Business Intelligence Solution Providers

Specialized in creating talent resource pool

MSBI Beginner's Guide

Provided By: BISP Bispsolutions.wordpress.com bisp.consulting@gmail.com

Created By: Gaurav Shrivastava Software Engineer Reviewed By: Amit Sharma BISP Team

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

1

Content



1). Software and Hardware requirements.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

2

1. Framework

To set up SQL Server the following software components are required as pre-requisites

- .NET Framework 3.5
- SQL Server Native Client
- SQL Server Setup support files

2. Software

SQL Server Setup requires Microsoft Windows Installer 4.5 or a later version.

3. Internet Software

Microsoft Internet Explorer 6 or a later version is required for all installations of SQL Server 2008.

1. Web server

A Web server installed and started (IIS 5.1 or upper version)

Installing SQL Server 2008 Enterprise Edition

1. Processor:

Processor type: Pentium III-compatible processor or faster Processor speed: Minimum: 1.0 GHz, Recommended: 2.0 GHz or faster

2. Operating System:

Windows XP Professional SP2 Windows Server 2003 Small Business Server R2 Standard Windows Server 2003 Small Business Server R2 Premium Windows Server 2003 SP2 Standard Windows Server 2003 SP2 Enterprise Windows Server 2003 SP2 Data Center Windows Server 2003 SP2 64-bit x64 Standard Windows Server 2003 SP2 64-bit x64 Data Center Windows Server 2003 SP2 64-bit x64 Enterprise Windows Vista Windows Server 2008 Standard Windows Server 2008 Web Windows Server 2008 Data Center Windows Server 2008 Enterprise

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

Windows Server 2008 x64 Standard Windows Server 2008 x64 Data Center Windows Server 2008 x64 Enterprise

2. Memory:

RAM: Minimum 512 MB. Recommended: 2.5GB or more

3. Features and Disk Space Requirement:

Disk requirement will depend on your feature selection as I have given some example in below

Database Engine and data files	s, Replication, and Full-Text Search	:	280 MB
Analysis Services and data file	s	:	90 MB
Reporting Services and Report	Manager	:	120 MB
Integration Services		:	120 MB
Client Components		:	850 MB
SQL Server Books Online and	SQL Server Compact Books Online	:	240 MB

Install Microsoft Windows installer

From the below link you can download windows installer.

http://www.toggle.com/lv/group/view/kl39621/Microsoft_Windows_Installer.htm

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

4

Download all free programs at once from your browser 😽 Pownload				
Download Micros	oft Windows Installer free			
Program information 🗧 Free	guently Asked Questions 🗧 Comments			
The qualitation and being installed Installation status: Description of the status of	Download Microsoft Windows Installer free			
	This utility does small updates over Windows to give the capacity to execute .msi f (Microsoft Installer).			
Download Now!!!	This is the standard installation format for Windows and it is the one used almost a by the software developers.			

Install .Net Framework 3.5

.Net 3.5 Framework is one more prerequisite for installation of MSBI.

From the below link you can download .net framework 3.5.

http://www.microsoft.com/downloads/details.aspx?FamilyId=333325FD-AE52-4E35-B531-508D977D32A6&displaylang=en

← → C ☆ http://	//www.microsoft.com/dowploads/details	s.aspx?FamilyId=333325FD-AE52~4E35-B531-508D977D32A6&displaylang=en	
		mple Onlin 🔏 http://msdn.microsoft 🦂 Gmail: Email from Google 👔 btjunkie - the largest	C Other
Click Here to Install Silverlight			ange All Microsoft Sites S
Microsoft		Search Microsoft.com	
Download Center			
Download Center Home	Search All Downloads	Go Advanced Search	
Product Families Windows Office Servers Business Solutions Developer Tools Windows Live MSN Gamee & Xbox Windows Mobile All Downloads	Microsoft .NET Fran Brief Description Microsoft .NET Framework 3.5 cont. pack 1 and .NET Framework 3.0 set On This Page Use Outlook Details System Requirements Requirements Requirements	ains many new features building incrementally upon .NET Framework 2.0 and 3.0, and includes .NET Framework 2.0 service	Visual Studi
bounload Categories Games DirectX Internet Windows Security & Updates	Download Quick Details File Name:	dotNetFx35setup.exe	
Windows Media Drivers	Version:	3.5	
Drivers Home & Office	Date Published:	11/20/2007	
Mobile Devices Mac & Other Platforms System Tools Development Resources	Language: Download Size: Estimated Download Time:	English 2.7 MB 7 min 56K	
Download Resources Microsoft Update Services	Change Language:	English Change	

Install .Net Framework 3.5 for in your system.

IIS (Internet Information Services)

Verify that the IIS server is installed in your system. If Not, then Start \rightarrow Control Panel \rightarrow Add/Remove <u>W</u>indows Components. You will get a new wizard if check box enables then it means installed properly. You can install IIS in your computer system from Microsoft Operating System CD.

BISP | MSBI Beginner's Guide

5

🚱 Contro	l Panel								
File Edit View Favorites Tools Help									
Back	🐱 Add or Remove Programs								
Address [5	Currently installed programs: Show up <u>d</u> ates Sort by: N							
₽ .	C <u>h</u> ange or Remove Programs	Windows Components Wizard							
Gr S		Windows Components You can add or remove components of Windows XP.							
See A	Add <u>N</u> ew Programs	To add or remove a component, click the checkbox. A shaded box means that only part of the component will be installed. To see what's included in a component, click Details. Components:							
	Add/Remove <u>W</u> indows Components	□ Indexing Service 0.0 MB ☑ Internet Explorer 0.0 MB □ Internet Explorer 0.0 MB							
	Set Pr <u>o</u> gram Access and Defaults	Internet Information Services (IIS) 13.5 MB Image: Management and Monitoring Tools 2.0 MB Image: Message Queuing 0.0 MB Image: Description: Includes Windows Accessories and Utilities for your computer.							
		Total disk space required: 54.5 MB Details Space available on disk: 72723.6 MB							
		< Back Next > Cancel							

You can also check that is IIS working or not?

Type <u>http://localhost/</u> in internet explorer press enter. If it shows default .asp page then it is working properly.

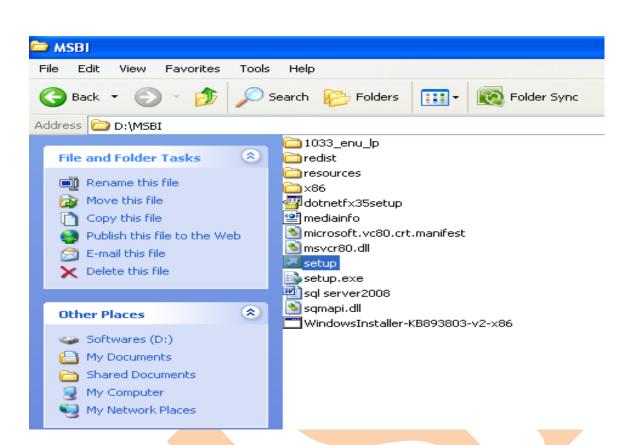
Installation of MSBI

You can install MSBI by running setup file shown below in following image.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

6



IF you don't have software setup file then you need to download it from internet.

SQL Server 2008 Enterprise Evaluation is available as an image file that contains X86, X64 and IA64 installable versions. You can use this image to burn your own DVD.

http://switch.atdmt.com/action/mrtity_FY09SQL08RTMEnterpriseTrialExperienceIT_9

Download image file and burn DVD. Run *Setup.exe* file from there it installation.

Installation Steps→

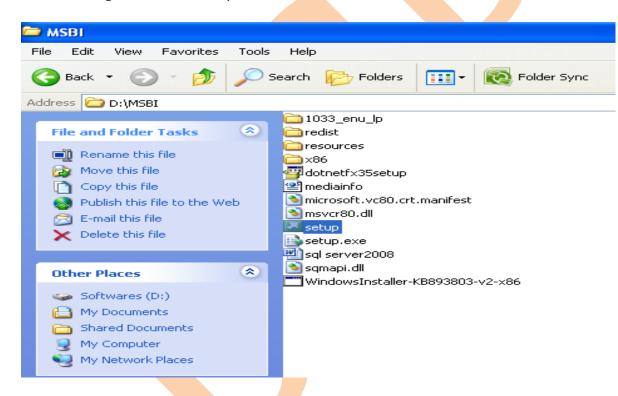
STEP 1: Copy the installation files

BISP | MSBI Beginner's Guide



It is Recommend that you copy the entire directory structure from the SQL Server 2008 installation disc to the any $(D:\)$ drive of the machine.

- It makes the installation process much faster than running it from CD/DVD once it gets started.
- It allows you to easily add or remove components later, without having to hunt around for the CD/DVD.
- If your media is damaged and a file won't copy, you get to find out now, rather than halfway through the installation.



Below image shows "setup.exe" file double click on it.

If you have DVD/CD of SQL 2008 then run it and go ahead ...

First dialog box appears

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

8



This will disappear from the screen and then the main installation page appears.

STEP 2: This is first wizard which is showing planning before installation.



STEP 3: Go to second option Installation

Click on the Installation hyperlink

SQL Server Installation Ce	nter
Planning	New SQL Server stand-alone installation or add features to an existing installation
Installation	Launch a wizard to install SQL Server 2008 in a non-clustered environment or to add features to an existing SQL Server 2008 instanc
Maintenance	New SQL Server failover cluster installation
Tools	Launch a wizard to install a single-node SQL Server 2008 failover cluster.
Resources	Add node to a SQL Server failover cluster
Advanced	3 Launch a wizard to add a node to an existing SQL Server 2008 failover cluster.
Options	Upgrade from SQL Server 2000 or SQL Server 2005
	Launch a wizard to upgrade SQL Server 2000 or SQL Server 2005 to SQL Server 2008. Before you upgrade, you should run the Upgr
	Search for product updates
	Search Microsoft Update for SQL Server 2008 product updates.

STEP 4: SQL Server Installation Center

Click on the "New Server stand-alone installation" link

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

9

🐮 SQL Server Installation Center		
Planning Installation	New SQL Server stand-alone installation or add features to an existing installation Val Launch a wizard to install SQL Server 2008 in a non-clustered environment or to add features to an existing SQL Server 2008 inst	tance.
Maintenance Tools	New SQL Server failover cluster installation Launch a wizard to install a single-node SQL Server 2008 failover cluster.	
Resources Advanced	Add node to a SQL Server failover cluster Launch a wizard to add a node to an existing SQL Server 2008 failover cluster.	
Options	Upgrade from SQL Server 2000 or SQL Server 2005 Launch a wizard to upgrade SQL Server 2000 or SQL Server 2005 to SQL Server 2008. Before you upgrade, you should run the U	Upgradı
	Search for product updates Search Microsoft Update for SQL Server 2008 product updates.	

The following dialog box appears on the screen while the installation program preparing itself......

SQL Server 2008

Please wait while SQL Server 2008 Setup processes the current operation.

The next screen will appear in few minutes that will be...

STEP 5: Setup Support Rules

Sol Server 2008 Setup Setup Support Rules Setup Support Rules Operation completed. Passed: 6. Failed 0. Warning 0. Skipped 0. Show details >> View detailed report

In case the checking goes failed. You need to check status by "Show details" button. You will get status of Setup Support Rules or "View detailed report link" to find out the cause, correct it, and then click on the Re-run button to perform the checks again.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 10

🚼 SQL Server 2008 Setup

Setup 9

Setup Support Rules

Setup Support Rules identify problems that might occur when you install SQL Server Setup support files. Failures must be corrected before Setup can continue.

Support Rules	Operation completed. Passed: 6.	Failed 0.	Warning 0.	Skipped 0.	

Hide details << View detailed report				
Rule Status				
	Minimum operating system version	Passed		
	Setup administrator	Passed		
	Restart computer	Passed		
	Windows Management Instrumentation (WMI) service	Passed		
	Consistency validation for SQL Server registry keys	Passed		
	Long path names to files on SQL Server installation media	Passed		

All rules for installation have passed.

The below dialog box appears on the screen while the installation program preparing itself......

1	SQL Server 2008
	Please wait while SQL Server 2008 Setup processes the current operation.

STEP 6: Product key

When all checks have passed, click on the OK button. After a while, the option to select edition and to enter the license key (or "product key") will appear.

Note: - Don't enter unregistered product key. We can't go further till you enter right product key.

For learning purpose select Enterprise Evaluation Option.

🏗 SQL Server 2008 Setup	
Product Key Specify the edition of SQL Server 200	18 to install.
Product Key License Terms Setup Support Files	Specify a free edition of SQL Server or provide a SQL Server product key to validate this instance of SQL Server 2008. Enter the 25-character I specify Enterprise Evaluation, the instance will be activated with a 180-day expiration. To upgrade from one edition to another edition, run the Specify a free edition: Enterprise Evaluation Enter the product key:

STEP 7: License Terms

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 11

Enter the product key into the box if you have, or choose the free edition.



Make true check box of "I accept the license terms", then click on the Next button ...

- 1. INSTALLATION AND USE RIGHTS.
 - a. Installation and Use.
 - You may install and use any nur
 - You may not use the software ir

I accept the license terms.

STEP 8: Setup Support Files

The below wizard appears

🚼 SQL Server 2008 Setup		
Setup Support Files		
Click Install to install Setup Support file	es. To install or update SQL Server 2008, these	files are required.
Product Key	The following components are required for SQ)L Server Setup:
License Terms	Feature Name	Status
Setup Support Files	Setup Support Files	
Click on the Install button		
< Back Install Cancel		

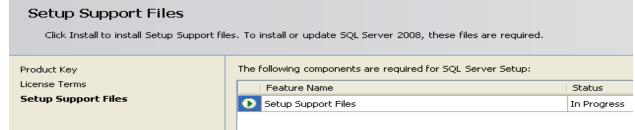
The below wizard will appear it shows setup support files in progress

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

12

🏗 SQL Server 2008 Setup



STEP 9: Setup Support Rules

The next wizard is showing rules and their status.

