New Database Server Setup

# Before anything else

* Check the Database collation to check if it’s correct (***Latin1\_General\_CI\_AS***). Shout at Rackspace if it’s not.
* Validate that the SQL Server is at the correct patch level.
* Check if BIOS power saving option is switched off.
* This document should be accompanied by the following configuration scripts:
  + *01\_Initial server and database configuration.sql*
  + *02\_DDL trigger.sql*
  + *03\_Create DBA database.sql*
  + *04\_DatabaseMail Setup.sql*
  + *05\_Create operator.sql*
  + *06\_Add standard alerts.sql*
  + *07\_Job sp RecordFreeSpace.sql*
  + *08\_SQL Agent Restart Job.sql*
  + *09\_MaintenanceSolution.sql*
  + *10\_Indexes for SSISDB.sql*

# Setting up accounts

Rackspace delivers the server set up with Windows Server 2008 R2 installed and SQL Server 2012 installed. They set up one (1) account with Administrator access to log in to.

1. Create your own user Administrator account in Server Manager.
   1. Make sure to store the password in Keepass - R:\Operations\Keepass
2. Log out of the Rackspace account and log in as your own.
3. Create the following Administrator accounts:
   1. svcSQLServer
   2. svcSQLAgent
      1. Use strong passwords and store them in Keepass.

# Windows Configuration

1. Configure Windows Page File to 4GB (Min & Max).
2. Prepare the folder structure for the default database location.

Typically: C:\MSSQL\ (*InstanceName)\ (Data, Log, Backup)*

# SQL Server Configuration Tools

1. Open up SQL Server Configuration Tools and change the accounts used by SQL Server and SQL Agent to the accounts just created and restart the Server.
2. Server Level Configuration - ***Script 01.***
   1. Add Builtin\Administrators account to Sysadmin group
   2. Configure *Max Server Memory*

SQL PRD + SQL STG (*typically 50% of PRD*) + 6GB spare for the System

* 1. Enable *Backup Compression*
  2. Set *Max Degree of Parallelism* (*CPG = 0, Retail = 1*)

1. Change the default system database location - ***Script 01.***
2. Pre-size system database files & set Model recovery to *Simple* - ***Script 01.***
3. Move Tempdb to the default database location - ***Script 01.***
4. Add additional Tempdb files - ***Script 01.***

*1 per every 3 physical cores*

1. Pre-size tempdb - ***Script 01.***

*20GB data, 10GB Log, 10% growth*

1. Create DDL Trigger - ***Script 02.***
2. Configure DBMail - ***Script 03.***
3. Create DBA database - ***Script 04.***
4. Create SQL Server Agent Operator - ***Script 05.***
5. Configure Standard Alerts - ***Script 06.***
6. Configure Record Free Space job - ***Script 07.***
7. Configure SQL Server Restart job - ***Script 08.***
8. Configure SSISDB

|  |  |
| --- | --- |
| * 1. In Catalogue Properties set:      1. Retention period: **30 days**      2. Max Number of Versions per project: **5**   2. Create additional indexes – ***Script 10.*** |  |
|  |

1. Configure Ola Hallengren maintenance tasks - ***Script 09.***
   1. Backup Retention 72hrs
2. Create SSIS Proxy account (CPG)

|  |  |
| --- | --- |
| * 1. Create Local Windows Account without Admin permissions   2. Create a folder structure in the root of C:\      1. C:\Axway\_*SystemName\*         1. *001. InBound*         2. *002. OutBound*      2. C:\SSIS\         1. Mailbox\_*SystemName*   3. Create a credential and an SSIS proxy for the Windows account   4. Grant full access to the Windows account on the folder just created |  |

# Final touches

1. Disable SQL Server backup on Rackspace Infrastructure
2. Synchronize Rackspace file system backup with SQL Server backup
3. Install 7zip
4. Install Note++