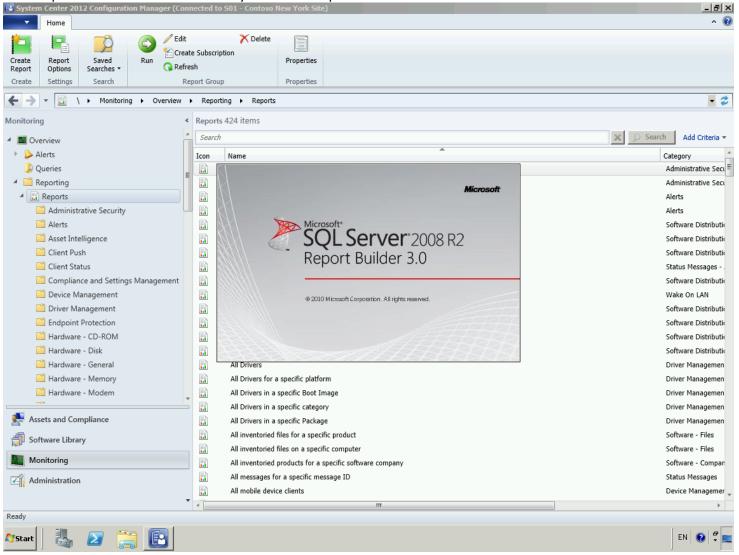
ConfigMgr 2012 is designed to work out of the box with Report Builder 2.0. You'll need to set a registry key to name the Report Builder 3.0 application manifest. The key in question is:

"HKLM\Software\Wow6432Node\Microsoft\ConfigMgr10\AdminUI\Reporting\ReportBuilderApplicationManifestName".



Change its value from "ReportBuilder\_2\_0\_0\_0.application" to "ReportBuilder\_3\_0\_0\_0.application" on any machine from which you want to launch Report Builder 3.0.

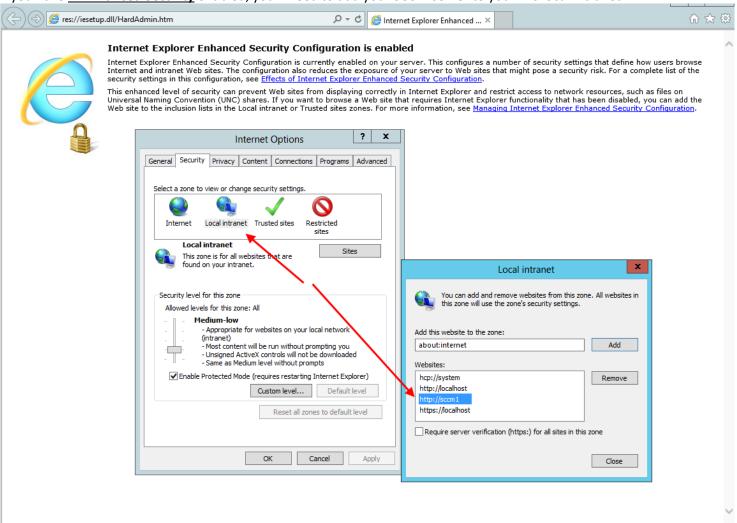
Then Report Builder 3.0 will start when you create a report:



From <a href="http://www.windows-noob.com/forums/index.php?/topic/5743-report-builder-20-is-not-installed-as-a-click-once-application-on-report-server">http://www.windows-noob.com/forums/index.php?/topic/5743-report-builder-20-is-not-installed-as-a-click-once-application-on-report-server</a>

If you're using <u>SQL 2012 SP1</u> with <u>SCCM 2012 SP1</u> you don't need to do anything, you already have Report Builder 3.0 configured.

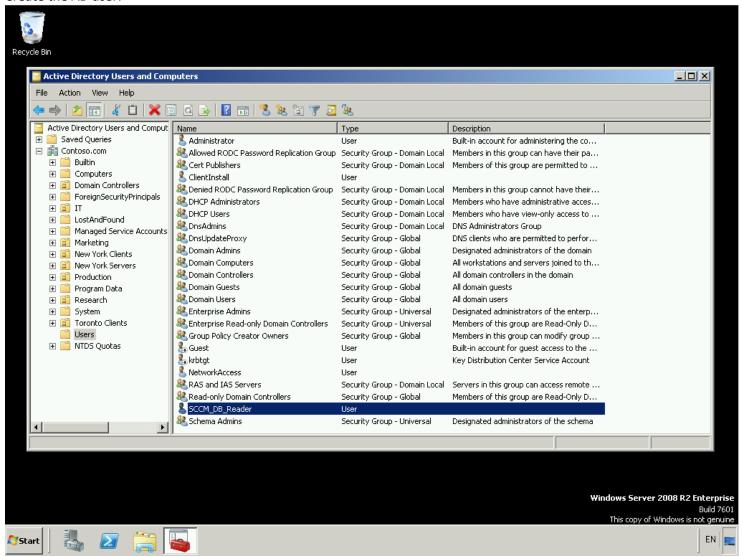
#### If you have <u>IE Enhanced Security</u> enabled, you'll need to add your SCCM server to your IE's local intranet:



## **Create DB Read Account:**

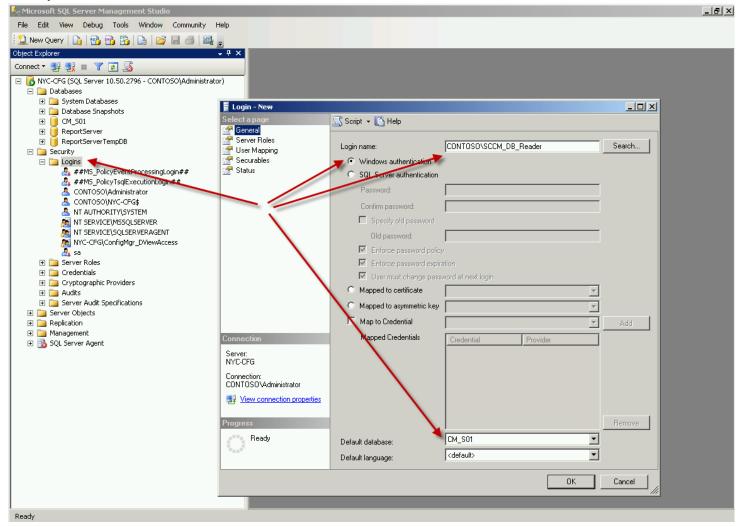
First, create a <u>read-only</u> account (let's call it SCCM\_DB\_Reader) that your custom reports will use to access the SCCM database:

#### Create the AD user:

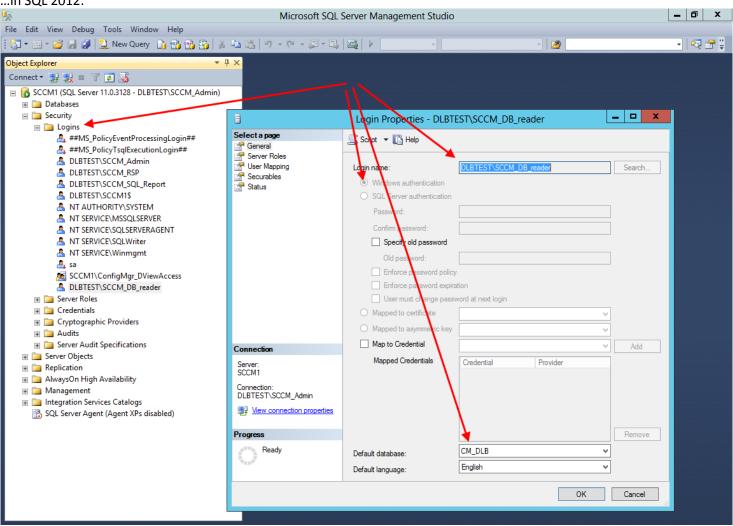


Next create the SQL login for the SCCM\_DB\_Reader account: http://www.youtube.com/watch?v=Uh5USR7pymE

#### ...in SQL 2008:

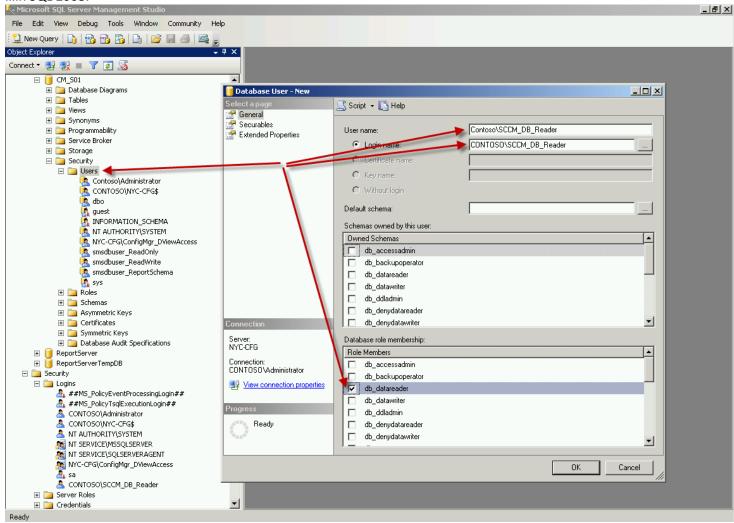


...in SQL 2012:

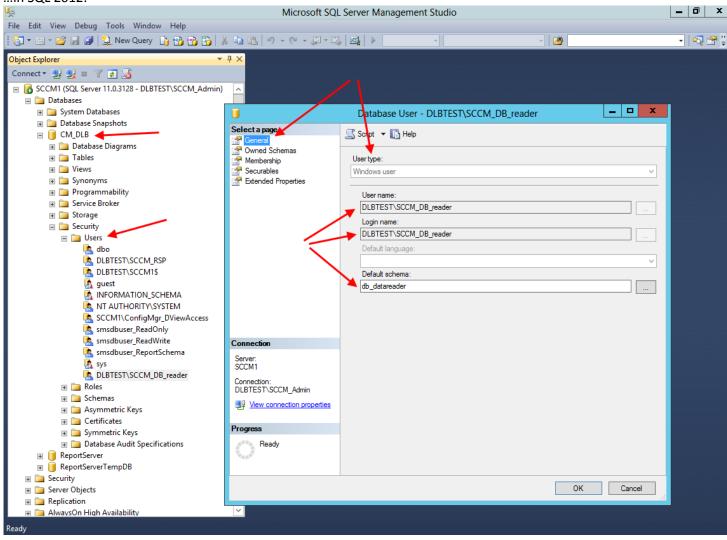


Lastly, create the SQL user for the SCCM\_DB\_Reader account:

#### ...in SQL 2008:

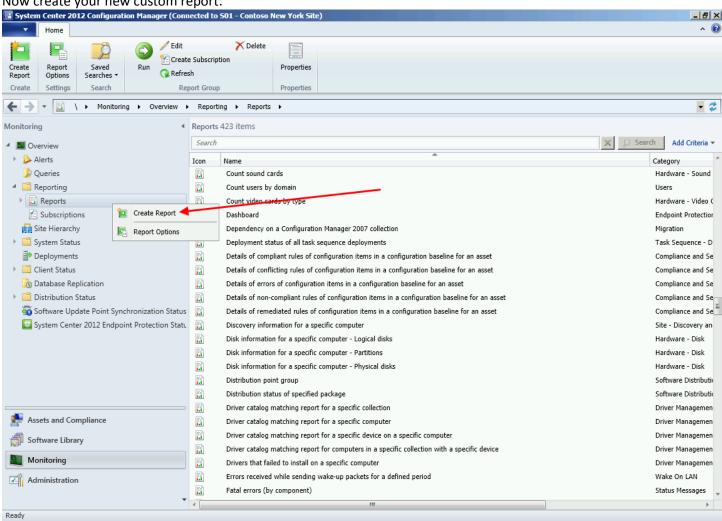


#### ...in SQL 2012:



## **Create a New Report Manually:**

Now create your new custom report:



Choose SQL-based, and specify the group to which the report will belong: \_|&| ×| Create Subscription Create Report Saved Searches • 🙍 Create Report Wizard x Search Information ← → ▼ 🔝 \ ▶ Monitorin - 2 Monitoring Specify the type and location for the report Search Add Criteria ▼ Overview Summary Alerts Category Progress Queries Completion Hardware - Sound Select the type of report to be created, then provide a name and description, if needed. ▲ □ Reporting Users Туре ▶ 🔝 Reports Hardware - Video ( Model-based Report **Subscriptions** Endpoint Protection Create a report based on a reporting services model, and select the attributes to be manipulated with Report Builder Site Hierarchy Migration System Status Task Sequence - D P Deployments Create a traditional report which is based directly off the database using straight SQL statements and stored procedures  ${\sf SQL}$ Compliance and Se ▶ ☐ Client Status Compliance and Se 🚴 Database Replication Compliance and Se Information Distribution Status Compliance and Se DLB - Desktops Name: Compliance and Se Software Update Point Sync This report was written by DLB. It shows desktop \_ Description: 🔐 System Center 2012 Endpoi Site - Discovery an Hardware - Disk put the report where Hardware - Disk you think it fits best Hardware - Disk  $\neg$ Software Distribution NYC-CFG.Contoso.com Software Distribution Path Hardware - General Browse Driver Managemen Assets and Compliance Driver Managemen Driver Managemen Software Library Summary Driver Managemen Monitoring Driver Managemen Errors received while sending wake-up packets for a defined period ii) Wake On LAN Administration

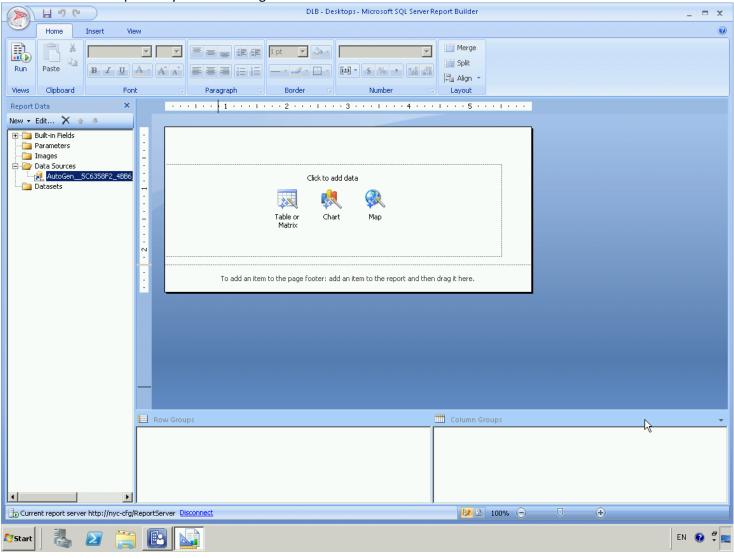
Ready

...