🀮 SQL Server 2008 Setup

Setup Support Rules

Setup Support Rules identify problems that might occur when you install SQL Server Setup support files. Failures must be corrected before Setu

Setup Support Rules	Operation completed. Passed: 9. Failed 0. Warning 1. Skipped 1.			
Feature Selection				
Disk Space Requirements	_			
Error and Usage Reporting	Hid	e details <<		
Installation Rules	View	detailed report		
Ready to Install				
Installation Progress		Rule	Status	
Complete		Fusion Active Template Library (ATL)	Passed	
		Unsupported SQL Server products	Passed	
		Performance counter registry hive consistency	Passed	
		Previous releases of SQL Server 2008 Business Intelligence Develop	Passed	
		Previous CTP installation	Passed	
		Consistency validation for SQL Server registry keys	Passed	
		Computer domain controller	Passed	
		Microsoft .NET Application Security	Not applicable	
		Edition WOW64 platform	Passed	
		Windows PowerShell	Passed	
		Windows Firewall	Warning	

Click on the **Next** button again.

STEP 10: Feature Selection

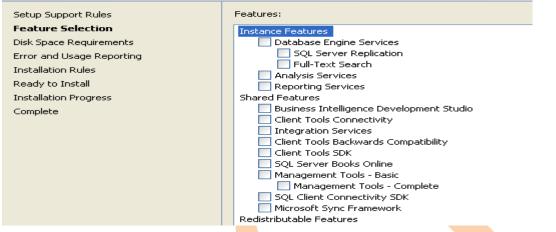
BISP | MSBI Beginner's Guide

Select the features you want to install as needed.

🍀 SQL Server 2008 Setup

Feature Selection

Select the Enterprise Evaluation features to install. For clustered installations, only Database Engine



Click on the **Next** button.

Now all selected features are checked wait till process is going on....

🏗 SQL Server 2008 Setup Feature Selection Select the Enterprise Evaluation features to install. For clustered installations, only Database Engine Services and Analysis Services can be clustered. Features: Setup Support Rules Feature Selection Instance Features Instance Configuration ☑ Database Engine Services SQL Server Replication Disk Space Requirements Full-Text Search Server Configuration 💌 Analysis Services Database Engine Configuration Reporting Services Analysis Services Configuration Shared Features Business Intelligence Development Studio Reporting Services Configuration Client Tools Connectivity Error and Usage Reporting Integration Services Installation Rules Client Tools Backwards Compatibility Ready to Install 🔽 Client Tools SDK SQL Server Books Online Installation Progress Management Tools - Basic Complete Please Wait... Management Tools - Complete SQL Client Connectivity SDK Microsoft Sync Framework Redistributable Feature

STEP 11: Instance Configuration

After a short while the following screen appears:

Go for default instance

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 14

1 SQL Server 2008 Setup

Instance Configuration

Specify the name and instance ID for	the SQL Server instance.		
Setup Support Rules	Default instance		
Feature Selection	 Named instance; 	MSSOLSERVER	
Instance Configuration			
Disk Space Requirements			
Server Configuration	Instance ID:	MSSQLSERVER	
Database Engine Configuration	Instance root directory:	C:\Program Files\Microsoft SOL Server\	
Analysis Services Configuration	Instance root directory.	C. (Program Filestraterosofe betvert	
Reporting Services Configuration			
Error and Usage Reporting	SQL Server directory:	C:\Program Files\Microsoft SQL Server\MSSQL10.M	155QLSERVER
Installation Rules	Analysis Services directory:	C:\Program Files\Microsoft SQL Server\MSAS10.M	SQLSERVER
Ready to Install	Reporting Services directory:	C:\Program Files\Microsoft SQL Server\MSRS10.M	SQLSERVER
Installation Progress			-
Complete	Installed instances:		Please Wait
	Instance	Features	

Leave default settings. Click on the **Next** button.

STEP 12: Disk Space Requirements

This wizard shows disk summary which is used in installation of SQL Server 2008.

🏗 SQL Server 2008 Setup

Disk Space Requirements Review the disk space summary for the SOL Server features you selected. Disk Usage Summary: Setup Support Rules Feature Selection 😑 🥝 Drive C: 1512 MB required, 53148 MB available Instance Configuration System Drive (C:\): 770 MB required Shared Install Directory (C:\Program Files\Microsoft SQL Server\): 414 MB required Disk Space Requirements Instance Directory (C:\Program Files\Microsoft SQL Server\): 328 MB required Server Configuration Database Engine Configuration Analysis Services Configuration Reporting Services Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete Click on Next.

STEP 13: Server Configuration

This step allows you to set up the service accounts that will be used to run SQL Server. If you have Windows NT or Active Directory accounts. You can use them. You can also use the built-in Network Service account for all three services listed (this account does not require a password).

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 15

This allows SQL Server to start up after installation. However, it can be easily changed later to another account through the Services applet (Control Panel \rightarrow Administrator Tools \rightarrow Services):

Server Configuration Specify the configuration.				
Setup Support Rules Feature Selection Instance Configuration	Microsoft recomme	Collation ands that you use a sep	arate ac	count for each SQL Server service.
Disk Space Requirements Server Configuration	Service SQL Server Ageni			Account Name
Database Engine Configuration	SQL Server Data			
Analysis Services Configuration	SQL Server Analy	-		
Reporting Services Configuration Error and Usage Reporting	Sql Server Report	ing Services		
Installation Rules				
Ready to Install				
Installation Progress Complete				
Complete	These services wi Help.	Il be configured automa	tically w	here possible to use a low privilege account. On some older Windows versions the user will ne
Password		Startup Type		
		Manual	~	
		Automatic	~	
			~	
		Automatic	×	
		Automatic Automatic	~	

Remember to change the *Startup Type* of services from automatic to manual, for all three services. When you re-boot computer system it will not start services automatically.

Use the same a	account for all SQL Server 2008 services	
Specify a user n	ame and password for all SQL Server service accounts.	
Account Name:	NT AUTHORITY\SYSTEM Browse	
Password:		
	OK Cancel	
		-1
		< Back Next >

If services are manual so sql server will not effect to your system speed.

Click on Next.

STEP 14: Database Engine Configuration

Account Provision

Below wizard allows you set up database engine security.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 16

🚼 SQL Server 2008 Setup	
Database Engine Configu	ration
Specify Database Engine authenticati	n security mode, administrators and data directories.
Setup Support Rules Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Analysis Services Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Account Provisioning Data Directories FILESTREAM Specify the authentication mode and administrators for the Database Engine. Authentication Mode Windows authentication mode Mixed Mode (SQL Server authentication and Windows authentication) Bulk-in SQL Server system administrator account Enter password: Confirm password:
	< Back Next > Cancel Help
SQL Server 2008 Setup Database Engine (Specify Database Engine a	Configuration uthentication security mode, administrators and data directories.
Setup Support Rules Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configurat	Account Provisioning Data Directories FILESTREAM Specify the authentication mode and administrators for the Database Engine. Authentication Mode
Analysis Services Configuration Reporting Services Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Mixed Mode (SQL Server authentication and Windows authentication) This is for both server and windows need password.

Windows authentication Mode – In this mode you require windows credential to connect with SQL server.

Mixed Mode- In this mode you can use both windows and SQL server authentication mode. If you choose Mixed Mode security then you must require system admin account.

Add Current User Add Remove		
		< Back Next >

For now you can use "Add Current User" as you logged in with windows administrator account.

STEP 15: Database Engine Configuration -

Data Directories

Change the directories to specify which drives in your system will be used for the various types of database files.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 17

Generally it's advisable to put the User database directory and User log directory on separate physical drives for performance. But it depends on how Windows has been configured and how many disk drives you have in your computer system.

If you are installing on a single drive laptop or desktop, then simply specify:

Data root directoryC:\Program Files\Microsoft SQL ServerUser database directoryC:\DataUser log directoryC:\LogsTemp DB directoryC:\TempDBTemp Log directoryC:\TempDBBackup directoryC:\Backups

Do not click on the **FILESTREAM** tab unless you know how to change these options, as it is not generally required for most installations. It can easily be changed by using sp_configure 'filestream_access_level', ''after SQL Server has been installed. Click on Next.

STEP 16: Analysis Services Configuration

Click on Add Current user if you login as Administrator.

🍀 SQL Server 2008 Setup		
Analysis Services Config	guration	
Specify Analysis Services administra	tors and data directories.	
Setup Support Rules	Account Provisioning Data Directories	
Feature Selection Instance Configuration	Specify which users have administrative permissions for Analysis Services.	
Disk Space Requirements	BISP1-05E73C0A5\BISP1 (BISP1)	Analysis Services administrators have unrestricted access to Analysis Services.
Server Configuration		
Database Engine Configuration		
Analysis Services Configuration		
Reporting Services Configuration		
Error and Usage Reporting		
Installation Rules		
Ready to Install Installation Progress		
Complete		
Complete		
	Add Current User Add Remove	
		< Back Next > Cancel Help

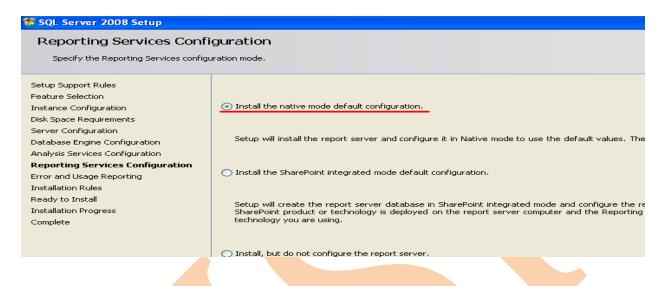
BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 18

Click on Next.

STEP 17: Reporting Services Configuration

Leave below setting as default.



STEP 18: Error Usage Reporting

Do you want to send error information to Microsoft? Then make check box true. You can safely skip if you do not want to share any information.

🚼 SQL Server 2008 Setup	
Error and Usage Report	ing
Help Microsoft improve SQL Server fe	patures and services.
Setup Support Rules Feature Selection Instance Configuration Disk Space Requirements Server Configuration Database Engine Configuration Analysis Services Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Specify the information that you would like to automatically send to Microsoft to improve future releases of SQL Server. The updates though Microsoft Update to modify feature usage data. These updates might be downloaded and installed on your View the Microsoft policy for SQL Server privacy and data collection. Read more about Microsoft Update and Automatic Update.
	Send feature usage data to Microsoft. Feature usage data includes information about your hardware configuration and how

Click boxes if you want to help Microsoft.

Click on **Next** again...

STEP 19: Installation Rules

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 19

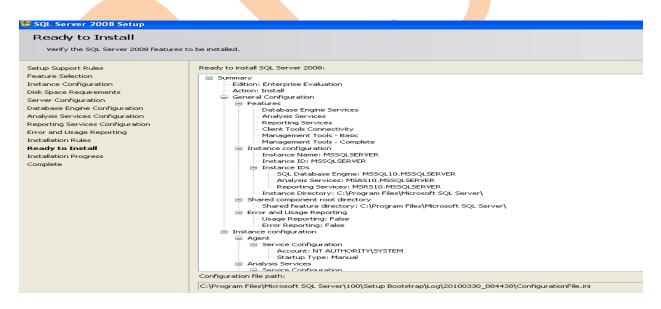
This screen simply checks if there are any processes or other installations running which will stop the installation of SQL Server 2008.

🏗 SQL Server 2008 Setup						
Installation Rules						
Setup is running rules to determin	e if the installation process will be blocked. For more information, click Help.					
Setup Support Rules	Operation completed. Passed: 11. Failed 0. Warning 0. Skipped 0.					
Feature Selection Instance Configuration		***************************************				
Disk Space Requirements	Hide details <<					
Server Configuration	View detailed report					
Database Engine Configuration						
Analysis Services Configuration		Rule Status				
Reporting Services Configuration	Same architecture installation Passed					
Error and Usage Reporting	Cross language installation Passed					
Installation Rules	Existing clustered or cluster-prepared instance	Passed				
Ready to Install Installation Progress	Reporting Services Catalog Database File Existence	Passed				
Complete Completa Com						
	SQL Server 2005 Express tools	Passed				
	Operating system supported for edition	Passed				
	FAT32 File System	Passed				
	SQL Server 2000 Analysis Services (64-bit) install action	Passed				
	S Instance name	Passed				
	Previous releases of Microsoft Visual Studio 2008	Passed				

Click on Next again – you're almost ready to install.....

STEP 20: Ready to Install

This screen summarizes what you are about to install and gives you a last chance to cancel or change anything that's wrongly configured.

