Installing SQL Server 2008 R2 on Windows 2008

Stand-alone and Cluster

Installing SQL Server 2008 Stand-alone and Cluster

CONTENTS

Installing SQL Server 2008 Stand-alone and Cluster

INTRODUCTION

The purpose of this document is to step the DBA thru the installation process of SQL 2008 stand-alone or clustered environments. The core of the document is to detail XXYCOMPANY specific procedures to be performed as part to the installation.

NOTES:

1. There are additional points to check during a clustered install, follow the CLUSTER INSTALL – INFORMATION, CLUSTER INSTALLATION STEPS AND CLUSTER POST INSTALLATION STEPS sections for details on the clustered installs.

Corporate SQL Database Software Information:

Version Information (Currently installing):

SQL 2008 R2 Standard Edition (64Bit), all features except Reporting Server. Up to 4 CPU's supported with SP1 as of the last update to this document.

Second choice. Verify with SQL Manager:
SQL 2008 Enterprise Edition (64 Bit) to support 3+ Cluster or more than 4 CPU's

License Options: verify with SQL Manager

SQL 2008 Download site and other information

http://www.microsoft.com/sqlserver/2008/en/us/standard.aspx

Client tools: Microsoft® SQL Server® 2008 Management Studio Express

Editions

- Enterprise
- Standard
- Workgroup
- Web
- Express
- Compact
- Developer
- Compare Edition Features

2. DIFFERENCES

a. Install GUI is step-down, vs popup windows
b. MSSQL10.MSSQLSERVER\MSSQL, MSSRS10.MSSQLSERVER\Reporting Services, MSAS10.MSSQLSERVER\Olap are new standard install paths

Installing SQL Server 2008 Stand-alone and Cluster

STAND ALONE INSTALLATION STEPS

1. Get connectivity to machine.

- ☐ You should be able to use Remote Desktop. **Login as XXYCOMPANY_corp\sqlsa** and double check that this account has full administrative privilege on the host(s) where SQL will be installed. Also, verify that your AD account is a member of XXYCOMPANY_corp\sdc_dba
- ☐ **On a cluster,** the DBA should connect to the Cluster's Active node, for example, if installing on new cluster ADS-A01/A02, the DBA would login to ADS-A01
- ☐ **Verify that the server can be re-started before starting the install.**

3. Ensure O/S compatibility with server administrators

SQL Server 2008 Enterprise Edition is required for Clusters with more than 2 nodes.

- SQL Server 2008, 2005 and 2000 Enterprise Edition and Standard Edition can run on the following operating systems:
  - Windows Server™ 2003, Enterprise Edition Service Pack 1 or 2
  - Windows Server 2008R2, Standard or Enterprise Edition
- SQL 2008 install will run pre-installation checks; any software component listed must first be installed by DSG before continuing with the SQL install.

3. Verify LOCAL ADMINISTRATOR ACCOUNTS

- ☐ XXYCOMPANY_CORP\sqlsa and XXYCOMPANY_CORP\sdc_dba

4. Verify that there is enough disk space for SQL Binaries

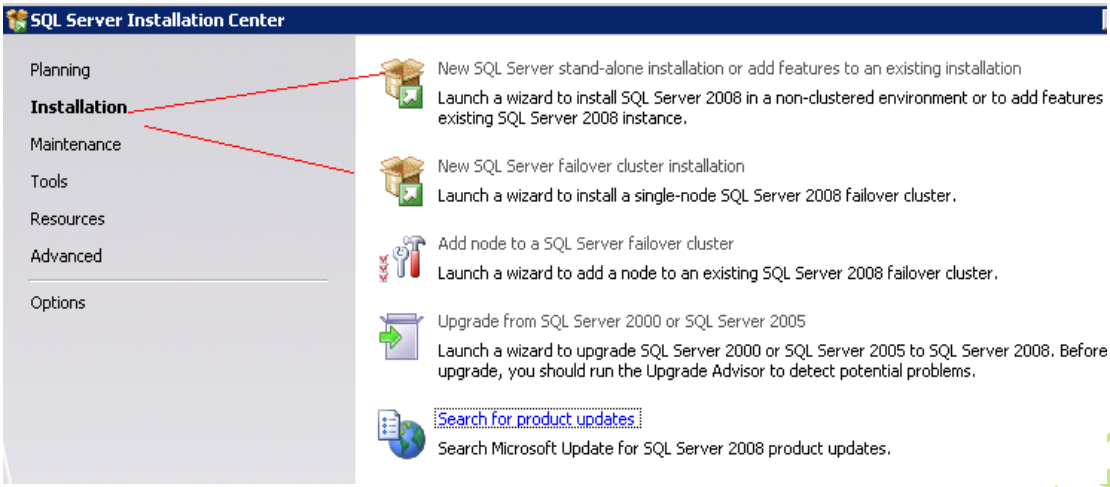
- ☐ C: must be a minimum of 30GB in size, M: or data 300GB, O: or log drive 100GB, R: or tempdb 100GB

