

Spotlight Audit/RM - Install Process 6.45

Blackchair Spotlight
Spotlight Core Audit\Release Management
Install Process

Version 6.45

- Introduction
 - Intended Scope & Audience
 - Spotlight Audit Overview
 - Software & Licensing
- Pre Install Requirements
 - Architecture & Connectivity
 - Server Sizing & Requirements
 - Platform Requirements
 - Genesys Framework Requirements
 - SDP Genesys Applications
- Installation
 - Spotlight Folder Structure
 - Spotlight Databases
 - Database Collation General
 - Create DB Owner
 - Create SIConfig DB
 - Create SIconfig DB Structure
 - Create Spotlight DB
 - Create Spotlight DB Structure
 - Install Assistant
 - Spotlight Database
 - Genesys Config
 - GAX
 - Comms Server
 - Environment
 - File Locations
 - Security
 - Spotlight Reports
 - GO\Report
 - Software Installation
 - Create RabbitMQ Queue
- Initial Data Load
 - Pre Initial Load Services\SDP Licensing
 - Initial Load - CME
 - Initial Load - GAX
- Commissioning
 - Tomcat HTTPS
 - Website
 - Change Tracking Test
 - Log File Management
 - Multiple Message Servers
 - Filtering
 - Not Supplied
 - Service Alerts
 - Customer Logo
- Release Management
 - Install License File
 - Switch on Release Management
- SAM
- Additional Spotlight Environments
 - Create Additional Spotlight Databases
 - Configure SIConfig DB
 - Create Additional Loader
 - Configure Loader Config Files
 - SpotlightLoaderConfig.xml
 - exe.config files
 - Loader Licensing\Start Loader Service
 - SDP Applications
 - Create RabbitMQ Queue
 - Install SDP Components as Services

- Configure Services
 - WIP Audit Producer
 - Audit Consumer
- Log File Configuration
- Initial Data Load
 - Pre Initial Load Services
 - Initial Load
- Commissioning
 - Adding an Admin User
- Change Tracking Test
- WIP Multiple Message Servers
- Filtering
- Comms Server
- Optional Configuration
 - Alternative Authentication
 - Custom Port Number
- Troubleshooting
 - Issue Accessing UI
 - Resolution
 - Configuration Sync Error
 - Resolution

Introduction

Intended Scope & Audience

This document presents instructions for installing **Spotlight Version 6.45** Auditing module into a Genesys environment. The intended audience is system engineers and other members of an implementation team who install, configure and maintain Genesys systems. It has been written with the assumption that you have a basic understanding of:

- Windows servers
- SQL Server databases
- Genesys Framework architecture.

The scope of this version of the Deployment Guide is installing **Spotlight Version 6.45** into a Genesys Version 8.n environment, the Spotlight database is hosted on Microsoft SQL server and the software installed on a Microsoft Windows server.

If you wish to arrange assistance with your installation please contact - installationsupport@theblackchair.com

Spotlight Audit Overview

Spotlight Audit maintains a fully-versioned model of every object and setting in the **Genesys Configuration Management Environment (CME)** and **GAX** database.

When Spotlight is first connected it takes a complete copy of the **CME/GAX** data. Thereafter it uses notifications from Management Framework to inform of additions, deletions and changes to objects and settings and updates its model with a new version of the object or setting.

The model therefore contains the entire history of the configuration, its objects and settings with information on when changes occurred and who made the changes.

Software & Licensing

Complete the form at <http://www.theblackchair.com/license-key-form> supplying the following information:

- Requestor and email address
- Customer details
 - territory and location
 - estimated project start
 - estimated project finish
 - project details
 - sponsoring customer name and contact
- Number of Genesys seats
- Purchase order details
- Genesys project manager
- Genesys project code
- Responsible engineer
- Planned installation date

Two license files (**InstalLicense.dat** and **License.properties**) and login details for an FTP site to download the Spotlight software will be sent to the specified email address within 2 working days.

The license files must not be altered in any way and must be used in a Spotlight installation within 2 weeks; after this time the license will become locked and a refresh must be requested.

The software must be downloaded within two weeks from the FTP site; after this time the login details will become locked and unlock must be requested.