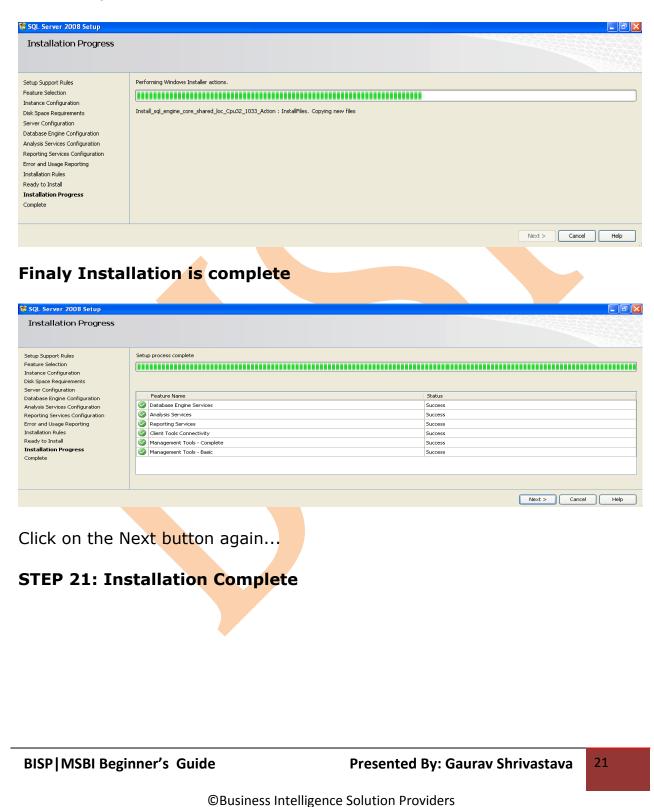


Check that what's being installed is what you want and then click on *Install* when you're sure you want to start the installation process.

BISP | MSBI Beginner's Guide

Installation Progress

SQL Server 2008 will now install. How long it takes depends on the speed of your machine and what load it's under, the installation media (CD is slower) and what you've chosen to install.



🏗 SQL Server 2008 Setup	
Complete Your SQL Server 2008 installation co	mpleted successfully.
Setup Support Rules Feature Selection Instance Configuration Disk-Space Requirements Server Configuration Database Engine Configuration Analysis Services Configuration Reporting Services Configuration Error and Usage Reporting Installation Rules Ready to Install Installation Progress Complete	Summary log file has been saved to the following location: <u>ClProgram FilestMicrosoft SQL Server/1001Setup BootstrapiLool/20100330 084438(Summary bisp1-05e73k045 20100330 084438.txt</u> Information about the Setup operation or possible next steps: Vour SQL Server 2008 installation completed successfully.
	Supplemental Information: The following notes apply to this release of SQL Server only. The following notes apply to this release of SQL Server only. For information about how to use Microsoft Update to identify updates for SQL Server 2009, see the Microsoft Update Web site http://goinki/?LinkId=108409 > at http://goinki/?LinkId=108409> at http://goinki/?LinkId=114089> at http://goink
	Close Hep

It may be worth clicking on the installation log at the top of the screen to check everything's gone as expected. Not that this is much smaller than the usual SQL Server installation log files of old.

Finally, click on the Close button.

Now you can re-boot your system and start working in SQL Server2008.

How to check that SQL Server 2008 has installed correctly?

You have to check that all contents are working or not.

Check 1: Has the SQL Server Service Started?

Check SQL Server 2008 has started.

Services						
File Action View	Help					
$\leftarrow \rightarrow \square$	🗈 🗔 😰 🕨 🔳 🗉 🖦					
Services (Local)	Services (Local)					
	SQL Server Agent (MSSQLSERVER)	Name A	Description	Status	Startup Type	Log On As
	Stop the service Restart the service	♥ SQL Active Directory Helper Service ♥ SQL Full-text Filter Daemon Launcher (MSSQLSERVER) ♥ SQL Server (MSSQLSERVER)	Enables int Service to I Provides st	Started Started	Disabled Manual Manual	NT AUTHORITY\NETWORK SERVICE NT AUTHORITY\LOCAL SERVICE Local System
	Description: Executes jobs, monitors SQL Server, fires alerts, and allows automation of some administrative tasks.	BigQL Server Agent (MSSQLSERVER) BigQL Server Analysis Services (MSSQLSERVER) BigQL Server Browser BigQL Server Integration Services 10.0 BigQL Server Reporting Services (MSSQLSERVER) BigQL Server V5S Writer	Executes j Supplies on Provides S Provides m Manages,	Started Started Started Started Started Started	Manual Manual Manual Manual Manual Automatic	Local System Local System NT AUTHORITYLOCAL SERVICE Local System Local System

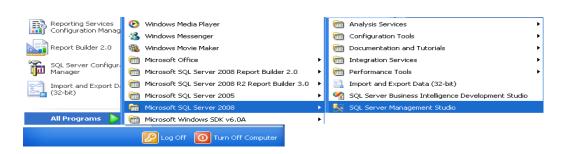
Check 2: Does Management Studio Work?

Check Management Studio works by firing it up.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

22

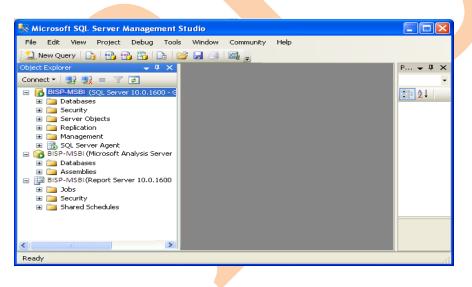


Now you need to connect each service to the server.

Microsoft		
Server type:	Reporting Services	
Server name:	BISP-MSBI	~
Authentication:	Windows Authentication	✓
User name:	GAURAV-08E63F1F\Administrator	~
Password:	Remember password	
Conne	ect Cancel Help Optio	ins >>

Click on connect.

Below wizard shows that all services are connect to the server.



Check 3: Can you run a basic query against the new SQL Server?

Check SQL Server works by running a simple query from Management Studio.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 23

Object Explorer	~ ₽ ×
Connect 👻 📃	💐 = 🝸 🛃
	Connect Disconnect Register New Query Activity Monitor Start Stop Pause Resume Resume Restart Policies

Enter the query shown below and hit F5 to run.

	0VERSI	N								
ts 🛅	Messages	1								
	o column	o column name)	 o column name)	o column name)	o column name)	o column name)	lts 📑 Messages o column name)	o column name)	ts 📑 Messages o column name)	lts 📑 Messages

Check 4: Is SQL Server Agent Running?

Check SQL Server Agent is running for scheduled jobs. There should be a green arrow next to the SQL Server Agent database symbol.

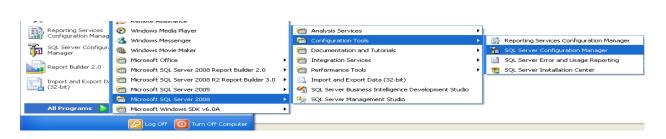


Check 5: Has the TCP/IP network protocol library been enabled on the server?

If the browser service is started but you still cannot connect to the server, click on Start→Programs→SQL Server 2008→ SQL Server Configuration Manager

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 24



The SQL Server Configuration Manager window opens. Click on the **SQL Server Network Configuration** node and expand it.

Click on "Protocols for MSSQLSERVER".

🚡 Sql Server Configuration Manager			
File Action View Help			
🕵 SQL Server Configuration Manager (Local)	Protocol Name	Status	
SQL Server Services	😙 Shared Memory	Enabled	
SQL Server Network Configuration	😽 Named Pipes	Disabled	
Protocols for MSSQLSERVER	TCP/IP	Disabled	
Protocols for SQLEXPRESS	TA VIA	Disabled	Enable
庄 🖳 🖳 SQL Native Client 10.0 Configuration			Disable
			Properties
			Help

In the above screenshot, the TCP/IP network protocol library is disabled. You need to enable it in order that remote servers can talk to the newly installed SQL Server.

Named Pipes can be ignored, unless there is a requirement for it. In virtually all environments, VIA can also be ignored as this protocol requires a special network card. Shared memory is the "local" protocol that SQL Server uses when talking to a client application on the same server as itself, for example when SQL Server Management Studio connects to it. It is usually best to leave this enabled.

You will need the TCP/IP protocol enabled if you need to connect to your new SQL Server from a remote client or another server via TCP/IP, which is what most networks use.

If it shows as *DISABLED*, double click on the "TCP/IP protocol line", and the following window will appear.

BISP | MSBI Beginner's Guide

TCP/IP Properties		? 🗙
Protocol IP Addresses		
General		
Enabled	Yes	
Keep Alive	Yes	
Listen All	No	
Enabled		
Enable or disable TCP/IP protoc	ol for this server instance	
ОК	Cancel Apply	Help
Ensure that Enabled	s set to Yes, and o	click on OK.
The following warning		
	5 1	
Warning		
Any changes made wi	I be saved; however, they will	I not take effect until the service is stopped and restarted.
	OK	

Click on OK.

You will be returned to the Configuration Manager window, where TCP/IP will now be shown as enabled.

🚡 Sql Server Configuration Manager		
File Action View Help ← → € I Image: Base of the second seco		
SQL Server Configuration Manager (Local) SQL Server Services SQL Server Network Configuration Protocols for MSSQLSERVER Protocols for SQLEXPRESS SQL Native Client 10.0 Configuration	Protocol Name Shared Memory Named Pipes TCP/IP VIA	Status Enabled Disabled Enabled Disabled

Now re-start the MSSQLSERVER service so that the TCP/IP protocol can be used to connect to your new SQL Server.

All required components checked it shows that you install and configure SQL server correctly.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 26

MSBI Contents

Basic content of business intelligence are in SQL server are

- Reporting Services
- > Analysis Services
- Integration Services

Reporting Services

SQL Server Reporting Services is a report generation environment for data gathered from SQL Server databases. It is administered via a <u>web interface</u>. Reporting services features a <u>web services</u> interface to support the development of custom reporting applications. Reports are created as <u>RDL</u> files.

Reports can be designed using recent versions of <u>Microsoft Visual</u> <u>Studio</u> (Visual Studio.NET 2003, 2005, and 2008) with <u>Business Intelligence</u> <u>Development Studio</u>, installed or with the included Report Builder. Once created, RDL files can be rendered in a variety of formats including Excel, <u>PDF</u>, <u>CSV</u>, <u>XML</u>, <u>TIFF</u> (and other image formats), and HTML Web Archive.

Report Architecture

1) SSRS Component Architecture

The three-tier architecture of a Reporting Services

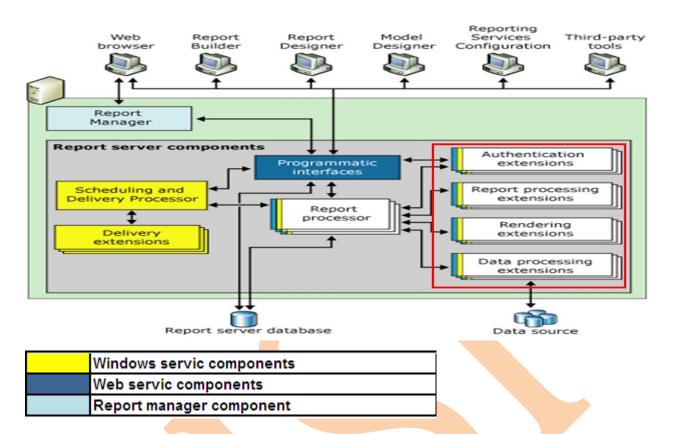
L1- Report server database and data sources in the data tier

L2- The report server components in the middle tier

L3- The client applications and built-in or custom tools in the presentation tier

BISP | MSBI Beginner's Guide

27

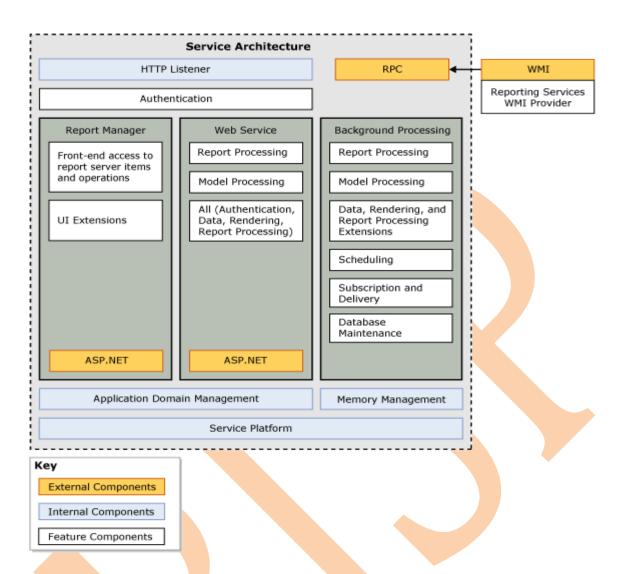


Reporting Services, a report server is implemented as a Windows service that consists of distinct feature areas that run in separate application domains.

- Report Manager
- Report Server Web service
- Background processing

2) SSRS Service Architecture

BISP | MSBI Beginner's Guide



Report Features

Relational, multidimensional, XML, and custom data sources Build reports using data from any data source type that has a Microsoft .NET Framework-managed data provider, OLE DB provider, or ODBC data source.

Report also can by using relational and multidimensional data from SQL Server and Analysis Services, Oracle, Hyperion, and other databases. You can use an XML data processing extension to retrieve data from any XML data source. You can use table-valued functions to design custom data sources.

Tabular, matrix, chart, and free-form report layouts create tabular reports for column-based data, matrix reports for summarized data, chart reports for graphical data, and free-form reports for everything else. A new data region introduced in SQL Server 2008 enables you to create reports

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

29

that combine table and matrix layouts. Reports can embed other reports and charts, along with lists, graphics, and controls for dynamic Web-based applications.

Ad hoc reports Create and save reports on the fly and save them locally or publish them directly to a report server or SharePoint site, where they can be managed like other reports. Ad hoc reporting is supported through report models and report templates using a Click Once application called Report Builder.

Drill through reports and interactivity Add interactive features by providing links to sub reports and drill through reports. Use parameters to filter data for customized views. Model-based reports provide infinite click through functionality so users can explore the data that is available to them.

Presentation formats Choose a presentation format when you open the report, or after you open the report. You can choose Web-oriented, page-oriented, and desktop application formats. Formats include HTML, MHTML, PDF, XML, CSV, TIFF, Word, and Excel.