Fatal errors (by component)

Status Messages

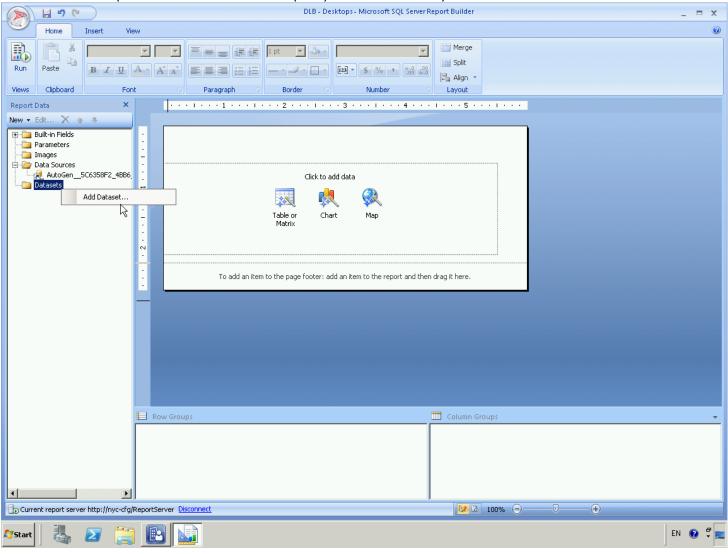
This is what comes up when you click through all of the 'OK's and 'Next's:



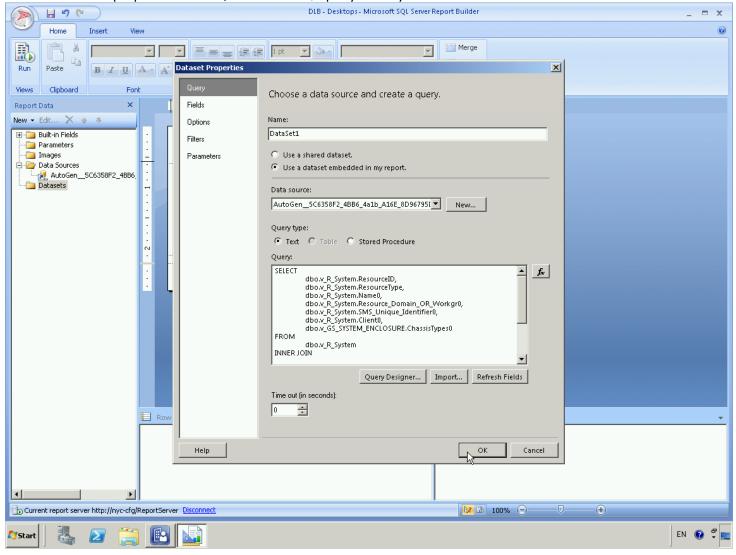
LCC the Data Source (which is the database from which the dataset is taken), and test the connection: DLB - Desktops - Microsoft SQL Server Report Builder Home Insert View ▼ ▼ ■ ■ 課課 1pt ▼ ◇ ▼ 🟢 Split Paste Run 🖺 Align 💌 Paragraph 🛛 Border 🕟 Number Clipboard Font Layout Report Data New 🕶 Edit... 🗙 🛊 🧈 ⊕ Built-in Fields
Parameters Images 🚊 🗁 Data Sources Click to add data Datasets × Data Source Properties Change name, type, and connection options. Credentials AutoGen\_\_5C6358F2\_4BB6\_4a1b\_A16E\_8D96795 • Use a shared connection or report model O Use a connection embedded in my report AutoGen\_\_5C6358F2\_4BB6\_4a1b\_A16E\_8D96795D8602\_ /ConfigMgr\_S01/{5C6358F2-4BB6-4a1b-A16E-8D96795D8602} Test Connection Result × Connection created successfully. Row Gro Browse... Test Connection OK Use single transaction when processing the queries οк Cancel № B 100% — Current report server http://nyc-cfg/ReportServer Disconnect

EN 🔞 📮

Add a new dataset (which are the actual records (data) from the database):



Make the dataset properties like this, where the SQL query is one you've written:



As an example, use this SQL query which finds desktop computers:

 $\underline{\text{http://sccmgeekdiary.wordpress.com/2012/09/06/sccm-2012-reporting-for-dummies-how-to-use-sql-management-studio-to-build-your-sccm-queries}$ 

```
SELECT
        dbo.v R System.ResourceID,
        dbo.v_R_System.ResourceType,
        dbo.v R System.Name0,
        dbo.v R System.Resource Domain OR Workgr0,
        dbo.v R System.SMS Unique Identifier0,
        dbo.v R System.Client0,
        dbo.v GS SYSTEM ENCLOSURE.ChassisTypes0
FROM
        dbo.v_R_System
INNER JOIN
        dbo.v_GS_SYSTEM_ENCLOSURE
     dbo.v_R_System.ResourceID =
     dbo.v GS SYSTEM ENCLOSURE.ResourceID
WHERE
        dbo.v GS SYSTEM ENCLOSURE.ChassisTypes0 = N'3'
```

Note: sometimes it's hard to write the SQL query because you don't know all of the tables and views you need, so you can build an SCCM query, then convert the WQL query code to SQL code as follows:

http://brothertu.blogspot.com/2010/06/how-to-convert-wql-to-sql-for-sccm-or.html

2010-06-25

### how to convert WQL to SQL for a SCCM or sms query

smsprov.log - records WMI provider access to the site database

this is a server log and can be found from the site server: sms\logs

open smsprov.log

excute your query

you should be able to see the query execution logged in the smsprov.log. Once this has happened, pause the log file so it does not scroll away on you.

look for the two lines starting with execute wgl= and execute sgl=,

copy the text out of the bottom pane of the log viewer and paste it into your web report.

Posted by Brothertu at 1:38:00 am

Labels: SCCM 2007 and SMS

You will be prompted for the credentials to use when running this report: H 19 (\* DLB - Desktops - Microsoft SQL Server Report Builder Home Insert View Merge ▼ ▼ = = ## 1pt ▼ → B I U A Dataset Properties x Paste Run Clipboard Font Choose a data source and create a query. Report Data Fields New ▼ Edit... 🗙 🍲 🐠 Options ⊕ Built-in Fields DataSet1 Filters Parameters C Use a shared dataset. images Parameters □ Data Sources • Use a dataset embedded in my report. AutoGen\_\_5C6358F2\_4BB6 Data source: AutoGen\_5C6358F2\_4BB6\_4a1b\_A16E\_8D96795[ New... Query type: € Text C Table C Stored Procedure Enter Data Source Credentials X SELECT dbo.v\_R\_System.Resourd dbo.v\_R\_System.Resourd dbo.v\_R\_System.Name0, dbo.w\_R\_System.Name0, dbo.v\_R\_System.Start.Ur dbo.v\_R\_System.Start.Ur dbo.v\_R\_System.Client0, dbo.v\_R\_System.Client0, dbo.v\_R\_System.Client0, dbo.v\_R\_System.Client0, dbo.v\_R\_System.Enct Use the following:

Use the following:

Contoso\SCCM\_DB\_Reader FROM dbo.v\_R\_System INNER JOIN Password: ✓ Use as Windows credentials Quen ☐ Save password with connection Time out (in seconds): 0 🗦 Row

№ 3 100% —

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Disconnect Current report server http://nyc-cfg/ReportServer Disconnect

**Start** 

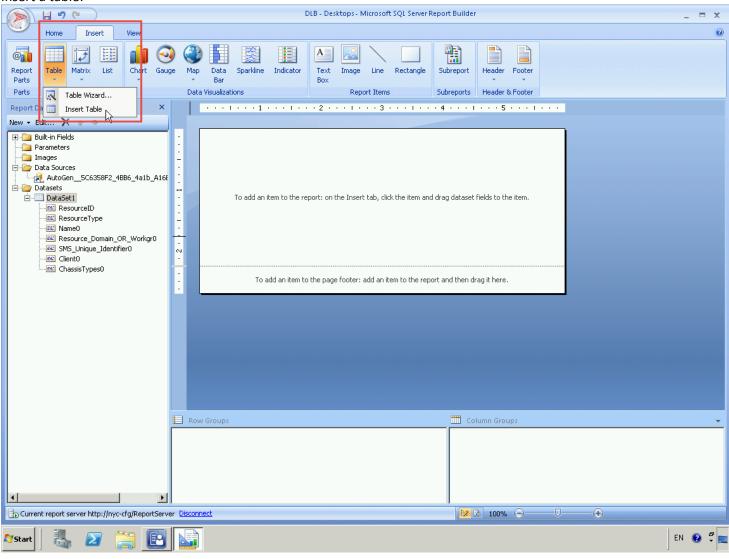
If the Username and Password work, you'll be taken to this screen, where the dataset is visible on the left: H 19 (\* DLB - Desktops - Microsoft SQL Server Report Builder □ X Home Insert View Merge \* **Split** Paste Run |≞ Align ▼ 6 Layout 🕟 Paragraph 🕟 Border 🕟 Number Views Clipboard Report Data New マ Edit... 🗙 🌸 🧈 ⊕ 🛅 Built-in Fields - Parameters Images 🖹 🍃 Data Sources Click to add data □ 🍅 Datasets ⊟--- DataSet1 ResourceID ResourceType Chart Мар - Name0 Matrix -- SMS\_Unique\_Identifier0 -EE Client0 ChassisTypes0 To add an item to the page footer: add an item to the report and then drag it here. Row Groups Column Groups