In the event of requiring license refresh or FTP login unlock please email details to - installationsupport@theblackchair.com

Pre Install Requirements

Architecture & Connectivity

The following components are installed and/or configured during the Spotlight Core Setup

Installation of the Spotlight software must be performed using the local administrator account or an account that is a member of the local administrator group, the account requires "Logon as Service" rights.

- **Loader service/SDP:** This is the heart of the Spotlight application; it is responsible for the tracking and loading of the changes and their associated version into the Spotlight database.
- **The User Interface (UI):** This is the web interface that the client will access to view the changes to the systems that they are tracking. This interface will also provide the user the ability to set their own personal preferences such as the number of items displayed on their screen and their time zone.
- **Spotlight Comms Server** - This is a spotlight component that when configured with email server settings facilitates the sending of email notifications for certain spotlight features
- **Apache Tomcat** - holds the Spotlight webservices component used by the User interface
- **IIS** - location of the Spotlight user interface
- **Mongo DB** - not currently in use

The Spotlight server needs connection to:

- Spotlight uses the Rabbit MQ service to load data into Spotlight. The following ports are required to be open
 - 5672 - Default port Rabbit MQ listens on
 - 15672 - Used by Rabbit MQ admin GUI
 - 5670 - Port used by Blackchair Consumer. Subsequent ports are utilised by the Consumer if additional environments are installed. These are normally increments of 10, eg 5680, 5690 etc

User workstations need connection to:

- The IIS instance on the Spotlight server, usually port 80
- The Tomcat instance on the Spotlight server, usually port 8080

Once Spotlight Core has been installed, the Environment Wizard can be used to add connections to the systems that Spotlight should track. Specific connection settings for each type of environment are described in their specific prerequisite document.

Server Sizing & Requirements

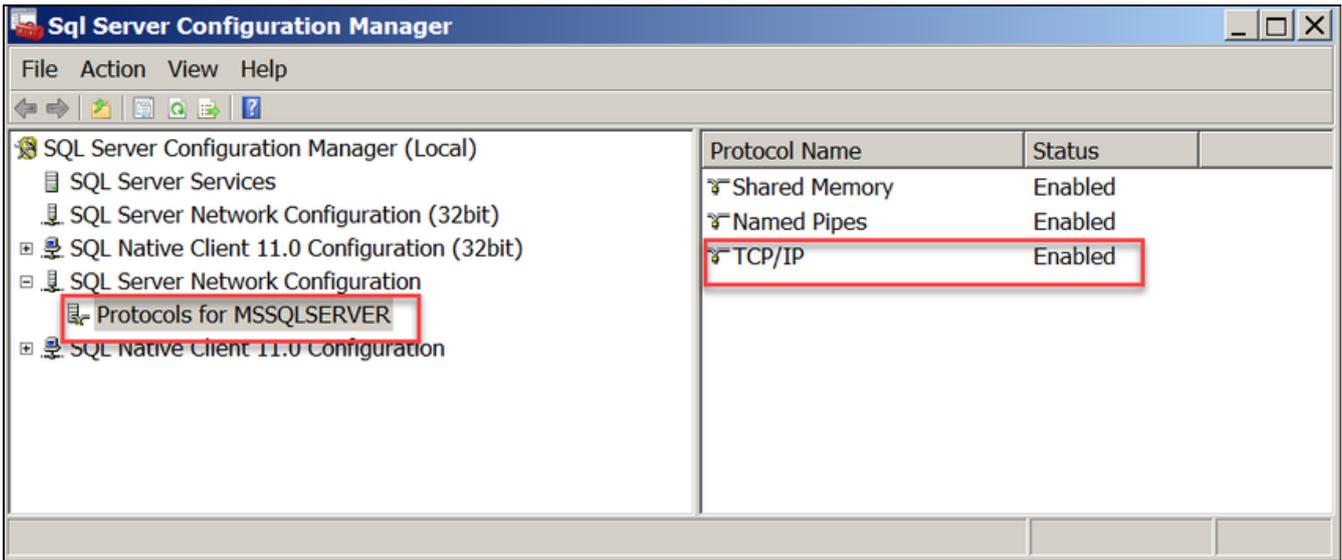
For information on server sizing and pre-requisite requirements please refer to [Spotlight Genesys Core Audit Prerequisites](#)

Platform Requirements

Spotlight audit is installed on a Windows server and uses a SQL Server database to store its information.