Custom controls and report items You can embed custom controls or report items that you create or purchase from a third-party vendor. A custom control requires a custom report processing extension. You can add scripted expressions in Microsoft Visual Basic.

Navigation You can add bookmarks and document maps to provide navigation options within a large report.

Aggregations You can aggregate and summarize data using controls and expressions.

Graphical elements You can embed or reference images and other resources, including external content.

Report and Model Design Tools

Report Designer Create reports in a full-featured report authoring application. Report Designer is hosted within Business Intelligence Development Studio. With Report Designer, you can create complex reports based on a number of different data source types, define simple to complex layouts, add chart and gauge data presentations, include interactive features

BISP | MSBI Beginner's Guide

like drill through reports and document maps, preview reports, and save reports to your local computer or publish them to a test or production report server. Report Designer includes query builders and an expression editor.

Model Designer Create models that support ad hoc reporting in Reporting Services. You can generate models automatically based on an existing schema or view, refine the model, and then publish it to a report server.

Report Builder 2005 Create ad hoc reports using templates and preorganized data and save them directly to a report server. Reports that you create in Report Builder can be accessed, distributed, and managed just as you would any other report.

This topic describes the terminology used to describe the various types of reports and the ways reports get created and used. Reporting Types:

- > Parameterized reports
- Linked reports
- Snapshot reports
- Cached reports
- Ad hoc reports
- Clickthrough reports
- Drillthrough reports
- Subreports

Organizing Report Data on a Page

Reports use a variety of report items to organize data on a report page. Report items are available in the Toolbox. You drag report items to the report design surface and then drag report data from the Report Data pane to the report items on the design surface. The design surface is not WYSIWIG. The report items have an initial layout position that may change when the report is processed. The following list describes typical uses for different report items.

BISP | MSBI Beginner's Guide

Textbox Use for titles, date stamps, and report names. Placeholder text appears in text boxes where you have linked data and layout items. The placeholder text is display text for an underlying report expression. During report processing, report data is substituted for the report expressions and the calculated values replace the placeholder text.

Table, Matrix Use to display tabular or crosstab data from a report dataset. Table and Matrix are templates of a Tablix data region and provide a starting grid layout for data from a report dataset.

Chart Use to graphically display data from a report dataset. You can also nest a chart inside a Tablix data region.

Gauge Use to present a visual image for a single value within a range of values.

List Use to create a free-form layout like forms on a Web page. A List is a template of a Tablix data region and provides a starting layout for data from a report dataset.

Image Use to add existing images to a report.

Sub report Use as a placeholder another report. A sub report must be designed separately and published to the report server to be included in a parent report.

Line, Rectangle Use lines and rectangles as graphical elements. A rectangle can also be used as a container for other report items. Use a rectangle to help control how report items like data regions appear on a report page when the report is rendered.

How to create sample report?

For creating sample report you can take one Business requirement for report.

Problem→ Business user wants to see his sales of each region of every month, quarter and yearly bases.

Solution \rightarrow You need to create a report which is a stepped process. Here I am showing how to create report by using report wizard.

1. Open a new project you can give name

BISP|MSBI Beginner's Guide

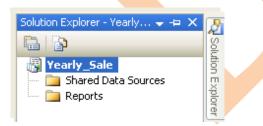
Presented By: Gaurav Shrivastava 32

	🍓 Te	st - M	icroso	ft Visual	Studio)				
ſ	File	Edit	View	Project	Build	Debug	Test	Tools	Window	He
		New			•		Project.	Cti	rl+Shift+N	
		Open			•	-	Web Sit	e Sł	nift+Alt+N	
		Add			•	1	File		Ctrl+N	

In the categories or project type just select Business Intelligence Project and the template should be the Report Server Project. Give a report name

New Project					? 🔀
Project types:		Templates:		.NET Framework 3.5	▼ (□)
Business Intelli Visual Basic Visual C# Visual C++ Other Project Test Projects	igence Projects Types	Visual Studio installed tem Analysis Services Project Integration Services Conne Report Server Project Wiza Report Server Project My Templates	· impor ctions P	rt Analysis Services 2008 ration Services Project rt Model Project	Dat
Create an empty R	leport Server project.				
Name:	Yearly_Sale				
Location:	C:\Documents and	Settings\Gaurav		~	Browse
Solution:	Create new Solution	ו 💌	🗹 Create director	ry for solution	
Solution Name:	Yearly_Sale				
				ОК	Cancel

In solution explorer you will get your project



Now the next step to create report is to add data source we can use different data base to create report.

Right click on data sources and the first option will be Add New Data Source

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 33

Solution E	xplorer 🚽 🗸 🗸	\times
	1	_
📑 Yea	arly_Sale Shared Data Sources	
	Add New Data Source	
I	Add	۲

Give the name of the data source. In this example *Dsales* is datasource. Now select a database type, and then type the connection string for the datasource. To build connection string click **Edit**.

nared Data Source	Properties	
General Credentials	Change name, type, and connection options.	
	Name:	
	DSales	
	Туре:	
	ODBC 💌	
	Connection string:	
		Edit
Help	OK	Cancel

Now connection Properties window will come. There are many options for datasource type. You previously select datasource type so it come automatically else you have option to change it.

If you want to build connection string just click Build

Connection Properties	? 🛛
Data source:	
ODBC (ODBC)	Change
CData source specification	
Use user or system data source name:	
	Refresh
 Use connection string: 	
persist security info=True	Build
Login information	
User name:	
Password:	
	Advanced
Test Connection OK	Cancel

BISP | MSBI Beginner's Guide

When you click on build one select data source wizard will come. In that you have two tabs one for file data source and other is for machine data source by the use of 'New' button you can create new data source.

Fle Data Source Image: Create New Data Source Create New Data Source Image: Create Source Selecting User Data Source Selecting User Data Source Selecting User Data Source (Applies to this machine	Select Data Source	Select Data Source
Construction User User Generation User User MS Access Database User meta Selecting Liser New New Select the file data source that describes the diver that you wish to connect to. New New Select the file data source that describes the diver that you wish to connect to. New New OK Cancel Help OK Cancel OK Data Source (Applies to this machine only) System Data Source (Applies to this machine only) System Data Source (Applies to this machine only) System Data Source creates a data source Which is specific to this machine, and visible only to System Data Source	File Data Source Machine Data Source	File Data Source Machine Data Source
Create New Data Source Select a type of data source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source Select a type of data source (Attachine Data Source (Applies to this machine only) System Data Source (Applies to this machine only) (Stecting User Data Source (Applies to this machine only) Selecting User Data Source creates a data source (Attachine Data Source that source Which is specific to this machine, and visible only to (Stecting User Data Source creates a data source)	Look in: Data Sources	dBASE Files User Excel Files User MS Access Database User sales User meta Sales_Data User data
You can use any file data source that refers to an ODBC driver which is installed on your machine. "User" data sources are specific to a user on this machine, or by a system-wide service. OK Cancel Help OK Cancel Help OK Cancel Help OK Cancel Help Select a type of data source: Image: Select a type of data source: Image: Select a type of data source: Image: Select a type of data source (Applies to this machine only) System Data Source (Applies to this machine only) System Data Source (Applies to this machine only) Selecting User Data Source (Applies to this machine only) Selecting User Data Source (Applies to this machine only) Selecting User Data Source creates a data source which is specific to this machine only		
Create New Data Source Select a type of data source:	You can use any file data source that refers to an ODBC driver which is installed	"User" data sources are specific to a user on this machine. "System" data
Select a type of data source: User Data Source (Applies to this machine only) System Data Source (Applies to this machine only) Selecting User Data Source creates a data source which is specific to this machine, and visible only to	OK Cancel Help	OK Cancel Help
<pre>< Back Next > Cancel</pre>	Select a type of data source: • User Data Source (Applies to the system Data Source (Applies to the system Data Source (Applies to the system Data Source creater the system Data Source creater the system of the system Data Source creater the system of t	o this machine only) rates a data source a, and visible only to

When you click on next you will get connection string. Now you should test the connection if you get success message click ok.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 35

Connection Propertie	25	? 🗙	
Data source: ODBC (ODBC)		Change	
O Use user or system		Refresh	
 Use connection stri Dsn=sales;dbq=G; 	ng: \BISP-MSBI\Data1\Salı	Build	
Login inform Test res	sults 🔀		
User name: Password:	Test connection succeeded.		
	ОК	Advanced	
Test Connection	ОК	Cancel	

After these processes you will get connection string in your connection string box.

Click OK.

Connection string comes, click ok.

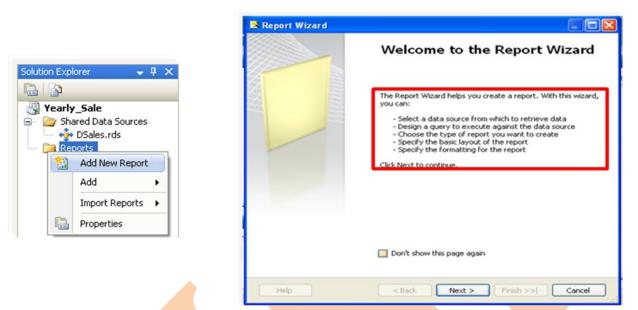
hared Data Source Pi	operties	E
General Credentials	Change name, type, and connection options.	
	DSales Type: ODBC	
	Connection string: Dsn=sales;dbq=G:\/BISP-MSBI\/Data1\Sales_Data_Mart.mdb;driveri d=25;fil=MS Access;maxbuffersize=2048;pagetimeout=5	dit
Help	ок	Cancel

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 36

Report Designing

Now you are ready to create report. Go to solution explorer there is one Reports folder just Right click on that and click on **Add New Report.**



Now you have Report wizard which shows all the stepped instruction How to create report?

Select datasource in the shared data source dropdown. You will get all data source which is available in your Shared Data Source folder.

BISP | MSBI Beginner's Guide

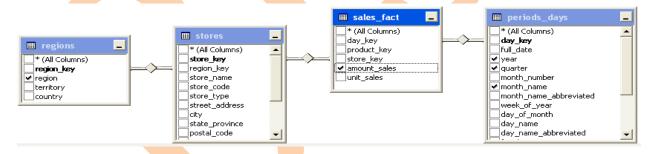
37

elect the Data Source Select a data source from which to obtain source.	n data for this report or crea	ate a new data
) Shared data source		
DSales	✓	
New data source		
Name:		
DataSource1		
Type:		
Microsoft SQL Server	×	
Connection string:		
		Edit
		Credentials
		credendais
Make this a shared data source		

To create data model we may have more than one data base. In one database there may be so many tables. So before creating data model first check the required tables then add them to data model.

In this problem you need regions, stores, sales_fact and periods_days table in data model.

Use query builder to create query



After select your required fields click **OK**

It is generated a query string.

Click on Next

There are two types of reports tabular and matrix for in this problem you can use matrix reporting.

BISP | MSBI Beginner's Guide

🗟 Report Wizard 📃 🗖 🔀	🗟 Report Wizard	
Design the Query Specify a query to execute to get the data for the report.	Select the Report Typ Select the type of report th	There are two type of report can be created one in tabular and other is
Use a query builder to design your query. Query Builder Query Builder SELECT regions.region, sales fact.amount_sales, periods_days.[year], periods_days.quarter, periods_days.month_name WHERE stores.store jacy and stores.store.jacy AND stores.region_key = regions.region_key AND sales_fact.day_key = periods_days.day_key =	 ○ Tabular ⊙ Matrix 	XXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Help < Back Next > Finish >>1 Cancel	Help	<back next=""> Frish >>1 Cancel</back>

You can Design matrix report there is four options.

Page \rightarrow You can add those fields which you want to come in page header.

Columns \rightarrow Add column fields.

Rows \rightarrow Add row fields.

Details \rightarrow This keeps measures information from fact table.

When all fields are chosen, click on Next.

🚨 Report Wizard				
Design the Mati	r ix that you want to display	in the matrix.		
Available fields:		Displayed fields:		
store_name	Page >			
		region		****
		10gion		жжж
			+	××× ××× ××× ××× ××× ××× ××× ××× ×××
	Rows >	year quarter month_name	+	*** *** *** ***
	Details >	amount_sales		
Enable drilldown	< Remove			
Help	< Back	Next >	Finish >:	> Cancel

Choose the Table Layout page, select a layout for the table, and then click *Finish.*

Select report appearance.