**①** 

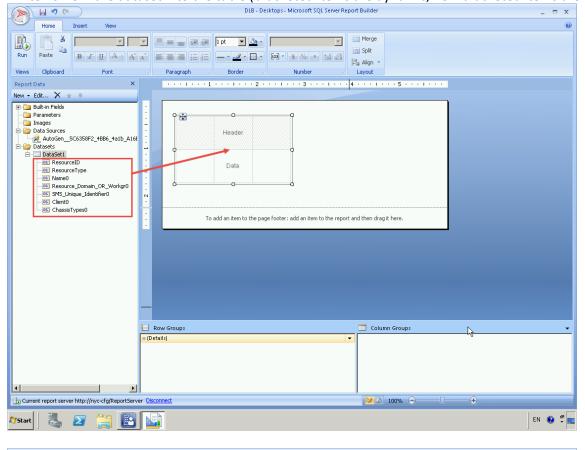
Current report server http://nyc-cfg/ReportServer Disconnect

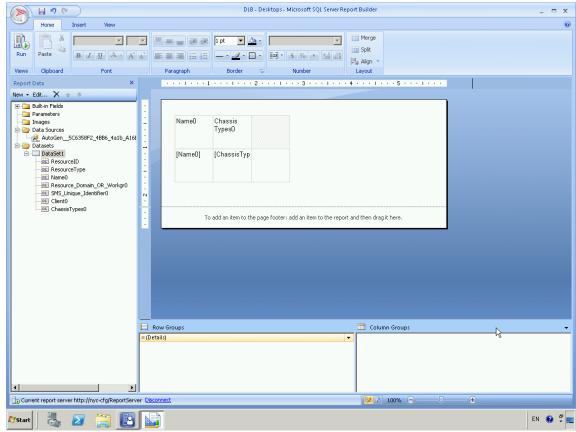
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#### Insert a table:

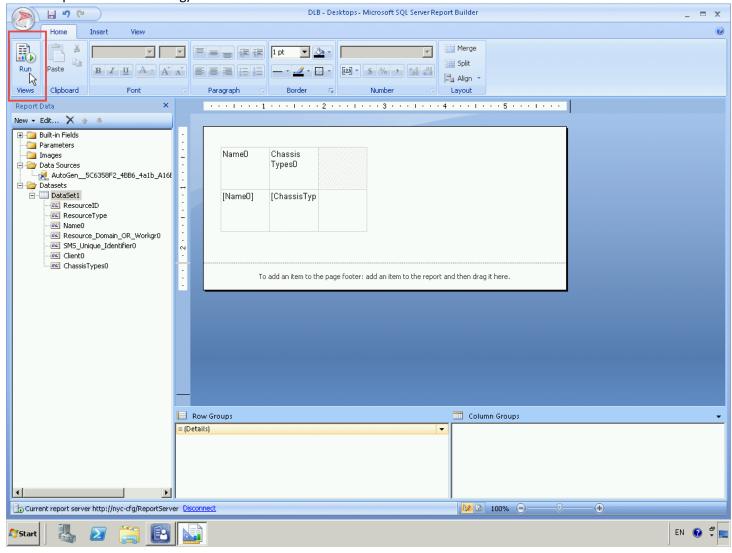


LD items from the dataset into the table (bracketed items are dynamic, non-bracketed items are static text):