5. **Copy Installation Software from**
   - ☐ \\ DBA_WORKSPACE\

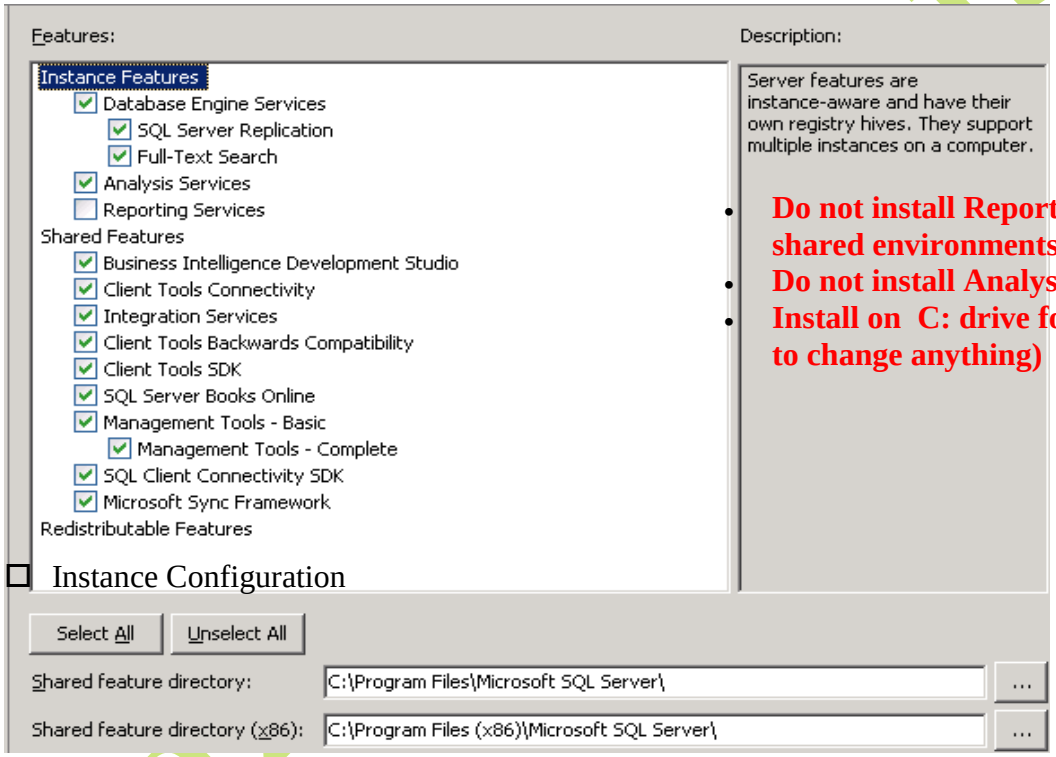
6. Install Software by setup.exe in the "Installlation Software" folder.

This is a STANDALONE INSTALL. Cluster install directions are under CLUSTER INSTALL

Installing SQL Server 2008 Stand-alone and Cluster



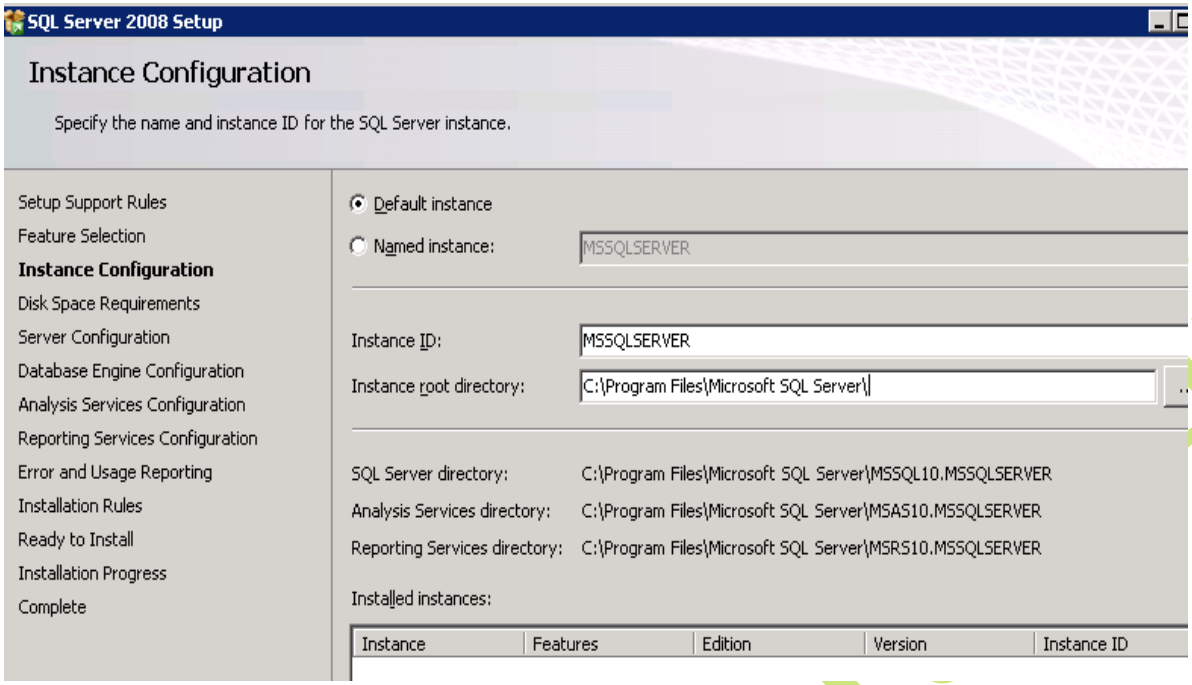
- ☐ Features configuration



- ☐ Instance Configuration

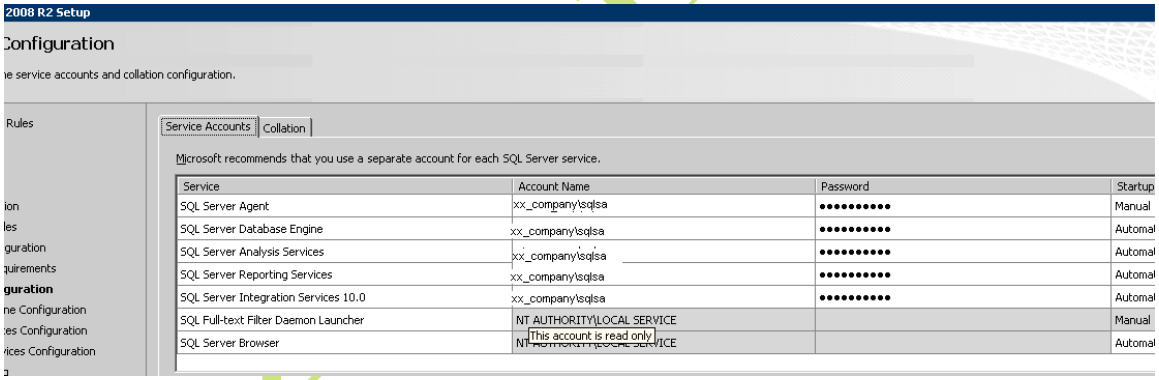
- **Do not install Reporting Services (we have shared environments for 2005 Reporting)**
- **Do not install Analysis Services unless.**
- **Install on C: drive for ALL servers (no need to change anything)**