XXXXXXX XXXX	Stock XXXX XXXX <t< th=""><th>Report Wizard Choose the Matrix Style Choose a style for the matrix.</th><th></th><th></th><th></th><th></th><th></th><th>1</th></t<>	Report Wizard Choose the Matrix Style Choose a style for the matrix.						1
XXXX XXXX XXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXXX XXXXX	Bold Ocean Generic xxxx xxxx xxxx 21/30/ 30/30/ 20/3/	Forest		xx				
XXXX XXXXX XXXXX 202102 MR100X XXXXX XXXXX XXXXX 202102 MR100X </td <td>XXXX XXXX XXXX Generic XXXX XXXX XXXX XYXX XXXX XXXX XXXX XYXX XXXX XXXX XXXX XYXX XXXX XXXX XXXX XYXXX XXXX XXXXX XXXX</td> <td></td> <td></td> <td></td> <td>XXXX</td> <td>A MARK</td> <td>XXXX</td> <td></td>	XXXX XXXX XXXX Generic XXXX XXXX XXXX XYXX XXXX XXXX XXXX XYXX XXXX XXXX XXXX XYXX XXXX XXXX XXXX XYXXX XXXX XXXXX XXXX				XXXX	A MARK	XXXX	
XXXXXX XXXXXX XXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Strend in Constraint XXXXX XXXXX </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
XXXXXX XXXXXX XXXXXX XXXXXX XXXXXXX XXXXXXX XXXXXX XXXXXX XXXXXXX XXXXXXX XXXXXX XXXXXX XXXXXXX XXXXXXX XXXXXX XXXXXX XXXXXXXX XXXXXX XXXXXX XXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Vision XXXX <		XX XX	XXXX				
XMXXMX XXXXXX XXXXXXX XMXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	2012 307 2013 307 2013 307 2000X 2000X 2017 307 2013 307 2000X 2000X 200X 2017 307 2013 307 2000X 200X 200X	Generic						
201302 301302 30002 30002 30002 201302 301400 30002 30002 30002 201302 301400 30002 30002 30002 201302 301400 30002 30002 30002 201302 301400 30002 30002 30002 201302 301400 30002 30002 30002 201302 301400 30002 30002 30002 201302 301400 30002 30002 30002 201302 301400 30002 30002 30002 201302 301400 30002 30002 30002	XXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXXX XXXXXX XXXXX XXXXX XXXXXX XXXXXX XXXXX XXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		XX XX	XXXX	× 200X	XXXX	xxxx	
307335 878 MR XXXX XXXX 207305 398 MXX XXXXX XXXXX	101/102/102 101/102/102		XX XX	XXXX	XXXXX	XXXX	XXXX	
201307 MM307 XXXX XXXX XXXX	XXXX XXXXX XXXXX XXXXX XXXXX XXXXX							
XXXXX XXXXXX XXXXXX XXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	X0X X0X X00X X00X X00X X0X X0X X0XX X0XX X0XX		XX XX	XXXX	XXXXX	XXXX	XXXX	
XXXX XXXXX XXXXX XXXXX XXXXX XXXXX	XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXXX XXXXX XXXXX XXXXX		XXXX	XXXX		XXXX	xxxx	
XXXX XXXXX XXXXXX XXXXX XXXXX <th< td=""><td>XXXX XXXXX XXXXXX XXXXX XXXXX <th< td=""><td></td><td>****</td><td>XXXX</td><td></td><td></td><td></td><td></td></th<></td></th<>	XXXX XXXXX XXXXXX XXXXX XXXXX <th< td=""><td></td><td>****</td><td>XXXX</td><td></td><td></td><td></td><td></td></th<>		****	XXXX				
XXXX XXXXX XXXXXX XXXXX XXXXX <th< td=""><td>XXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	XXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX							
201207 20100 2000 2000 2000 201207 20100 2000 2000 2000 201207 20100 2000 2000	101/102 201 201 201 201 201 201 201 201 201							
XXXXX XXXXX XXXXX XXXXX XXXXX XXXXX XXXXXX	201207 2000 2000 2000 2000 2000			XXXX		XXXX	XXXX	
				XXXX			XXXX	
100000 100000 YOUNG YOUNG YOUNG								
			202.202	XXXX	1 1 1 1 1	2322	2222	
			אא אא אא אא אא אא אא אא אא אא אא אא אא אא	хх хх хх хх хх хх хх хх хх хх хх хх хх хх хх хх	xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx	xxxx xxxx xxxx xxxx xxxx xxxx xxxx xxxx	

Give the Name to Report.

🗟 Report Wizard	
Completing the Wizard Provide a name and click Finish to create the new report.	
Report name:	
Yearly_Sale	
Report summary:	
Data source: DSales	~
Connection string:	
Report type: Matrix	
Style: Forest	=
Drilldown: Not enabled	
Column: region	
Row: year, quarter, month_name	
Details: amount_sales	
Querv: SELECT regions.region.products.product_name.sales_fact.amount_sales.	~
Preview report	
Help < Back Next > Finish	Cancel

Click On Finish.

This is Design view of report.

BISP | MSBI Beginner's Guide

a Yearly_Sale - Microsoft Visual Studio	E 6 🛛
File Edit Wew Project Build Debug Format Report Test Tools Window Help	
□・Ja W X 2a 2a ヴ・ペート Debug N 24 27 12 10 1 + g	
□ _ ● [[] 100%	출 친 않: 0: 1 H 문 1 💁 🔧 🏅
	★ X Solution Explorer ★ ↓ × ×
E N E Design C. Preview	
Name Scope	Yearly_Sale
	Shared Data Sources
77 1 0.1	E Comestros
Yearly_Sale	Yearly_Sale.rdl
Research 1	
[quarter] [month name] [Sum(amount su	
	Properties 👻 🖡 🗙
	Barret
	Report
	21/2
	El 21 / El Carlor
	El 24 Sectoroundina El Backgroundina El BorderColor Black
	El 21 / El Carlor
🔲 Row Groups 🛄 Column Groups	Bardercondine BarderColor Black BorderStyle None BorderWidth 1pt Columns
[[matrix1_year • K] [matrix1_yeagon	21 3 32
	Backgroundine Backgroundine BorderSkyle None BorderSkyle None Colorna Colorna DorderSkyle S.Sn, 11n Margins 1n, 1n, 1n, 1r
C matrici year C matrici year C mat	Al BackgroundIne BorderColor Black BorderSyle None BorderWidth 1pt Columns InteractiveSize 0.5n, 11n Margins 1n, in, 1n, 1r PageSize 0.5n, 11n
C Carbon Store Car	Alexandree BorderColor Black BorderColor Black BorderSyle None BorderWidth 1pt BorderWidth 1pt Briterschveisze 8.5n, 11n PageSze 8.5n, 11n PageSze 8.5n, 11n
C matrici year C matrici year C mat	Backgroundine Backgroundine BonderColor Elack BonderStyle None GoderStyle None GoderStyle None Goderstyle S.Sn. 1in Margins 1in, 1in, 1in PageStee 8.Sn. 1in PageStee 8.Sn. 1in Assembles
C Carbon Store Car	Backgroundine Backgroundine BorderColor Elack BorderStyle None GoderStyle None GoderStyle None Goderstyle Start Goderstyle Start DorderStyle Start DorderStyle Start DorderStyle Start Start Sacherences Assembles Socherences
C Carbon Store Car	Al Backgroundine BorderColor Black BorderColor Black BorderVidth 1gt Columns BorderWidth 1gt Columns BirteractiveSize 6.5n, 11n Pergesize 0.5n, 11n
C Carbon Store Car	Backgroundine Backgroundine BorderColor Elack BorderStyle None GoderStyle None GoderStyle None Goderstyle Start Goderstyle Start DorderStyle Start DorderStyle Start DorderStyle Start Start Sacherences Assembles Socherences

Now Click on Preview Tab

	and the second s		The second se		今日 日本日田 田 第二		
riables 🗸 🗘 🛪	Yearly_Sale.rdl [Design]*	Start Page				 × Solution Explorer 	- 4
₩ 🗑 🖬 🗖	S Design R Preview						
ne Scope		£1 ≥ ≥ + @	a 🖪 🗐 🖓 - 100%	•	Find / Next	Yearly_Sale	ta Sources
						+ 🐉 DSales	
	Yearly_Sale					Carly Reports Searly	Colored.
			Press Contractory and Contractory and Contractory	2040000 0 A	nobs	Teary.	"Sale ro
	2001 Q1	February	2721500.49118042	823392.495941162	1046430.91091919		
		January	6747121.02877808	2637144.33453369	3103254,28039551		
		March	1943356.01095581	790172.91317749	916950.730484009		
	Q2	April	2676323.22366333	976852.78225708	1301089.12765503		
		June	5247173.77874756	1741551.54376221	2156594.26452637		
		May	3588873.81530762	1646498.81121826	1481620.1473999		
	Q3	August	3459580.26937866	1222258.03573608	2081949.10424805		
		July	4224376.31158447	1810402.92932129	2582765.42626953	Properties	-
		September	5171556.11172485	1966944.44647217	3027080.9826355	a representation of the second s	
	Q4	December	11924236.1496277	5430476.86322021	5550794.06854248	The second se	
		November	9707066.10308838	4834877.28820801	5488700.64331055	21 0	
	and the second	October	2064342.18521118	904859.045288086	1268173.54693604		
	2002 Q1	February	2029509.26367188	978603.571594238	518707.81451416		
		January	7250819.77597046	3791976.42285156	4045721.45611572		
)							
ariables 📯 Toolbox 🌉 Serve							
xt	2					- # ×	
						* 7 ^	

Analysis Services

SQL Server Analysis Services adds OLAP and <u>data mining</u> capabilities for SQL Server databases. The OLAP engine supports <u>MOLAP</u>, <u>ROLAP</u> and <u>HOLAP</u>

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 41

storage modes for data. An analysis service supports the <u>XML for</u> <u>Analysis</u> standard as the underlying communication protocol. The cube data can be accessed using <u>MDX</u> queries. Data mining specific functionality is exposed via the <u>DMX</u> query language. Analysis Services includes various algorithms - <u>Decision trees</u>, clustering algorithm, <u>Naive Bayes</u> algorithm, time series analysis, sequence clustering algorithm, linear and logistic <u>regression</u> analysis, and <u>neural networks</u> - for use in data mining.

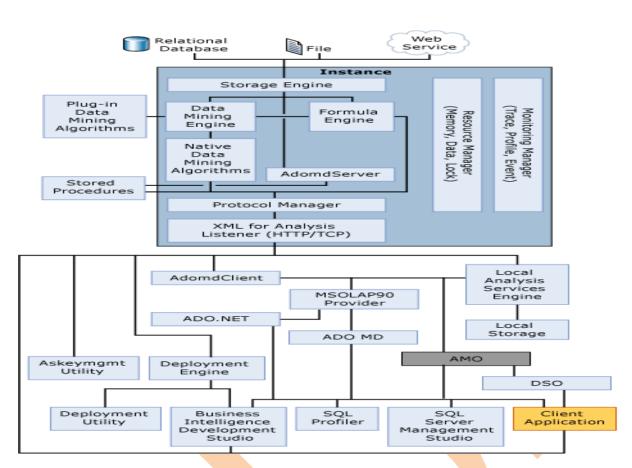
Analysis Services—Multidimensional Data provides fast, intuitive, top-down analysis of large quantities of data built on this unified data model, which can be delivered to users in multiple languages and currencies.

Analysis Services—Multidimensional Data works with data warehouses, data marts, production databases and operational data stores, supporting analysis of both historical and real time data.

Analysis Service Architecture

An Analysis Services instance runs as a stand-alone service and communication with the service occurs through XML for Analysis (XMLA), by using either HTTP or TCP. AMO is a layer between the user application and the Analysis Services instance. This layer provides access to Analysis Services administrative objects. AMO is a class library that takes commands from a client application and converts those commands into XMLA messages for the Analysis Services instance. AMO presents Analysis Services instance objects as classes to the end user application, with method members that run commands and property members that hold the data for the Analysis Services objects.

The following illustration shows the Analysis Services components architecture, including all major elements running within the Analysis Services instance and all user components that interact with the instance. The illustration also shows that the only way to access the instance is by using the XML for Analysis (XMLA) Listener, either by using HTTP or TCP.



How to create SSAS Cube?

You can take same business query.

Problem→ In a cube business user want sale of each region of every year , quarter and month.

Solution \rightarrow You can create a cube which is a stepped process. Create a cube by using cube building wizard.

1. Open a new project you can give name per project

	🍓 Te	st - Mi	icroso	ft Visua	Studio)				
	File	Edit	View	Project	Build	Debug	Test	Tools	Window	Hε
		New			•		Project.	C	trl+Shift+N	
•		Open			•	-	Web Sit	e S	5hift+Alt+N	
		Add			٠	•	File		Ctrl+N	

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 43

In the categories or project type just select Business Intelligence Project and the template should be the Analysis Service Project. And give a cube name....

New Project					? 🛛
Project types: Business Intelli ♥ Visual Basic ♥ Visual C# ♥ Visual C++ ₱ Other Project 1 ₱ Test Projects		Templates: Visual Studio installed tem Analysis Services Project Integration Services Conne Report Server Project Wiza Report Server Project My Templates Search Online Templates	impor itions P 🛃 Integ	.NET Framework 3.5 rt Analysis Services 2008 ration Services Project rt Model Project	v 111 🗐 3 Dat
Create a new Analy	ysis Services project				
Name:	Yearly_Sale				
Location:	C:\Documents and S	5ettings\Gaurav\My Documents\Vis	ual Studio 2008\Proj	ects 💌	Browse
Solution:	Create new Solution	· · · · · · · · · · · · · · · · · · ·	Create director	y for solution	
Solution Name:	Yearly_Sale				
				ОК	Cancel

You will get yearly_Sale in solution explorer.

First we will create a data sources from relational data



Select server name and Data source

BISP | MSBI Beginner's Guide

Connection	Manager 🔀	
Provider: Na	ive OLE DB\SQL Server Native Client 10.0	
Connection All	Server name: BISP2 Refresh Log on to the server Use Windows Authentication User Name: Password: Save my password Connect to a database Select or enter a database name: Sate Attach a database file:	
	Logical name:	
Test Connect	ion OK Cancel Help	

Check the connection and go to next step.

You can spacify windows user name and password for gatting datasource. You can choose current user option to connect data source.

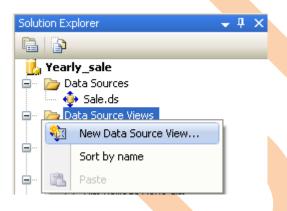
🌻 Data Source	Wizard	
	on Information e what Windows credentials Analysis Services will use to connect purce.	2
 Use a specific 	Windows user name and password	
User name:		
Password:		
🔘 Use the servi	te account	
🔘 Use the crede	entials of the current user	
🔘 Inherit		
	< Back Next > Finish >>	Cancel

Just give datasource name and click on finish.