- The server operating system must be **Windows 2008, Windows 2008R2, Windows 2012, Windows 2014** or **Windows 2016** 64 Bit with latest Service Pack.
- The database must be **SQL Server 2008, SQL Server 2008R2, SQL Server 2012, SQL Server 2014** or **SQL Server 2016** with latest Service Pack. The account used to login to the Spotlight server to perform this installation work must be configured as an administrator of the SQL Server instance.
- Standard Java 64-bit SDK 1.8 (Note: specifically the 64-bit SDK must be installed only)

- Ensure the **TCP/IP** protocol is enabled for **SQL Server**. Open **SQL Server Configuration Manager** and check in the **SQL Server Network Configuration** as below. If **TCP/IP** is disabled set it to enabled and restart **SQL Server**.

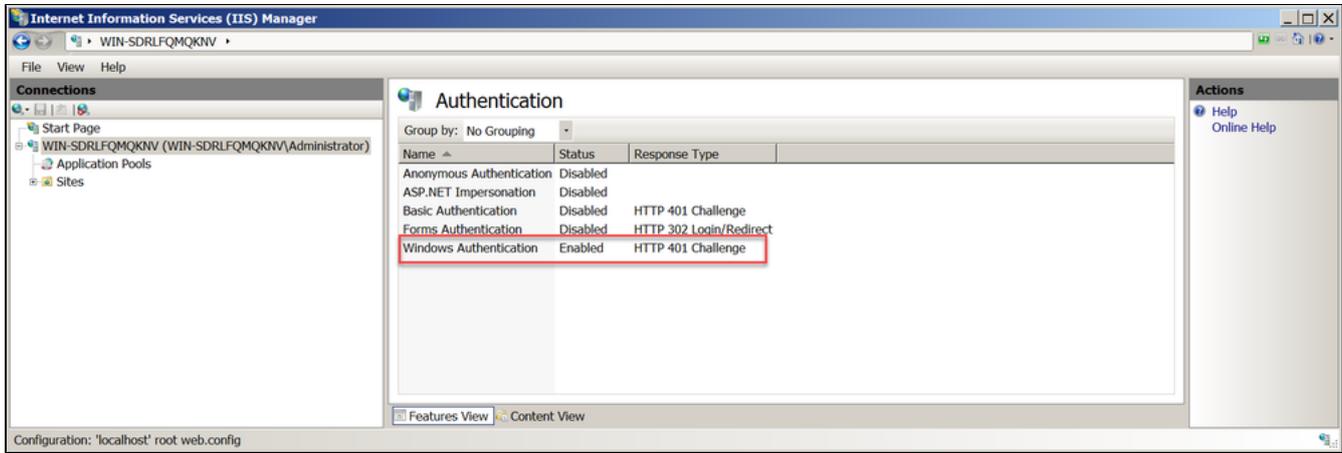
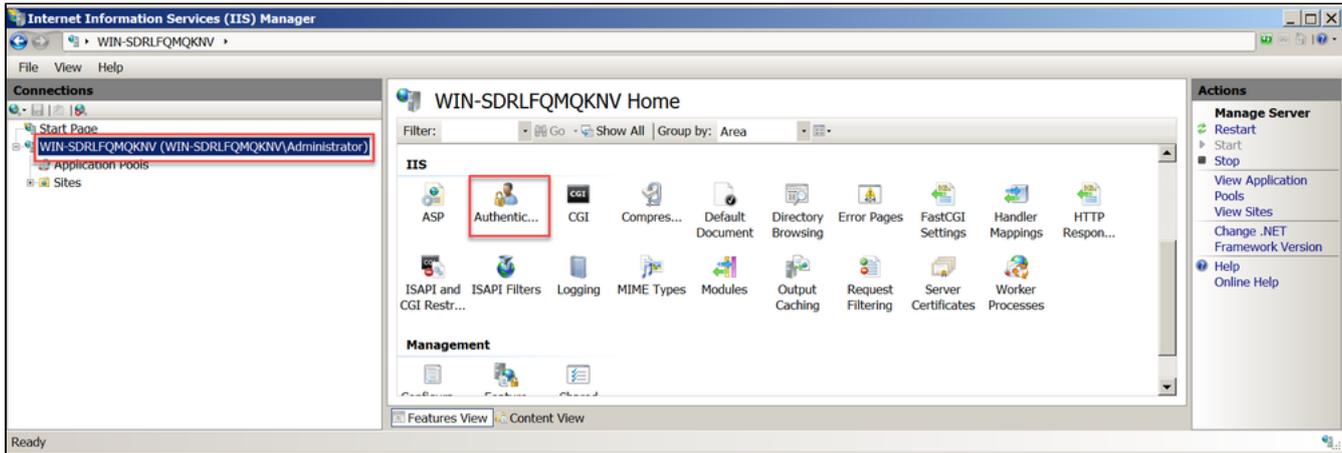