Installing SQL Server 2008 Stand-alone and Cluster



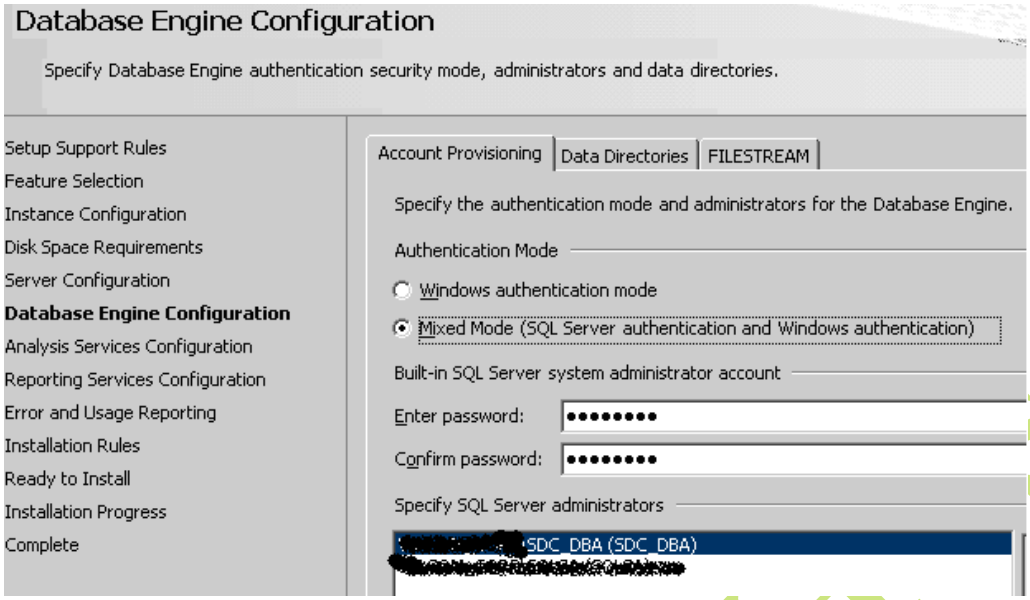
☐ Server Configuration

For SERVICE accounts, select ‘same acct for all svcs’ and use XXYCOMPANY_corp\sqlsa