BISP | MSBI Beginner's Guide

• Data Source Wizard			
Completing the Wizard Provide a name and then click Finis	h to create the new data	a source.	
Data source name:			
Sale			
Preview:			
Connection string: Provider=SQLNCLI10.1;Data Sour Catalog=Sale	ce=BISP2;Integrated Se	curity=SSPI;Initial	
< Ba	ick Next >	Finish	Cancel

The next step is Right click on data source view and click on New Data Source View.



Select Sale relational data sources click on Next.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 46

Data Source View Wizard Select a Data Source Select an existing relational data source or	create a new one.	
Relational data sources:	Data source prop Property Data Source Initial Catalog Integrated Se Provider	Value BISP2 Sale
Ner C Sack	w Data Source Next >	Advanced Finish >> Cancel

Select your fields those you want to include in analysis cube. There exist so many tables in the database; it is difficult to find the related tables. So with the help of data model you can find fact table easily.

Just select fact table and Click on Add Related Table \rightarrow then \rightarrow Click on Next

BISP | MSBI Beginner's Guide

47

Select Tables and Select objects from the view.	Views	e to be included in the data source	
Available objects: Name advertising_fact (bqaudit (dbo) BRIOBRG2 (dbo) BRIOCAT2 (dbo) BRIOGRP2 (dbo) BRIOOBJ2 (dbo)	Type A Table I Table I Table Table Table Table I Table I	periods_days (dbo)	Type Table Table Table Table Table Table
CB_CONCURRENC CB_VERSION (dbo) CB_VERSION (dbo) CTR_ATTRIBUTES DTR_INFO (dbo) CTN_HINTS (dbo) Filter: Show system objects	Table Table Table	>> Products (dbo)	Table

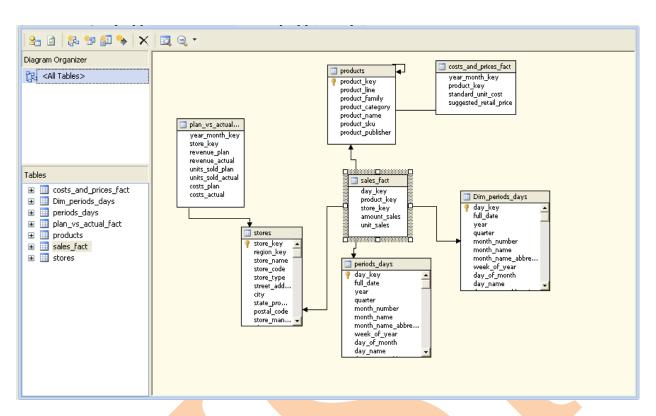
Data source view will comes in Solution Explorer



Below image shows data source view.

BISP | MSBI Beginner's Guide

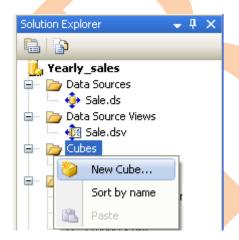
Presented By: Gaurav Shrivastava 48



The relationship between all tables is showing in view.

Create Cube

Now for creating new cube **Right Click on Cube Folder Click on New Cube.**



Here is one question. How would you like to create the cube?

You have created data source so I select use existing table.

BISP | MSBI Beginner's Guide

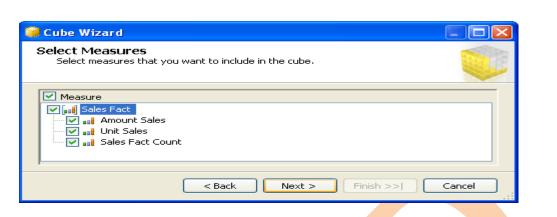
Presented By: Gaurav Shrivastava 49

💭 Cube Wizard	
Select Creation Method Cubes can be created by using existing tables, creating an empty cube, or generating tables in the data source.	
How would you like to create the cube?	
 Use existing tables 	
Create an empty cube	
 Generate tables in the data source 	
Template:	
(None)	~
Description:	
Create a cube based on one or more tables in a data source.	
< Back Next > Finish >>	Cancel

Click On Next.

Now you have all tables in window just select table which has measures.

😂 Cube Wizard	
Select Measure Group Tables Select a data source view or diagram and then select the U used for measure groups.	ables that will be
Data source view:	
Sale	✓
Measure group tables:	Suggest
<pre>stores stores stores stores_and_prices_fact Dim_periods_days periods_days Seck Next ></pre>	Finish >>1 Cancel
Click On Next.	
Select Measure Click on Next	
BISP MSBI Beginner's Guide	Presented By: Gaurav Shrivastava
©Business Intelligenc	e Solution Providers



Select Dimensions Click on Next.

Dimension Dimeriods Days	
Dim_periods_days Periods Days Periods Days Periods_days Products products Stores Stores	

Now Sale Cube is created

Cube Wizard	
Completing the Wizard Name the cube, review its structure, and then click Finish to save the cube.	Ĭ)
Cube name:	
Sale	
Preview:	
 Measure groups Sales Fact Amount Sales Unit Sales Sales Fact Count Dimensions Dim Periods Days Periods Days Products Stores 	
< Back Next > Finish	Cancel

Click on Finish.

Cube is created

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

	- 10- U			
Yearly_sales - Microsoft \				
	nid Debug Format Database Dat 7 - (2 -) Development - 🧟	a Source View Cube Test Tools Window Help		
Toolbox - 4 X	Sale.cube [Design]* Sale.dsv [De		Solution Explorer 🚽 🗸 🗙	
General				
	J · · · · · · · · · · · · · · · · · · ·	🎕 Calculations 🖉 KPIs 🕵 Actions 🖓 Partitions 🌓 Aggregati 🎯 Perspectives 🚳 Translations 🔍 Browser	Vearly_sales	
There are no usable controls in this group. Drag an item onto	🔁 🔂 🛍 🛍 🛄 🗉 😢 🎯	× + + ⊠ ⊠ ⊒, Q, + % +	Data Sources	
this text to add it to the toolbox.	Measures	Data Source View	Date Source Views	
	n jul Sales Fact		Sale.dv Cubes Cubes Cubes Dimensions Dimensions Dimersions Dime	
	Dimensions	store_type store_type stree_add	Properties • 4 × Dim_periods_days DataTable •	
	Sale ☑ IDin Periods Days ☑ Periods Days ☑ Periods Days ☑ Products ☑ Idin Stores	cty unit_sales product_sublisher potat_code store_man v log unit_sales product_sublisher log unit_sale	Data Detroids_days DataTable Data DataSource Sale (primary) Description Prined/lyAme Dim_periods_days Name Dim_periods_days Schema dbo TableType Table	
XVari 🔆 Tool 🚉 Ser				
Output		↓ ↓ ×	Name	
Show output from:	- B 4 B	R R R R R R R R R R R R R R R R R R R		
💫 Error List				
Ready				

You have many options to perform operation in cube as KPI's, Action, and Aggregation etc.

Next step is Build Cube and deploy it just **Right Click on** Project and go to properties. Select deployment then set target server where you want to deploy your Cube.

Yearly_sales P	roperty Pages		? 🗙
Configuration:	Active(Development)	 Platform: N/A 	Configuration Manager
😑 Configuratio	n Properties	Options	
Build		Processing Option	Default
- Debuggi		Transactional Deployment	
I Deploym	ient	Deployment Mode	Deploy Changes Only
		🗆 Target	
		Server	http://BISP2
		Database	Yearly_sales
		Server	
			ce to which the project will be deployed.
			OK Cancel Apply
			OK Cancel Apply

Integration Services

BISP | MSBI Beginner's Guide



Integration Services is a platform for building high performance data integration and workflow solutions, including extraction, transformation, and loading (ETL) operations for data warehousing.

Integration Services includes graphical tools and wizards for building and debugging packages; tasks for performing workflow functions such as FTP operations, SQL statement execution, and e-mail messaging; data sources and destinations for extracting and loading data; transformations for cleaning, aggregating, merging, and copying data; a management service, the Integration Services service, for administering Integration Services packages; and application programming interfaces (APIs) for programming the Integration Services object model.

Integration Services provides a rich set of built-in tasks, containers, transformations, and data adapters that support the development of business applications. Without writing a single line of code, you can create SSIS solutions that solve complex business problems using ETL and business intelligence, manage SQL Server databases, and copy SQL Server objects between instances of SQL Server.

SQL Server Integration Services (SSIS) is a set of tools and technologies that enable users and programmers to:

- Import data from a variety of sources into a database
- > Export data from a database to a variety of targets
- Perform data mining and warehousing tasks such as:

Extract subsets or samples of database content for further analysis (e.g., Forecasting)

Combine data in multiple databases or tables into a single database or table

Modify existing data using complex rules

SSIS has two broad groups of components

Server-Side

Extensions to the DBMS that enable advanced SSIS tasks (simpler tasks are supported on most DBMSs via standard drivers and SQL commands)

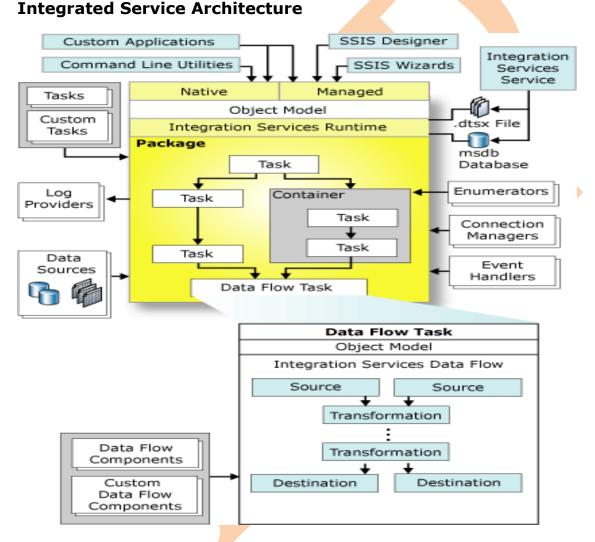
BISP | MSBI Beginner's Guide

Extensions are "invisible" to the user/programmer unless they're absent or incorrectly installed

Client-Side

Software components for both low-level and high-level integration tasks

Interfaces to data sources (e.g., spreadsheets, text files, and various DBMSs)



The best power full ETL tool is SSIS (SQL Server Integration Services). SSIS is a great tool for managing ETL, but in a complex process it's easy to have a lot of packages all referencing the same data source. Integration service is the basic services for keeping data into a single format. In real time environment always the data base are in different-different format because

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 54

may be the application program have different-different type of database and for performing any kind of operation we need to have data into a single format. With the help of SSIS we can perform this task easily

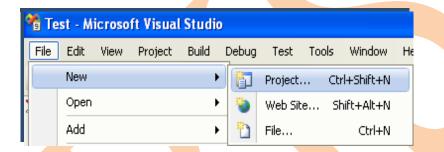
What is ETL?

ETL is the automated and auditable data acquisition process from source system that involves one or more sub processes of data extraction, data transportation, data transformation, data consolidation, data integration, data loading and data cleaning.

Here are the steps by which you can perform conversion of one type of database into required database. We create package to perform this task.

Creating Package in SSIS

1. Open a new project you can give name per project



In the categories or project type just select Business Intelligence Project and the template should be the Integration Service Connections Project. Integration Service Project first one is available with wizard and second one doesn't have wizard. Select one and give a name of package.

Here a integration Service Project named Sales_Analysis

New Project			? 🛛
Project types:		Templates:	.NET Framework 3.5 🛛 💌 🛅
Pusiness Intelli		Integration Services Connections P	port Analysis Services 2008 Dat egration Services Project port Model Project
Create a new SQL :	Server Integration Se	rvices project using a wizard.	
Name:	Sales_Analysis		
Location:	C:\Documents and S	iettings\Administrator\My Documents\Visual Studio 2	008\projects 🛛 Browse
Solution:	Create new Solution		
Solution Name:	Sales_Analysis		
			OK Cancel

Click on ok button. You will have next welcome wizard which little information.



Finally you have below wizard for performing task.

BISP | MSBI Beginner's Guide

📽 Sales_Analysis - Microsoft	Visual Studio	
File Edit View Project Buil	d Debug Data SSIS Tools Window Help	
) - (2 - 1) Development - 💀 🕾 😥 🖸 - 🖕	
Toolbox v 4 X	Package.dtsx [Design] Start Page	Solution Explorer 🚽 🦊 🗙
😑 Control Flow Items 🛛 🔼		
Revinter	🚏 Control Flow 🔱 Data Flow 👸 Event Handlers 🎇 Package Explorer	Sales_Analysis
Tor Loop Container		- Data Sources
Foreach Loop Container		— 📴 Data Source Views
Sequence Container		SSIS Packages
🔬 ActiveX Script Task		Package.dtsx Miscellaneous
🂫 Analysis Services Exec		- Pacona locas
Analysis Services Proc		
🛃 Bulk Insert Task		
😡 Data Flow Task		
🔨 Data Mining Query Task		
🛐 Data Profiling Task	To build the control flow in the package, drag objects from Control Flow Items in the Toolbox to the designer surface and then connect the objects by selection them and deaging their connections to another object.	
G Execute DTS 2000 Pac	To edit objects, double-click them.	
💫 Execute Package Task	To extract, transform, and load data, add a Data Flow task: and build its data flow.	
💭 Execute Process Task		
💁 Execute SQL Task		Properties 👻 🕂 🗙
🕥 File System Task		Package.dtsx •
🖷 FTP Task		
📙 Message Queue Task		Location
🕞 Script Task		File Name Package.dtsx
🖼 Send Mail Task	U. Connection Managers	Full Path C:\Documents and Se
🛃 Transfer Database Task	(FAA69F57-C029-4F4A-9585-40E3E800211A)	
强 Transfer Error Messag 🗸		
Server Explorer Toolbox		
	15	
Output	▲ 1 ×	
Show output from: Build	2 👌 🖗 🛸 🖬 💷	
		File Name
		File Name
<		
🔀 Error List		

SSIS environment is set.