- **.Net Framework 4.5.1** must be installed. To check this look in **Server Manager > Features**
- Windows .Net Core 2.2 installed - Spotlight 6.43 onwards
- **Microsoft IIS** must be installed with the following role services:

Rob/Sub Role			Installed/Not Installed	
Web Server	Common HTTP Features	Static Content	Installed	
		Default Document	Installed	
		Directory Browsing	Installed	
		HTTP Errors	Installed	
		HTTP Redirection	Not Installed	
	Application Development	ASP .NET	Installed	
		.NET Extensibility	Installed	
		ASP	Installed	
		CGI	Installed	
		ISAPI Extensions	Installed	
		ISAPI Filters	Installed	
		Server Side Includes	Not Installed	
		Health & Diagnostics	HTTP Logging	Installed
			Logging Tools	Not Installed
Request Monitor	Installed			
Tracing	Not Installed			
Custom Logging	Not Installed			
Security	ODBC Logging	Not Installed		
	Basic Authentication	Not Installed		
	Windows Authentication	Installed		
	Digest Authentication	Not Installed		
	Client Certificate Mapping Authentication	Not Installed		
		IIS Client Certificate Mapping Authentication	Not Installed	

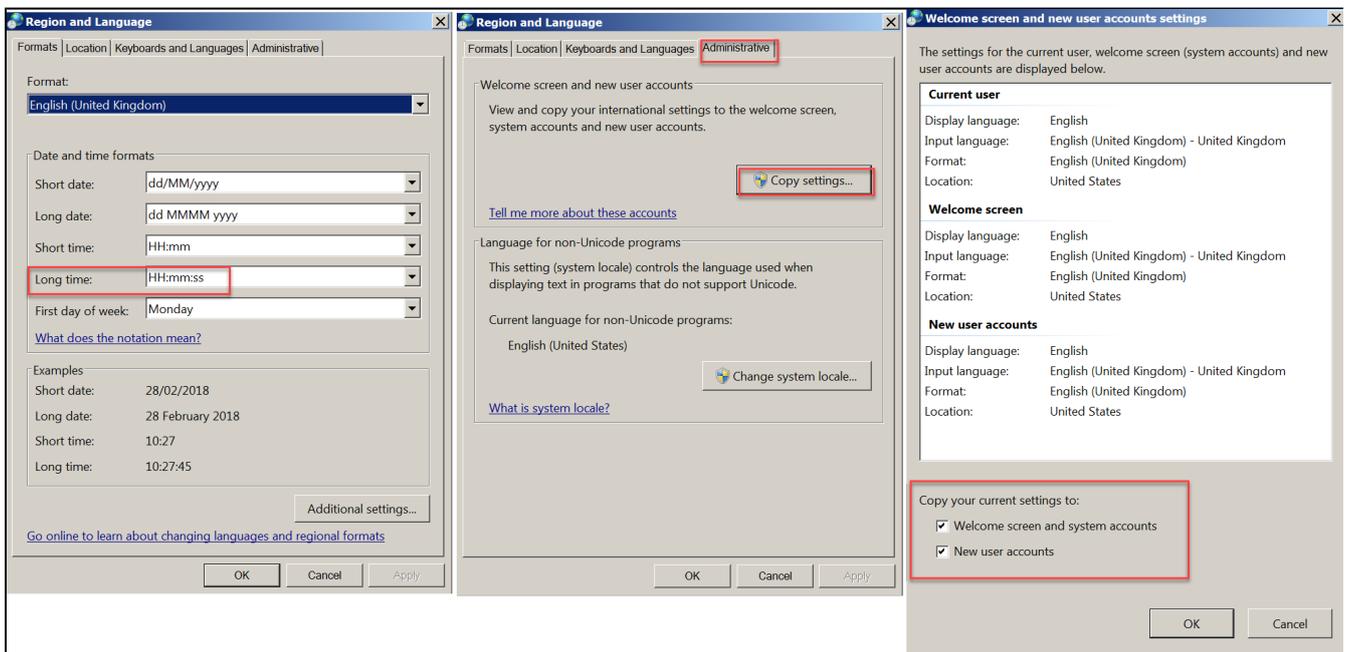
		URL Authorisation	Not Installed
		Request Filtering	Installed
		IP and Domain Restrictions	Not Installed
	Performance	Static Content Compression	Installed
		Dynamic Content Compression	Not Installed
	Management Tools	IIS Management Console	Installed
		IIS Management Scripts & Tools	Not Installed
		Management Service	Not Installed
		IIS 6 Management Compatability	Installed
		IIS 6 Metabase Compatability	Installed
		IIS 6 WMI Compatability	Installed
		IIS 6 Scripting Tools	Installed
		IIS 6 Management Console	Installed
	FTP Publishing Services	FTP Server	Not Installed
		FTP Management Console	Not Installed