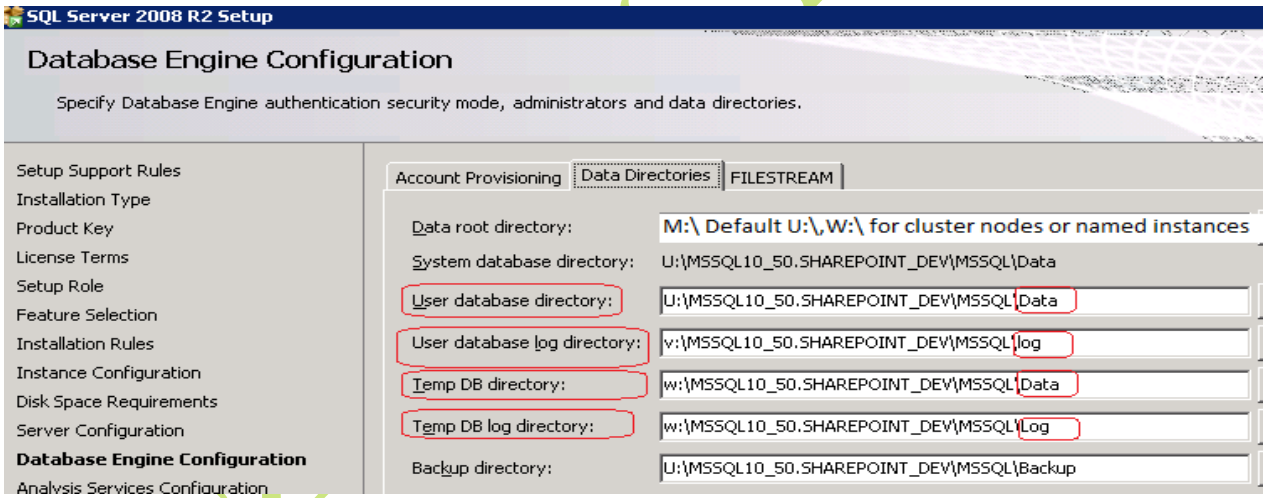


Installing SQL Server 2008 Stand-alone and Cluster

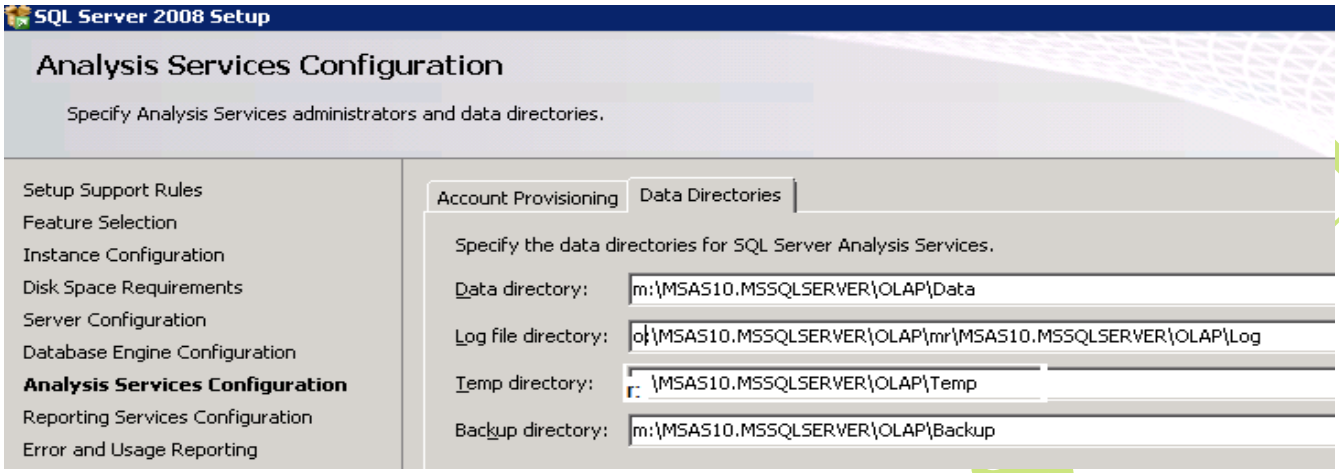
- Database Engine Configuration, Use Mix mode Authentication, add sa password (DEV and Prod are different), add XXYCOMPANY_corp\sqlsa and XXYCOMPANY_corp\sdc_dba



- Database Engine Configuration, Install location for Data, log and tempdb



- Analysis Services, Account provisioning and data directories, only if needed.



7. **Apply SP's and latest patch from the "Installlation Software" previously. SP1 for SQL 2008 R2 as of this write-up**

   Version number of SQL Server 2008 R2 Microsoft SQL Server 2008 R2 (RTM) - 10.50.1702.0

8. Install SQL Server 2008 R2 Feature Pack Compents

9. **Verify startup accounts and services**

   - Under Administrative Tools/Services set Microsoft Sql Server and Sql server agent to start automatically. **(THIS IS NOT SO ON CLUSTER CONFIG)**
   - Check the SQL browser service. If not running, set it to run and enable it for Automatic start up. This is required for remote users to connect to the SQL server.
   - Make sure that all SQL server services are configured to run using the proper startup account
   - Reboot Machine.

Installing SQL Server 2008 Stand-alone and Cluster

STAND-ALONE POST INSTALLATION STEPS

10. Set recovery mode on model db and user db's as follows:

PRODUCTION server: dba and system db's SIMPLE mode, user db's FULL
DEV server or any NON-PRODUCTION: SIMPLE mode on all databases

11. Setup system databases, configure tempdb, configure defaults

- ☐ **Increase size of MASTER, MODEL and MSDB to 100mb and 25 (Data and log)**

```
USE [master]
GO
ALTER DATABASE [master] MODIFY FILE ( NAME = N'master', SIZE = 102400KB )
GO
ALTER DATABASE [master] MODIFY FILE ( NAME = N'mastlog', SIZE = 25600KB )
GO
ALTER DATABASE [model] MODIFY FILE ( NAME = N'modeldev', SIZE = 102400KB )
GO
ALTER DATABASE [model] MODIFY FILE ( NAME = N'modellog', SIZE = 25600KB )
GO
ALTER DATABASE [msdb] MODIFY FILE ( NAME = N'MSDBData', SIZE = 102400KB )
GO
ALTER DATABASE [msdb] MODIFY FILE ( NAME = N'MSDBLog', SIZE = 25600KB )
GO
```

- ☐ **Configure TEMPDB**

Increase size of tempdb to be 25% of total allocated User Databases Data Used with autogrowth option of 10% if less than 2gig or 512mb growth if more than 2gig in size. Log 25% of Total tempdb data size allocated with autogrowth option of 10% if less than 2gig in size or 256mb growth if more than 2gig in size.

Create a single tempdb data file for each physical CPU on the SQL Server,

The script below is used to verify MEMORY and CPUs on stand-alone, NOTE, on a cluster divide physical memory in 1/2

```
SELECT cpu_count, hyperthread_ratio, cpu_count/hyperthread_ratio as 'ACTUAL # of CPUs',
round(((physical_memory_in_bytes/1024))/1024,-3) as PhysicaMemory,
round(round(((physical_memory_in_bytes/1024))/1024,-3)*.80,-3) as [80% Memory]
FROM master.sys.dm_os_sys_info
```

For example, if you have 8 CPUs, then have 8 TempDB database files. Each datafile equal in size.

Example1: Total # of CPU's 8; Total size of Data files (6 databases) 16gig.
Total size of tempdb Data would be 4 gig split in 8 data files,
each tempdb datafile size of 512mb with 10% autogrowth
Total size of tempdb log would be 1 gig 10% autogrowth

Example2: Total # of CPU's 8; Total size of Data File (20 Databases) 400gig
total size of tempdb data 100gig
split equally in 8 data files (12.5 each) with 512mb autogrowth
total size of tempdb log 25gig with 512 autogrowth

- ☐ Remove auto_create and auto_update statistic option from tempdb database.
- ☐ Enable Trace Flag 1118, run cmd: dbcc traceon(1118)
- ☐ Ensure that TEMPDB is on the proper temdb device (data and log)

```
ALTER DATABASE tempdb
MODIFY FILE (NAME = tempdev, FILENAME = '[log drive]:\MSSQL.x\MSSQL\Data\tempdb.mdf');
GO
ALTER DATABASE  tempdb
MODIFY FILE (NAME = templog, FILENAME = '[log drive]:\MSSQL.x\MSSQL\LOG\templog.ldf');
GO
```