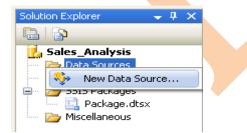
Problem

Ready

In one XYZ organization there are many stores in different regions. They use different desktop applications some with Access database and other in sql server database. Business user wants to perform some analysis now you need to convert all data base in single format. You need to convert all data base in Sql database format.

Solution

The First step is to create data source. In the solution explorer right click on data source and make new data source.



To connect with data source you need to define data connection. Click new button to create database connection.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

57

Ita Source Wizard ect how to define the connection You can select from a number of ways in whi connection string.	
Freate a data source based on an existing or	r new connection
Data connections:	Data connection properties:
	Property Value
Create a data source based on another obje	ct
A valid connection must be selected.	
< Back	Next > Finish >> Cancel

Select provider of respective database and then give absolute path of database file.

Connection Manager
Provider: Native OLE DB\Microsoft Office 12.0 Access Database Engine OLE DB Provider
OLE DB Provider: Connection Enter a server or file name: Server or file name: C:\DataBase\BI_Sales.mdb Location:
Connection Manager
Test connection succeeded.
ОК
Blank password Initial catalog: Test Connection OK Cancel Help
BISP MSBI Beginner's GuidePresented By: Gaurav Shrivastava58
©Business Intelligence Solution Providers

🌻 Data Source Wizard	
Select how to define the connectio You can select from a number of ways in whic connection string.	
 Create a data source based on an existing or it 	new connection
Data connections:	Data connection properties:
C:\DataBase\BI_Sales.mdb	Property Value
	Data Source C:\DataBase\BI_Sales Provider Microsoft.ACE.OLEDB.1
Create a data source based on another object	New Delete
< Back	Next > Finish >> Cancel

Data source wizard showing data source name. Click on finish....

Data Source Wizard	
Completing the Wizard Provide a name and then click Finish to create the new data source.	Ĩ
Data source name:	
BI Sales	
Preview:	
Connection string:	
Provider=Microsoft.ACE.OLEDB.12.0;Data Source=C:\DataBase\BI_Sales.mdl	D
< Back Next > Finish	Cancel

Solution explorer shows "BI_Sales" in data source.

BISP | MSBI Beginner's Guide

😤 Sales_Analysis - Microsoft	/isual Studio		
File Edit View Project Build	Debug Data SSIS Tools Window Help		
	- (2 -) Development - (2 2 2 2 2 -)		
Toolbox	Package.dtsx [Design]* Stat Page		rer - Sales 👻 🎙 🗙
Pointer	🚏 Control Flow 🔱 Data Flow 🙀 Event Handlers 🏗 Package Explorer		
Tor Loop Container		Sales_/	
D Foreach Loop Container		Data	a sources Data Source.ds
Sequence Container			BI Sales.ds
ActiveX Script Task			a Source Views
Analysis Services Exec		😑 🗁 SSIS	i Packages Package.dtsx
Analysis Services Proc			ellaneous
Bulk Insert Task			
U Data Flow Task			
🔆 Data Mining Query Task			
Data Profiling Task	To build the control flow in the package, drag objects from Control Flow Items in the Toolbox to the designer surface		
Execute DTS 2000 Pac	and then connect the objects by selecting them and dragging their connections to another object. To edit objects, double-click them.		
Execute Package Task	To extract, transform, and load data, add a Data Flow task and build its data flow.		
T Execute Process Task			
😫 Execute SQL Task		Properties	→ ₽ ×
Tile System Task		Sales_Analy	vsis 🗸
🖷 FTP Task		81 2↓ □	1
Hessage Queue Task		E Location	3
🕞 Script Task		FullPath	C:\Documents and S
Send Mail Task	U Connection Managers	Name	Sales_Analysis
🛃 Transfer Database Task	(FAA69F57-C029-4F4A-9585-40E3E800211A)		
ᡀ Transfer Error Messag			
Tenerfor John Tack			
Server Explorer Toolbox	L		
Output	• t x		
Show output from: Build			
		Name	
	×	Specifies the r	name of the project.
<			
📸 Error List			
Ready			

Right Click in connection managers and create new connection for data source.

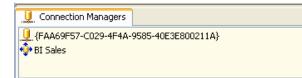
🔏 Sales_Analysis - Microsoft	Visual Studio					
File Edit View Project Buil	d Debug Data SSIS Tools Window Help					
🔚 • 🖬 🖉 🕹 🖎 🗠) - (~ - 🕨 Development 🕒 🖏 🚰 🎌 💽 🖬 •	-				
Toolbox 🗸 🖡 🗙	Package.dtsx [Design]* Start Page			▼ ×	Solution Explorer	- 4 ×
Control Flow Items Forter Forter Foreach Loop Container Foreach Loop Container Advect Script Task Analysis Services Proc Kother Task Data Flow Task Cota Aning Query Task	हिं ^{co} Control Flow 🕼 Data Flow 🛐 Event Handlers 👔	Pad	age Explorer New OLE DB Connection New File Tile Connection New ADO.NET Connection		Sales Analysis Data Sources Data Sources Data Source Still Sales Analysis Data Source Still Sales Analysis Miscellaneous	ce.ds ls liews s dtsx
Data Profiling Task Data Profiling Task Data Profiling Task Execute DTS 2000 Pac Execute Package Task Execute Process Task	To build the contro and then Tı		New Analysis Services Connection New File Connection New Connection From Data Source New Connection	 Items in the Toolbox to the designer surface these connections to another object. pers. task, and build its data flow. 		
N Execute SQL Task		ж	Cut		Properties	+ 4 ×
Tile System Task FTP Task Message Queue Task Script Task		6 in	Copy Paste Delete		Package Package	-
Send Mail Task	U Connection Managers		Rename		ForceExecut False	
Transfer Database Task Transfer Error Messag	. (FAA69F57-C029-4F4A-9585-40E3E800211A)	•	Properties		Identification CreationDate 7/12/20 CreatorCom; GAURA CreatorName GAURA Description	V-9146A3
Output				≁ ‡ ×	ID {B7E3	65A0-65/
Show output from: Build	- B - S - K				Name Packag	e 💌
					Name Specifies the name of the	ne object.
Berror List		_				

Select data source which will use for making package.

BISP | MSBI Beginner's Guide

🌲 Select Data Source	×
Select one or more data sources to use in the p Available Data Sources:	ackage.
Data Source BI Sales	Description: ConnectionString: Provider=Microsoft.4
	Browse
	OK Cancel Help

You can check that it comes in connection Managers.



Now go to data flow tab. Drag and drop one "OLEDB Source" database of "data flow sources" category from toolbox. Drag and drop one more "OLEDB Source" database of "data flow destinations" category from toolbox.

😚 Sales_Analysis - Microsoft Visual Studio		
File Edit View Project Build Debug Data SSIS Tools Window Help		
👔 • 🔜 🍠 🐇 🖧 🖄 🖉 - 🔍 - 🕨 Development 🔹 🥺 😤 🌪 🛃 🖸 • 💂		
Toobox - 4 × Package.dtsx [Design]* Start Page	- ×	Solution Explorer 🛛 👻 🖡 🗙
Data Flow Sources		
		🛃 Sales_Analysis
🕵 ADO NET Source Data Flow Task: 🔱 Data Flow Task	~	🖃 🗁 Data Sources
Le Excel Source		 Data Source.ds BI Sales.ds
Ret File Source		- 🗁 Data Source Views
👂 OLE DB Source		🖃 🗁 SSIS Packages
b Mill Saura		- 🔜 Package.dtsx
Data Flow Transform		
Data for Destinations		
Pointer		
ADD NET Destination ADD NET Destination Destination Destination		
V Data mining noder mark		
LostaReader Destination		
C Dimension Processing		
🐍 Excel Destination		Properties 🗸 🖡 🗙
		OLE DB Source Data Flow Compt -
General Contraction General Contraction		2↓ □
Raw File Destination		ContactInfo OLE DB Source;Mi 📥
Recordset Destination		Description OLE DB Source
P SOL Server Compact D		Identification component "OLE [
SQL Server Destination		IsDefaultLoc True
E General M		LocaleID English (United St. Name OLE DB Source V
Server Explorer 2 Toobox		
Output	↓ ₽ ×	Show Editor, Show Advanced Editor
Show output from: Build 🔄 🚱 🔄 🛼 😨		
	~	Name Specifies the name of the
	×	component.
	2	
Bror list		

Select green arrow of "OLEDB Source" adds to "OLEDB Destination".

BISP | MSBI Beginner's Guide

📽 Sales_Analysis - Microsoft		
	d Debug Data Format SSIS Tools Window Help	
	- C - I Development 🔄 🖏 😤 🎦 - 👼	
Toolbox 👻 🕂 🗙	Package.dtsx [Design]* Start Page	× Solution Explorer • 🗸 🗸 ×
😑 Data Flow Sources	🚰 Control Flow 🛃 Data Flow 🙀 Event Handlers 🔓 Package Explorer	
R Pointer		Jales_Analysis
ADO NET Source	Data Flow Task:	😑 🗁 Data Sources
Contraction Contraction Contraction		 Data Source.ds BI Sales.ds
Flat File Source		- Data Source Views
Ge OLE DB Source		🖃 🗁 SSIS Packages
Raw File Source	OLE D8 Ø	Package.dtsx
XML Source Data Flow Transform		- Miscellaneous
Data Flow Destinations		
Pointer		
ADO NET Destination		
A Data Mining Model Trai	¥.	
LataReader Destination	Cle DB Destination	
Dimension Processing	- Descritation	
Excel Destination		Properties v 4 ×
A Flat File Destination		Data Flow Task Task
OLE DB Destination		₩ 2↓ 🖾
🞯 Partition Processing		
🖏 Raw File Destination		ForcedExect. 0
III Recordset Destination	I Constant Management	ForceExecut False
C SQL Server Compact D	U Connection Managers	Identification
SQL Server Destination		Description Data Flow Task
🖻 General 💌	20102	ID (F33EF51D-D752-
Server Explorer 📯 Toolbox		Name Data Flow Task
Output	- A	× Edit Breakpoints
Show output from: Build		
		Name
		Specifies the name of the object.
<	5	
📸 Error List		
Ready		

Right click on "OLEDB Source" go to edit.

Data Flow Task:	a Flow 🛛 📴 Event Handlers 🛛 🏪 Package Explore			
	20 Data Flow Task			
	Variables E de Variables E dt, Advaste Add Path Add Path Add Path Cot Copy Paste Delete Rename E roperties Froperties	OLE DB Designation •		
	e for mapping.			
	ntor es used by a data flow to obtain data from ar	y OLE DB provider.		
Connection Manager Columns Fror Output	Specify an OLE DB connection manager, a access mode. If using the SQL command ar the query or by using Query Builder.	data source, or a data source view, ccess mode, specify the SQL comma	and select the data nd either by typing	
	access mode. If using the SQL command a	data source, or a data source view, cess mode, specify the SQL comma	nd either by typing	
Columns	access mode. If using the SQL command a the query or by using Query Builder. OLE DB connection manager:	ccess mode, specify the SQL comma	nd either by typing	
Columns	access mode. If using the SQL command a the query or by using Query Builder. OLE DB connection manager: [BI Sales Data access mode: Table or view	ccess mode, specify the SQL comma	nd either by typing	
Columns	access mode. If using the SQL command a the query by using Query Builder. OLE DB connection manager: BI Sales Data access mode:	ccess mode, specify the SQL comma	nd either by typing	

Right click in connection manager select "New OLEDB Connection".

			- ×
Package.dtsx [Design]* Start Page			• *
🚰 Control Flow 👹 Data Flow 🔄 Event Handlers 🎦 Package Explorer			
Data Flow Task: 🔱 Data Flow Task			×
OLE DB Source	<u> </u>	New OLE DB Connection	
		New Elat File Connection	
		New ADO.NET Connection	
		New Analysis Services Connection	
		New File Connection	
		New Connection From Data Source	
		New Connection	
	Ж	Cut	
		Copy	
	625	Paste	
	\times	Delete	
	-	Rename	
U. (FAA69F57-C029-4F4A-9585-40E3E800211A) BI Sales		Properties	
* ST 29les			

Add new blank database in which you want to get result data.

Configure OLE DB Connection Manage To create a connection manager based on prev data connection, and then click OK. To create a	viously defined connection information, select a	
Data connections: C:\DataBase\BI_Sales.mdb Data Connection	Data connection properties: Property Value Provider Microsoft.ACE.OLEDB.1 User ID Administrator	
	New Delete	

Click on New.

Select server name and destination database ("BI_Sales_Destination").

Provider: N. Connection	n Manager	
All	Use SQL Server Authentication User name: Password: Save my password Connect to a database Select or enter a database name: BI_Sales_Destination Attach a database file:	
Connection Manag		
Test connectio	on succeeded.	ж
Test Conne	iction OK Cancel Help	

Click OK.

Select destination database and click ok.