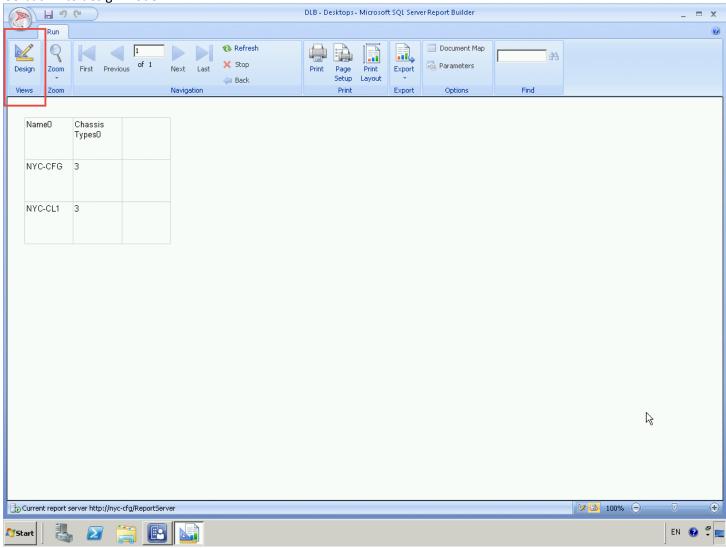


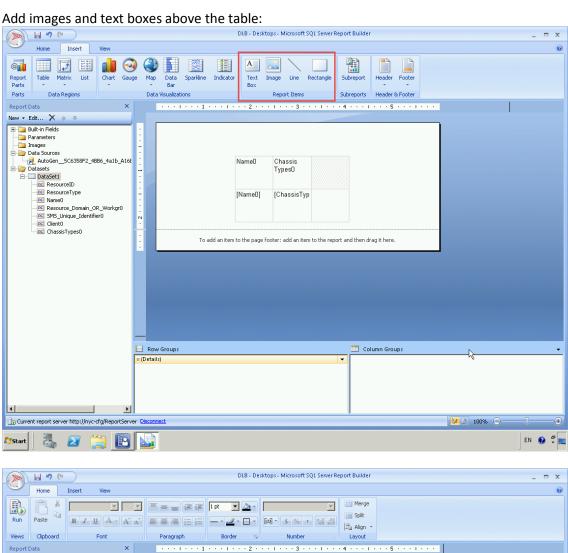


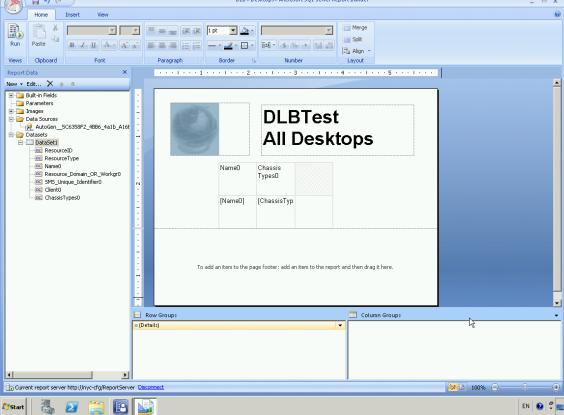
Run the report to see how it looks (be <u>patient</u>, it sometimes takes 10 seconds for ANYTHING to happen, and 30 seconds for the report to finish loading):



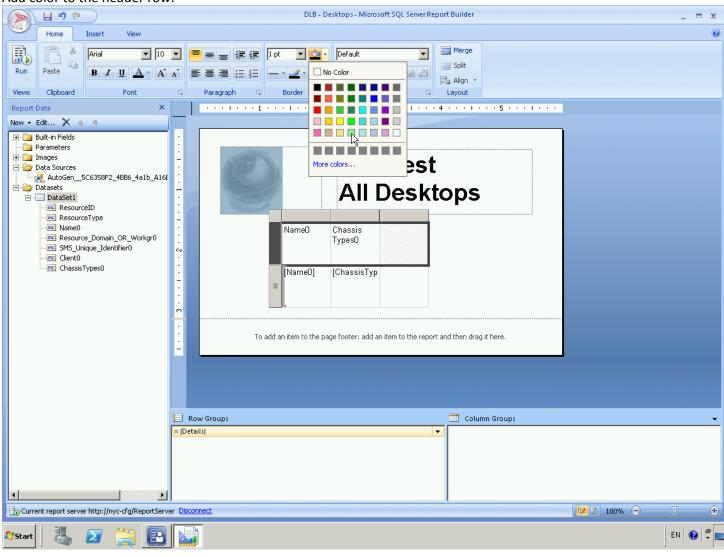
Go back into design mode:



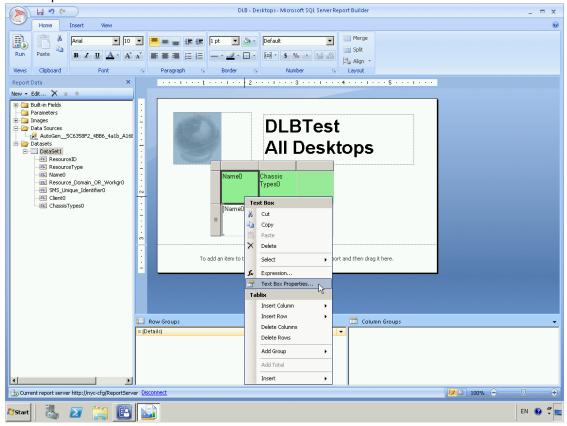


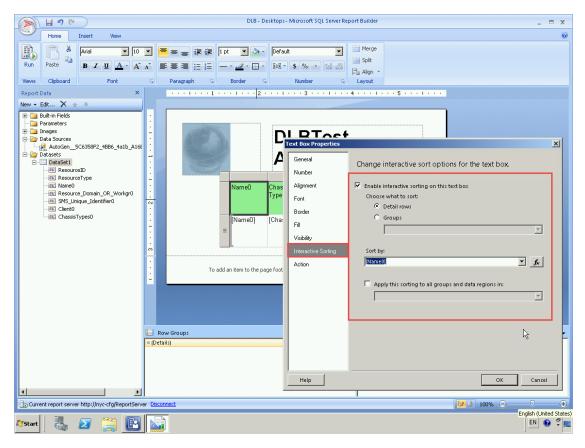


#### Add color to the header row:



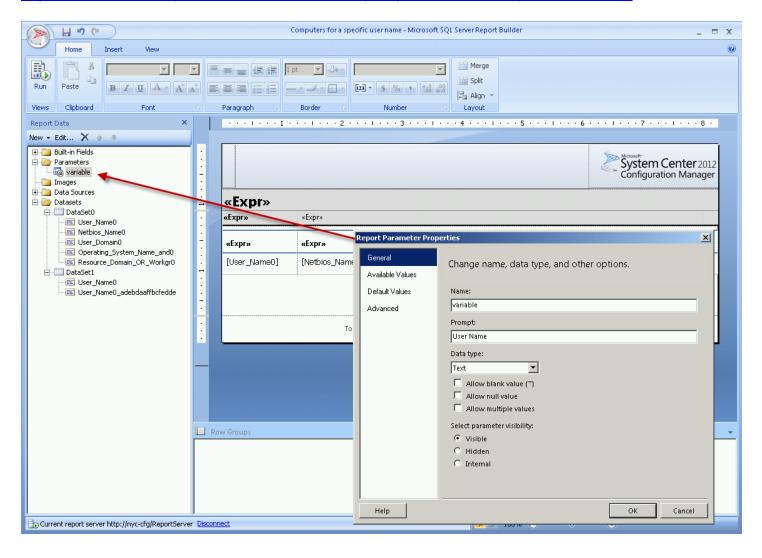
Add sorting to your report table (LC the header of the column so it has a heavy border, then RC that header cell, LC 'Text Box Properties':

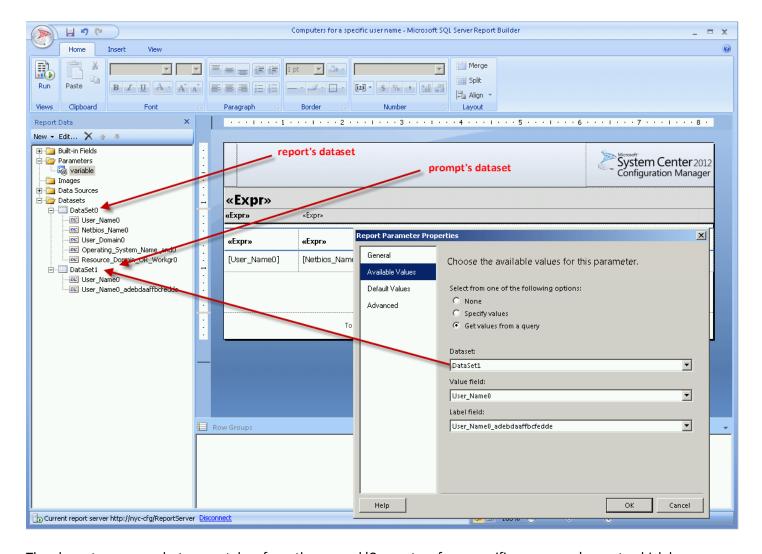




# **Adding a Prompt to your Report:**

http://asithadesilva.wordpress.com/2013/04/01/how-to-prompt-collection-to-a-report-in-sccm-2012/





The above two screenshots were taken from the canned 'Computers for a specific user name' report, which has:

#### Report's dataset (dataset0):

SELECT SYS.User\_Name0, SYS.Netbios\_Name0, SYS.User\_Domain0,
Operating\_System\_Name\_and0, SYS.Resource\_Domain\_OR\_Workgr0
FROM v\_R\_System SYS
WHERE User\_Name0 LIKE @variable
ORDER BY SYS.User\_Name0, SYS.Netbios\_Name0

#### Prompt's dataset (dataset1)

begin
if (@filterwildcard = ")
SELECT DISTINCT SYS.User\_Name0 from v\_R\_System SYS Order by
SYS.User\_Name0
else
SELECT DISTINCT SYS.User\_Name0 from v\_R\_System SYS
WHERE SYS.User\_Name0 like @filterwildcard
Order by SYS.User\_Name0
end