- ☐ **Configure XP_CMDSHELL**

```
sp_configure 'show advanced options',1
reconfigure
go
sp_configure 'xp_cmdshell', 1
reconfigure
go
```

- ☐ **Enable Dedicated Administrator Connection**

```
sp_configure 'allow updates', 1;
GO
RECONFIGURE;
GO

sp_configure 'remote admin connections', 1;
GO
RECONFIGURE;
GO
```

- ☐ **Configure AWE Extension**

```
exec sp_configure 'show advanced options',1
reconfigure
exec sp_configure ‘awe enabled’,1
reconfigure
```

- ☐ **Configure ‘Max Memory’ to be 80% of total server physical memory**

Memory = 80% of Physical, EXCEPT on active/active clusters where total physical memory/# of nodes, then 80% of the result.

```
The script below is used to verify MEMORY and CPUs on stand-alone
SELECT cpu_count, hyperthread_ratio, cpu_count/hyperthread_ratio as 'ACTUAL # of CPUs',
round(((physical_memory_in_bytes/1024))/1024,-3) as PhysicaMemory,
round(round(((physical_memory_in_bytes/1024))/1024,-3)*.80,-3) as [80% Memory]
FROM master.sys.dm_os_sys_info
```

-- this is a SAMPLE where 12GB is allocated to SQL with 16GB of physical memory

```
exec sp_configure 'show advanced options',1
reconfigure
exec sp_configure 'max server memory (MB)',12000
reconfigure
```

12. **Remove default administrator accounts and add system admin groups**
    - ☐ If not done on previously, add the following groups as system admin on SQL server: XXYCOMPANY_corp\sdc_dba and XXYCOMPANY_corp\sqlsa
    - ☐ Remove BUILTIN\Administrators login ***(note that additional steps are done on clusters before this is done, check the cluster post-install section)***
    - ☐ Change the rights of default accounts `[NT AUTHORITY\SYSTEM] as shown`

```
EXEC master..sp_dropsrvrolemember @loginame = N'NT AUTHORITY\SYSTEM', @rolename = N'sysadmin'
GO
USE [msdb]
GO
EXEC sp_addrolemember N'db_datareader', N'NT AUTHORITY\SYSTEM'
GO
```

- Remove guest user from model and user databases.

13. **Enable and test smtp mail – Run the script on APPENDIX B**

- Run script on Appendix F (msdb trigger)

14. Add DBA Database Maintenance Plans

See the document "How to deploy DBA Standard Maintenance Plans"

15. **Run SQL Server documentation scripts APPENDIX H**

16. RUN ALL DBA JOBS to verify that their configuration is correct and there are no failures

Installing SQL Server 2008 Stand-alone and Cluster

CLUSTER INSTALL – PRE-INSTALLATION CHECKS:

Prior to cluster install you will need to identify the following from the Server group (DSG).

- ip and machine names for primary and fallback nodes
- virtual ip and subnet mask to be used for SQL server -- ** must be different from the cluster server ip
- information on drive layout, including free space:

  C:\ (SQL Binaries – default) M: (SQL Data); O: (SQL Log); N: (DBA Tools), R:(Tempdb data and log)

- Verify Cluster configuration

CLUSTER INSTALLATION STEPS

First node installation

http://www.mssqltips.com/tip.asp?tip=1709, section "***Installing SQL Server 2008 on a Windows Server 2008 cluster" READ NOTES AS YOU ADVANCE THRU THE INSTALL PAGES.***

- ☐ Features configuration
  - **Do not install Reporting Services (we have shared environments for 2008/2005 Reporting Servers SDCSQLRPT01, LIVEMSSRS01, SDCDEVSQLRPT01, DEVMSSQL04 and DEVMSSQL08 for SQL 2008)**
  - **Install on C: drive for ALL features (no need to change anything)**
  - **DO NOT install Analysis Svcs unless requested**
- ☐ Instance Configuration, enter the name of SQL server INSTANCE to be created
- ☐ Disk space requirements, should just be a visual check, because space needed to be checked prior to install
- ☐ Cluster Resource Group. The install WILL CREATE the SQL Cluster group
- ☐ Cluster Disk Selection, or the equivalent SQL Data, SQL Logs and SQL Temp
- ☐ Cluster Network Configuration, select PUBLIC network and enter IP for SQL svr
- ☐ Cluster Security Policy, use default (SID)
- ☐ Server configuration, service account (XXYCOMPANY_corp\sqla). Change collation ONLY if required
- ☐ Database Engine Configuration,
  - Account provisioning. Use mixed mode and add:
    - XXYCOMPANY_corp\sqlsa and XXYCOMPANY_corp\sdc_dba
- ☐ Database Engine Configuration, Data, log, tempdb Directories, M:, O:, R:
- ☐ Analysis Services, Only configured if needed for an application
  - Add XXYCOMPANY_corp\sqlsa and XXYCOMPANY_corp\sdc_dba and set data and log drives to M: and O:

Additional node installation

http://www.mssqltips.com/tip.asp?tip=1721, section "***Adding a node on a SQL Server 2008 Failover Cluster"***