BISP | MSBI Beginner's Guide

Configure OLE DB Connection M	anager 📃 🗖 🔀	
	n previously defined connection information, select a eate a new connection manager, click New.	
Data connections:	Data connection properties:	
C:\DataBase\BI_Sales.mdb BISP-MSB.BI_Sales_Destination	Property Value Data Source BISP Initial Catalog BI_Sales_Destination Integrated Se SSPI Provider SQLNCLI10.1	
	New Delete OK Cancel	
estination data bas	se comes in connection manager.	
ackage.dtsx [Design]* Start Page	• ×	
🗝 Control Flow 😡 Data Flow 🛃 Event Handlers 🎽		
Data Flow Task: UB Data Flow Task		
OLE DB Source		
	OLE DB OLE DB	
Connection Managers		
	-MSBLBI_Sales_Destination	
	-MSBLBI_Sales_Destination_	
ght click on destin	ation database select edit.	- ×
(reasoper-coze-4P4A-9686-40E3E000211A)	ation database select edit.	• ×
(PAAGOPS7-CO29-4P4A-9885-40E3E800211A) PBT Sales Package.dtsx [Design]* Start Page ** Control Flow U Data Flow E Event H	antion database select edit.	
I (FAA69F57-C029-4F4A-9895-40E3E000211A)	antion database select edit.	
Package.dtsx [Design]* Start Page	antion database select edit.	
PAA69F57-C029-4FPA-9585-40E3E800211A1 Ight click on destin Agenerative states Package.dtsx [Design]* Start Page *** Control Flow Data Flow Data Flow Task:	antion database select edit.	
Impacement Impacement Impacement Impacement Impackage.dtsx [Design]* Start Page ** Control Flow Impackage.dtsx [Design]* Start Page	antion database select edit.	
Impacement - Cooper-Impace segment - Cooper-Imp	antion database select edit.	
Impacement - Cooper-Impace segment - Cooper-Imp	aation database select edit.	
PAA69F57-C029-4FPA-9585-40E3E800211A1 Ight click on destin Agenerative states Package.dtsx [Design]* Start Page *** Control Flow Data Flow Data Flow Task:	ardion database select edit.	
PAA69F57-C029-4FPA-9585-40E3E800211A1 Ight click on destin Agenerative states Package.dtsx [Design]* Start Page *** Control Flow Data Flow Data Flow Task:	action database select edit.	
Impacement Impacement Ight click on destin Ight click on destin Package.dtsx [Design]* Start Page Impackage.dtsx [Design]* Impackage.dt	ardiers Package Explorer Task	
Impacement Impacement Ight click on destin Ight click on destin Package.dtsx [Design]* Start Page Impackage.dtsx [Design]* Impackage.dt	andlers Package Explorer Tak	
PAA69F57-C029-4FPA-9585-40E3E800211A1 Ight click on destin Agenerative states Package.dtsx [Design]* Start Page *** Control Flow Data Flow Data Flow Task:	adion database select edit.	
Impacement - coord-represented as a coordination of the	adion database select edit.	
Image: Provide a construction Image: Provide a construction </td <td>adion database select edit.</td> <td></td>	adion database select edit.	
Connection Managers (CAA69F57-C029-4F4A-9585-40E3E800211A)	ation database select edit.	
Connection Managers	ation database select edit.	

Select table from destination database for mapping.

onfigure the properti	es used to insert data into a relational database using an OLE DB provider.							
Connection Manager Mappings Error Output	Specify an OLE DB connection manager, a data source, or a data source view, and select the data access mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder. For fast-load data access, set the table update options.							
	OLE DB connection manager:							
	BISP-MSBI.BI_Sales_Destination	New						
	Data access mode:							
	Table or view							
	Name of the table or the view:							
	🖻 [dbo].[Sales] 🗸 🗸	New						
:	Preview							
Map the columns (on the Mappings page.							

Go to mappings and map both tables.

Connection Manager Mappings Error Output	Available Input C Name Period_ID Market_ID Product_ID Store_ID Promotion_ID Quantity Amount Revenue	Available Destin Name Period_ID Market_ID Product_ID Store_ID Promotion_ID Quantity Amount Revenue	
	Input Column Period_ID Market_ID Product_ID Store_ID Promotion_ID Quantity Amount Revenue	Destination Column Period_ID Market_ID Store_ID Product_ID Promotion_ID Quantity Amount Revenue	
ck ok.		OK Cancel Help	

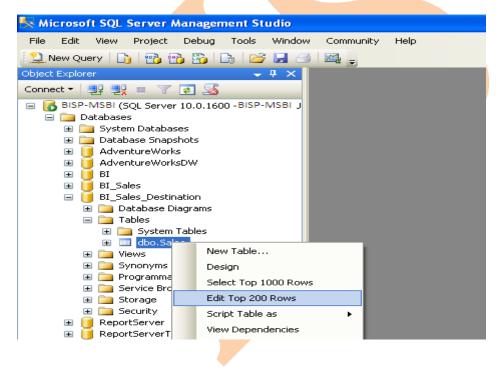
Now run the package. You can see how many rows have converted from source database to destination database.

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava 65

🖥 Sales_Analysis (Running) -	Microsoft Visual Studio				
	l Debug Data Format SSIS T				
🗊 - 🗶 🌒 👗 🖻 🖻 🧐	👻 🕶 🔸 🕨 Development 👻 🗟	🖻 🋠 🛃 🖬 📲 🖕 🚺 🖬 🖬 🕼	👒 🗔 - 🖕		
Package.dtsx [Design]					Solution Explorer 🚽 🗸 🗸
🚰 Control Flow 😕 Data Flow	🧕 Event Handlers 📙 Package Expl	vrer 🍦 Progress			
Data Flow Task:	Data Flow Task	1		~	Sales_Analysis
	urca 116 rows				Pota Source .ds Pota Source View Stales.ds Dota Source View StiS Packages Package.dtsx Miscellaneous
		Cestration			
U Connection Managers					
Quantition Managers Granection Managers GrassFr57-0029-4F4A-9585-408 Dess Sales BISP-MSBL8L_Sales_Destinatio	E36800211A)			 	
U {FAA69F57-C029-4F4A-9585-400 BI Sales U BISP-MISBI.BI_Sales_Destination	E3E800211A) on ick here to switch to design mode, or sele				
U {FAA69F57-C029-4F4A-9585-400 BI Sales U BISP-MISBI.BI_Sales_Destination	on	t Stop Debugging from the Debug menu.	Call Stack		- # >
(FAA69F57-C029-4F4A-9585-40t B Sales BISP-MSBI.BI_Sales_Destinati Package execution completed. Cli	on	t Stop Debugging from the Debug menu.	Coll Stack		- 4) Lang d
(FAA69F57-C029-4F4A-9585-400 BI Sales JEI Sales JEISP-MSBI.BI_Sales_Destinatio Package execution completed. Cli witos	on	t Stop Debugging from the Debug menu.			

Open database from management studio.



You can check that converted rows filled in destination database.

BISP | MSBI Beginner's Guide

🍢 Microsoft SQL Server Management Studio

File Edit View Project Debug Query Designer Tools Window Community Help

일 New Query 🛯 🔒 📸 😘 😘 🕞 🎽 🗐 🖓 ᇕ

😢 🏢 🙉 🚪 Change Type 🔹 📍 🎯 🚒

Object Explorer 🗸 🗸 🗙	GAURAY-9146A3n - dbo.Sales						C Properties 🗸 🖡 🕽			
Connect 🔹 🛃 🔳 🍸 🍒		Period_ID	Market_ID	Product_ID	Store_ID	Promotion_ID	Quantity	Amount	Revenue	[Qry] Query1.dtq •
a 🐻 BISP-MSBI (SQL Server 10.0.1600 - BISP-MSBI	•	13	1	1	7	7	5696	989990	45800	21
🖃 🚞 Databases		13	2	2	8	8	6555	995000	45600	E (Identity)
⊞		14	3	3	9	9	5666	989400	65680	(Name) Query1.dtg
B		14	4	4	10	10	6600	544440	89560	Database Name BI_Sales_Destination
		14	5	0	1	1	6650	454887	48500	Server Name gaurav-9146a39e
		14	6	1	2	2	6560	878998	56500	Query Designer
		15	7	2	3	3	8950	789800	46560	Destination Table Distinct Values No
		15	8	3	4	4	5690	989500	45600	GROUP BY Exten <none></none>
🖃 🧰 Tables		16	1	4	5	5	5850	989450	85600	Output All Colum No
🗉 🧰 System Tables		16	2	0	6	6	5620	569800	96500	Query Parameter No parameters have been
dbo.Sales Jiews		17	3	1	7	7	2320	898560	56990	SQL Comment ***** Script for SelectTop
E D Synonyms		17	4	2	8	8	2323	656580	87900	Top Specification Yes
🛅 Programmability				3						
🗉 🧰 Service Broker		18	5		9	9	4560	565800	98560	
🗄 🧰 Storage		18	6	4	10	10	6660	989800	65680	
E is Security E for the security		19	7	0	1	1	6565	989400	56500	
ReportServerTempDB		19	8	1	2	2	9666	798900	56500	
🗉 🧻 Sales		20	1	2	3	3	9998	988000	99900	
⊕		20	2	3	4	4	9866	989890	98960	
		21	3	4	5	5	8500	989500	65890	
E 📄 Management		21	4	0	6	6	9999	695900	98950	
🗉 🛗 SQL Server Agent		22	5	1	7	7	9950	989366	56590	
BISP-MSBI(Microsoft Analysis Server 10.0.1600		22	6	2	8	8	6585	965659	98650	
		23	7	3	9	9	5620	985865	98900	
a a resembles		23	8	4	10	10	3569	985600	45680	
		24	1	0	1	1	9865	995500	98960	
		1	1			- l'			Y	(Identity)
	<u>×</u>	4 h	tite b bl bm							
۲ 👘 ک	N ((1 ol	f 116 🕨 🔰 🌬							

Ready



FAQ's

BISP | MSBI Beginner's Guide

Presented By: Gaurav Shrivastava

67

_ • ×

Question 1: How to migrate SQL Server 2008 Reporting Services to another computer?

Answer:

The migration process for Reporting Services includes manual and automated steps. The following tasks are part of a report server migration:

- 1. Back up database, application, and configuration files.
- 2. Back up the encryption key.
- 3. Install a new instance of SQL Server 2008. If you are using the same hardware, you can install SQL Server 2008 side-by-side your existing SQL Server 2000 or 2005 installation. Be aware that if you do this, you might need to install SQL Server 2008 as a named instance.
- 4. Move the report server database and other application files from your SQL Server 2000 or 2005 installation to your new SQL Server 2008 installation.
- 5. Move any custom application files to the new installation.
- 6. Configure the report server.
- 7. Edit RSReportServer.config to include any custom settings from your previous installation.
- 8. Optionally, configure custom Access Control Lists (ACLs) for the new Reporting Services Windows service group.
- 9. Test your installation.
- 10.Remove unused applications and tools after you have confirmed that the new instance is fully operational.

If you are reusing an existing report server database that you created in a previous installation, be aware that there are restrictions on the editions of SQL Server you use to host the report server database.

Question 2: How to combine connecting string via parameter?

Answer:

You can include parameter reference in the data source connection string and allow the user to choose a data source for the report. For example, with an expression-based connection string, a user who is running a sales report can select a data source for a particular county before running the report.

The following example illustrates the use of a data source expression in a SQL Server connection string.

="Data Source=" & Parameters! BISP2.Value & "; initial catalog=Sale"

Question 3: Error of EXECUTE permission denied on object 'xp_sqlagent_notify'.

Problem:

In some special cases, you may receive the following error when trying to select the option execution from a report:

EXECUTE permission denied on object 'xp_sqlagent_notify', database '######', schema '###'.

Cause:

Usually, this error is caused by the user missing the "RSExecRole" role in the Master and MSDB system databases.

Solution:

Reporting Services uses a predefined database role called "RSExecRole" to grant report server permissions to the report server database. If you get the error mentioned above, try to create and provision the "RSExecRole" role in Master and MSDB system database.

Question 4: How to enable anonymous access to Report Server, and is there any security consideration?

Answer:

Please note that when using anonymous access, every person accesses the reports under the anonymous user context, and no one will have rights to administer Reporting Services through Report Manager. This is the reason why it is not recommended to use anonymous access in Reporting Services.

In order to differentiate between users, we need to either disable anonymous access or use a custom security extension. We have a sample using Forms Authentication:

Using Forms Authentication in Reporting Services

In some special situations, it may be necessary to use anonymous access. For security considerations, we can use the steps as below:

- 1. Add the anonymous user to the System User role
- 2. Create an Item-level role with all of the tasks you want this user to be able to use, and then assign the anonymous user to that role at the root level.
- 3. Check permissions for the anonymous user on folders that SRS uses: For example:

C:\Program Files\Microsoft SQL Server\MSSQL\Reporting Services (and subfolders)

C:\<windows>\Microsoft.NET\Framework\v1.1.4322\Temporary

ASP.NET Files

The temp folder for the anonymous user

Question 5: What is Query parameter in SSRS?

Answer:

Query parameter is mentioned in the query of the data sources that are to be included into the SQL Script where clause of the SQL that can accept parameter. Query parameters being with the symbol @. The name should not contain space, numbers and begin with the numbers.

Question 6: What is Matrix in SSRS?

Answer:

Matrix is a data region linked to a report set. Matrix allows us to create Cross steps reports with the report variable displaying on rows & columns. It allows us to drag & drop fields into it.

Question 7: What do we mean by Data Flow in SSIS? Answer:

Data Flow is nothing but the flow of data from corresponding source to record destination. In this process the data transformation make changes to the data to make it ready for the data warehouse.

Question 8: How do you add Column in Dimension and fact Table?

Answer:

• Add the columns to the source tables (and related views)

BISP | MSBI Beginner's Guide

- Update the DSV in your cube by hitting the refresh button in the DSV view
- Modify each dimension and add the new columns. Configure or add them to user hierarchies as needed.
- If you process the dimension to check your changes, please note that this will cause the related measure groups to need to be processed.
- For the measure group, add the new measure to the measure group from the Cube Structure view.
- Go to the partitions tab and update all of the partitions for the measure group so that the query contains the new column. This measure group will not process unless you update this.
- Deploy and process your changes

BISP | MSBI Beginner's Guide