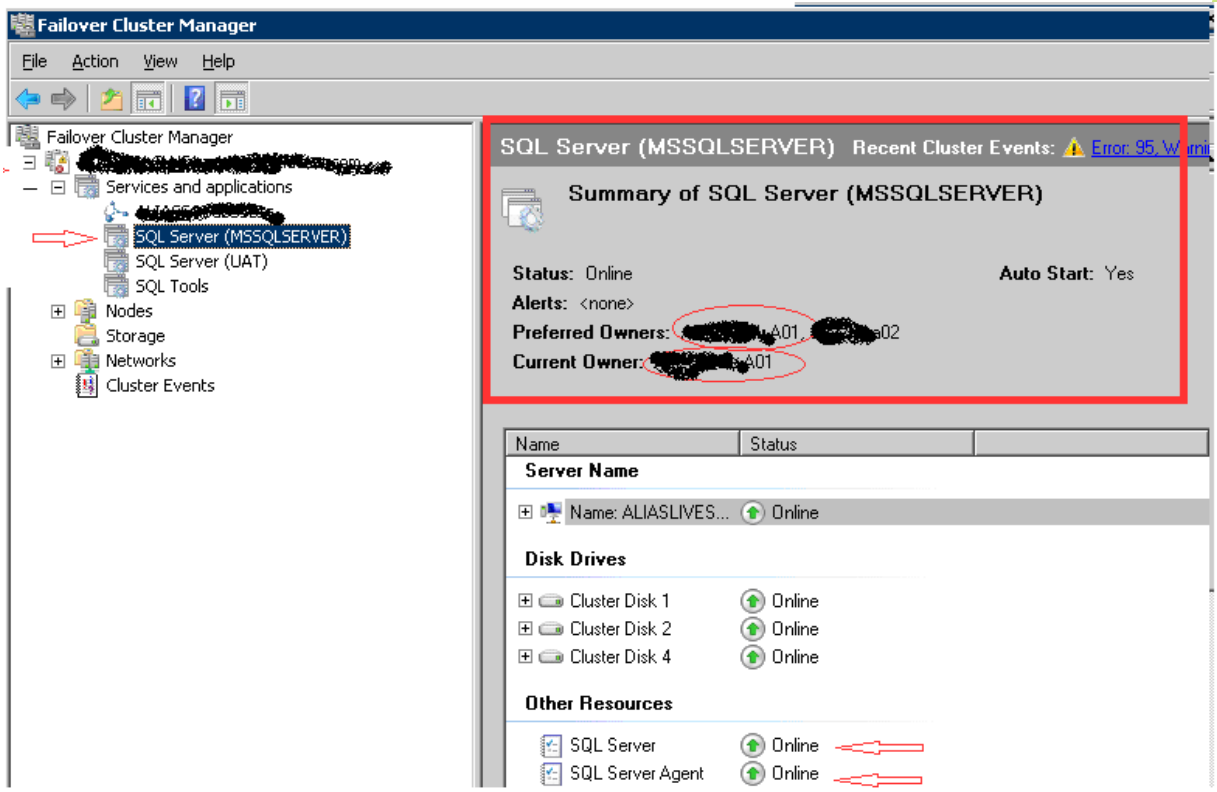
again, READ NOTES ABOVE AS YOU ADVANCE THRU THE INSTALL PAGES

Installing SQL Server 2008 Stand-alone and Cluster

CLUSTER POST-INSTALLATION STEPS

1. Using"Failover Cluster Manager", connect to active node, expand 'group' , right click on 'sql group': click on <move>, this should fail the SQL resources to the passive node.

    a. Perform the same steps to move the resources back to their original node.



2. Follow "STAND ALONE POST-INSTALLATION STEPS"

   Have another member of SQL Team validate the install BEFORE releasing to end-users

Installing SQL Server 2008 Stand-alone and Cluster

APPENDIX A

APPENDIX B
SNMP E-mail Setup – SQL 2008

```
exec sp_Configure 'show advanced options',1
reconfigure
exec sp_Configure 'Database Mail XPs',1
reconfigure
-- Create a Database Mail profile
EXECUTE msdb.dbo.sysmail_add_profile_sp
@profile_name = @@servername,
@description = 'Notification service for SQL Server' ;

-- Create a Database Mail account
EXECUTE msdb.dbo.sysmail_add_account_sp
@account_name = @@servername,
@description = 'SQL Server Notification Service',
@email_address = 'secsqldba@XXYCOMPANY.com',
@replyto_address = 'secsqldba@XXYCOMPANY.com',
@display_name = 'SQL Server Notification Service',
@mailserver_name = 'imailrelay.XXYCOMPANY.com' ;

-- Add the account to the profile
EXECUTE msdb.dbo.sysmail_add_profileaccount_sp
@profile_name = @@servername,
@account_name = @@servername,
@sequence_number =1 ;

-- Grant access to the profile to the DBMailUsers role
EXECUTE msdb.dbo.sysmail_add_principalprofile_sp
@profile_name = @@servername,
@principal_id = 0,
@is_default = 1 ;

SELECT * FROM msdb.dbo.sysmail_profile
SELECT * FROM msdb.dbo.sysmail_account

declare @servername varchar(50)
declare @recipients varchar(200)
declare @subject varchar(100)

Select    @servername = @@servername,
          @recipients =  'secsqldba@XXYCOMPANY.com',
          @subject = @servername + ' – THIS IS A TEST'

          exec msdb..sp_send_dbmail
          @profile_name = @servername,
          @recipients = @recipients,
          @subject = @subject,
          @body = @subject

/* FULL SYNTAX
sp_send_dbmail [ [ @profile_name = ] 'profile_name' ]
[ , [ @recipients = ] 'recipients [ ; ...n ]' ]
[ , [ @copy_recipients = ] 'copy_recipient [ ; ...n ]' ]
[ , [ @blind_copy_recipients = ] 'blind_copy_recipient [ ; ...n ]' ]
[ , [ @subject = ] 'subject' ]
```

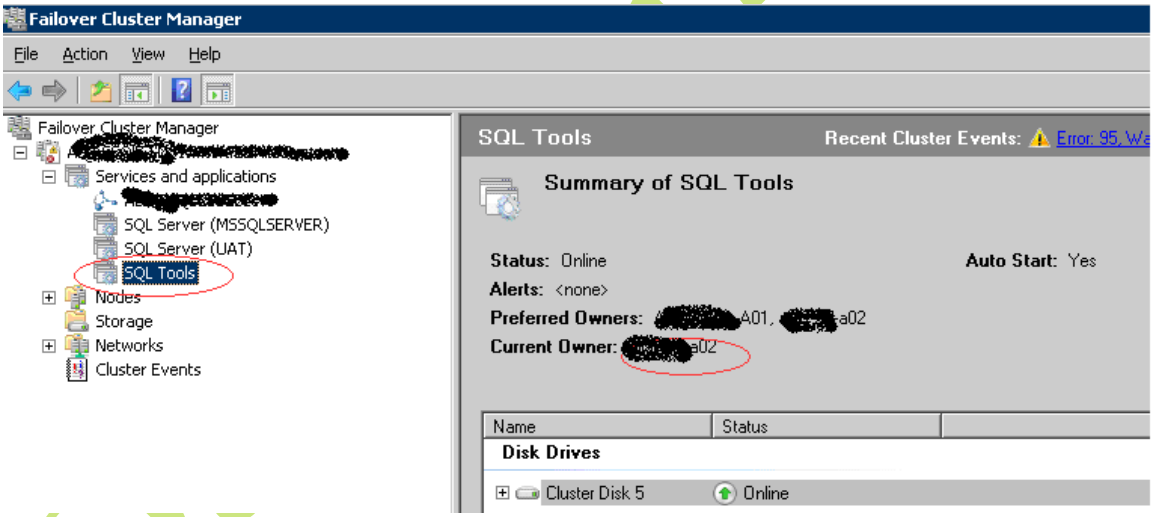
[, [@body =] 'body']
[, [@body_format =] 'body_format']
[, [@importance =] 'importance']
[, [@sensitivity =] 'sensitivity']
[, [@file_attachments =] 'attachment [; ...n]']
[, [@query =] 'query']
[, [@execute_query_database =] 'execute_query_database']
[, [@attach_query_result_as_file =] attach_query_result_as_file]
[, [@query_attachment_filename =] query_attachment_filename]
[, [@query_result_header =] query_result_header]
[, [@query_result_width =] query_result_width]
[, [@query_result_separator =] 'query_result_separator']
[, [@exclude_query_output =] exclude_query_output]
[, [@append_query_error =] append_query_error]
[, [@query_no_truncate =] query_no_truncate]
[, [@query_result_no_padding =] query_result_no_padding]
[, [@mailitem_id =] mailitem_id] [OUTPUT]
*/

APPENDIX D – N:\ resource on clusters

☑ N:\ is a shared resource.

☐ To change the group ownership, click on the active group resource, right click the "Shared SQL Tools" , click "Move Group" and select the node which will take ownership of the resource

☐ All nodes of a failover cluster instance must be at the same version level. This means that any patching of SQL server MUST BE DONE CONCURRENTLY on all nodes.



APPENDIX E

SPECIAL ADD-REMOVE NODE NOTES

Installing SQL Server 2008 Stand-alone and Cluster

For a clustered installation of SQL Server 2008, the Add or Remove Programs item only lets you **add or remove the nodes** in a cluster or remove the whole installation.

You **cannot use the Add or Remove Programs item on a cluster to add or remove cluster-aware SQL Server components.** For example, you cannot use the Add or Remove Programs item on a cluster to add or remove SQL Server 2008 Database Engine or SQL Server 2008 Analysis Services. You can only run the Setup program at a command prompt to add or remove SQL Server components.

http://support.microsoft.com/kb/922670/en-+us

For more information about how to use the command prompt to add SQL Server components to a SQL Server 2008 clustered installation, visit the following Microsoft Developer Network (MSDN) Web site:

http://msdn2.microsoft.com/en-us/library/ms144259.aspx

Installing SQL Server 2008 Stand-alone and Cluster

APPENDIX F
tr_SysJobs_enabled

```
USE [msdb]
GO
/****** Object:  Trigger [dbo].[tr_SysJobs_enabled]    Script Date: 11/11/2009 12:59:49 ******/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
-----------------------------------------------------------------------------------------------------
CREATE TRIGGER [dbo].[tr_SysJobs_enabled]
ON [dbo].[sysjobs]
FOR UPDATE AS
-----------------------------------------------------------------------------
-- Object Type : Trigger
-- Object Name : msdb..tr_SysJobs_enabled
-- Description : trigger to email DBA team when a job is enabled or disabled
-- Author : www.mssqltips.com
-- Date : July 2009
-- Modification: November 2009, XXYCOMPANY.  Martha Negron
--              Setup to mail our group
-----------------------------------------------------------------------------
SET NOCOUNT ON

DECLARE
@UserName VARCHAR(50),     @JobName VARCHAR(100),
@DeletedJobName VARCHAR(100),
@New_Enabled INT,                          @Old_Enabled INT,
@Bodytext VARCHAR(200),     @SubjectText VARCHAR(200),
@HostName sysname,                         @Servername sysname

SELECT @UserName = SYSTEM_USER, @HostName = HOST_NAME()
SELECT @New_Enabled = Enabled FROM Inserted
SELECT @Old_Enabled = Enabled FROM Deleted
SELECT @JobName = Name FROM Inserted
SELECT @Servername = @@servername

-- check if the enabled flag has been updated.
IF @New_Enabled <> @Old_Enabled
              BEGIN
               IF @New_Enabled = 1
               BEGIN
                 SET @bodytext = 'User: '+@username+' from '+@hostname+
                    ' ENABLED SQL Job ['+@jobname+'] at '+CONVERT(VARCHAR(20),GETDATE(),100)
                 SET @subjecttext = @Servername+' : ['+@jobname+
                    '] has been ENABLED at '+CONVERT(VARCHAR(20),GETDATE(),100)
               END
               IF @New_Enabled = 0
               BEGIN
                 SET @bodytext = 'User: '+@username+' from '+@hostname+
                    ' DISABLED SQL Job ['+@jobname+'] at '+CONVERT(VARCHAR(20),GETDATE(),100)
                 SET @subjecttext = @Servername+' : ['+@jobname+
                    '] has been DISABLED at '+CONVERT(VARCHAR(20),GETDATE(),100)
               END
               SET @subjecttext = 'SQL Job on ' + @subjecttext

              -- send out alert email
              declare @recipients varchar(200)
              declare @subject varchar(100)

              Select      @recipients =  'secsqldba@XXYCOMPANY.com'

               EXEC msdb.dbo.sp_send_dbmail
               @profile_name = @servername,
               @recipients = @recipients,
               @body = @bodytext,
               @subject = @subjecttext
END
```

APPENDIX H – INSTANCE DOCUMENTATION

```
--* ************************************************************
Print '************************************************************ '
Print 'INSTANCE DOCUMENTATION'
-- ************************************************************
set nocount on
Declare @versiondesc varchar(1000),
@version varchar(100),
@str1 varchar(100),
@cmd varchar(1000)

declare @instancename sysname
declare @name1 varchar(128)
declare @sqlver varchar(10)

SET NOCOUNT ON
declare @version_String varchar(500),
@sql_base_version varchar(100),
@sql_base_version_number varchar(100),
@sql_sp_2000_version varchar(100),
@sql_sp_2005_version varchar(100),
@latest_sp_2000_version varchar(100),
@latest_sp_2005_version varchar(100),
@latest_sp_2010_version varchar(100),
@Path varchar(128) ,
@FileName1 varchar(128),
@FileName2 varchar(128),
@cmd1 varchar(1000),
@cmd2 varchar(1000),
@value1 int,
@value2 int,
@tcp_port nvarchar(5),
@port nvarchar(5)

declare @db_version varchar(50), @db_sp char(20)
select @version = convert(char(20),SERVERPROPERTY('ProductVersion'))
select @db_sp = CONVERT(char(20),SERVERPROPERTY('ProductLevel'))
select @instancename = convert(char(20),SERVERPROPERTY('ServerName'))
Select @sql_base_version= convert(char(30),SERVERPROPERTY('Edition'))
select @db_version = 'SQL' + substring(@@version, charindex('SQL',@@version) + 10, charindex('Corporation',@@version)-70)
print ''
print '1.  This is to be run on on SECDBA1\SECDBA2005 to update DBA_INFO table'
Print 'update DEVMSSQL08.dba.dbo.dba_info set '
print 'DB_VERSION = '''+@db_version+''' + ','
print 'DB_SP = '''+@db_sp+''' + ','
print 'DB_SP_LEVEL= '''+@version+''' + ','
print 'DB_EDITION= '''+@sql_base_version+''' + ','
print 'DB_SUPPORT_GROUP= "secsqldba@XXYCOMPANY.com"'
print 'where instance = '+ '''' +  @instancename+''''
print ''
-----------------------------------------------------------------
-- IF SERVER IS A CLUSTER, THEN SHOW THE  NODES and status
print '2.  Copy and paste this on the instance doc'
Print ''
print ' INSTANCE: '+@instancename+'
 DATABASE VERSION: '+ @db_version
```

```
print ''
SELECT
convert(char(10),SERVERPROPERTY('ProductLevel')),
convert(char(20),SERVERPROPERTY('MachineName')) as 'INSTANCE',
--if (CONVERT(char(20), SERVERPROPERTY('isclustered'))) = 1
case (CONVERT(char(20), SERVERPROPERTY('isclustered')))
        when 1 then 'YES'
        else 'NO'
        end 'CLUSTER',
convert(char(20),SERVERPROPERTY('ComputerNamePhysicalNetBIOS')) as 'SERVER/HOST',
cpu_count/hyperthread_ratio as 'PHYSICAL CPUs',
cpu_count 'Logical CPUs', hyperthread_ratio 'CPU Hyperthread Ratio',
round(((physical_memory_in_bytes/1024))/1024,-3) as PhysicaMemory
FROM master.sys.dm_os_sys_info
if (SELECT   CONVERT(char(20), SERVERPROPERTY('isclustered'))) = 1
begin
set @cmd = 'master..xp_cmdshell '+ '"' + 'cluster.exe node'+'"'
exec (@cmd)
end
set @cmd = 'master..xp_cmdshell '+ '"' + 'ipconfig'+'"'
exec (@cmd)

--------------------------------------------------------------------------------
print '3.  User Databases.  This needs to be pasted onto the instance document'
select substring(name,1,30) "Database Name",
substring(SUSER_SNAME (sid),1,25) "DB Owner", crdate "Creation Date"
from master..sysdatabases where dbid > 4 and name not in  ('dba','distribution','reportserver')
order by name
--------------------------------------------------------------------------------
print '4. User Jobs, this needs to be imported into the server doc as an excel table so that the format fits on the document'
use msdb
select category_id,name,substring(description,1,35), step_id,step_name,substring(command,1,30) from sysjobs, sysjobsteps
where (category_id < 10 and category_id > 20) and name not like 'DBA%'
and name not like '%Maintenance%'
and name not like '%dbcc%'
and name not like 'refresh%'
and name not like 'restore%'
and name not like '%Backup%'
and name not like '%subscriptions%'
and name not like '%shrink%'
and name not like '%integrity%'
and name not like '%Optimizations%'
and name not like 'Integrity Checks%'
and description  not like '%replica%'
and description not  like 'DBA%'
and  description not  like 'Dump%'
and  sysjobs.job_id = sysjobsteps.job_id
order by name, step_id
```