In Internet Information Services IIS Manager ensure the IIS Authentication settings at server level enable Windows Authentication only



In Terminal Services Configuration ensure the session settings for RDP-TCP connection types will never disconnect sessions:

- In the servers regional settings ensure both Short Time and Long Time formats do not include "tt" for AM/PM and are as shown below and are copied to welcome screen, system accounts and new user accounts in the Administrative tab:



- Set the **service start timeout to 120 seconds**.
- Run **Windows Registry editor Regedit** and navigate to the following registry subkey - **HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control**
- Create a new **ServicesPipeTimeout** entry and set the value to **120000**: - On the **Edit** menu, point to **New**, and then click **DWORD Value**. - Type **ServicesPipeTimeout**, and then press **ENTER**. - Right-click **ServicesPipeTimeout**, and then click **Modify**. - Click **Decimal**, type **120000**, and then click **OK**.
- Restart the server

No other software should be installed on the server. Spotlight Audit requires a dedicated server with no other Genesys software, websites or Java versions. Ancillary software such as endpoint protection or anti-virus software may be installed after Spotlight audit is installed and tested as functioning correctly.

Genesys Framework Requirements

Spotlight Audit requires at least **Genesys Configuration Server** and **Message Server** be installed and running correctly. Spotlight Audit uses the following components in the Genesys system:

- A **Message Server** connected to Configuration Server. Spotlight will connect to this Message Server on its standard port and network connectivity must allow this. Primary and Backup pair is supported.
- **Configuration Server Proxy**. The CS Proxy may be read or write. Spotlight will connect to this CS Proxy on its standard port and network connectivity must allow this. Primary and Backup pair is supported.
- There must be an Application in the Genesys configuration of type **'Configuration Manager'** – eg **"Default"**
- A **Genesys login** with minimum Read access to the entire environment
- Applications (**SpotlightAuditServer** and **SpotlightAuditServerEC**) of type **Third Party Server** with connection to **Configuration Server/Proxy (CS/CSP)** and **Genesys Message Server (MS)** should be created. It is not necessary to set an 'install directory' or 'host/port'.

Spotlight Release Management (if enabled) will write to a **Configuration Server Proxy**, which must be a write CS Proxy. The same CS Proxy may be used for both **Audit** and **Release Management**. Configuration Server settings and connections must be configured as follows:

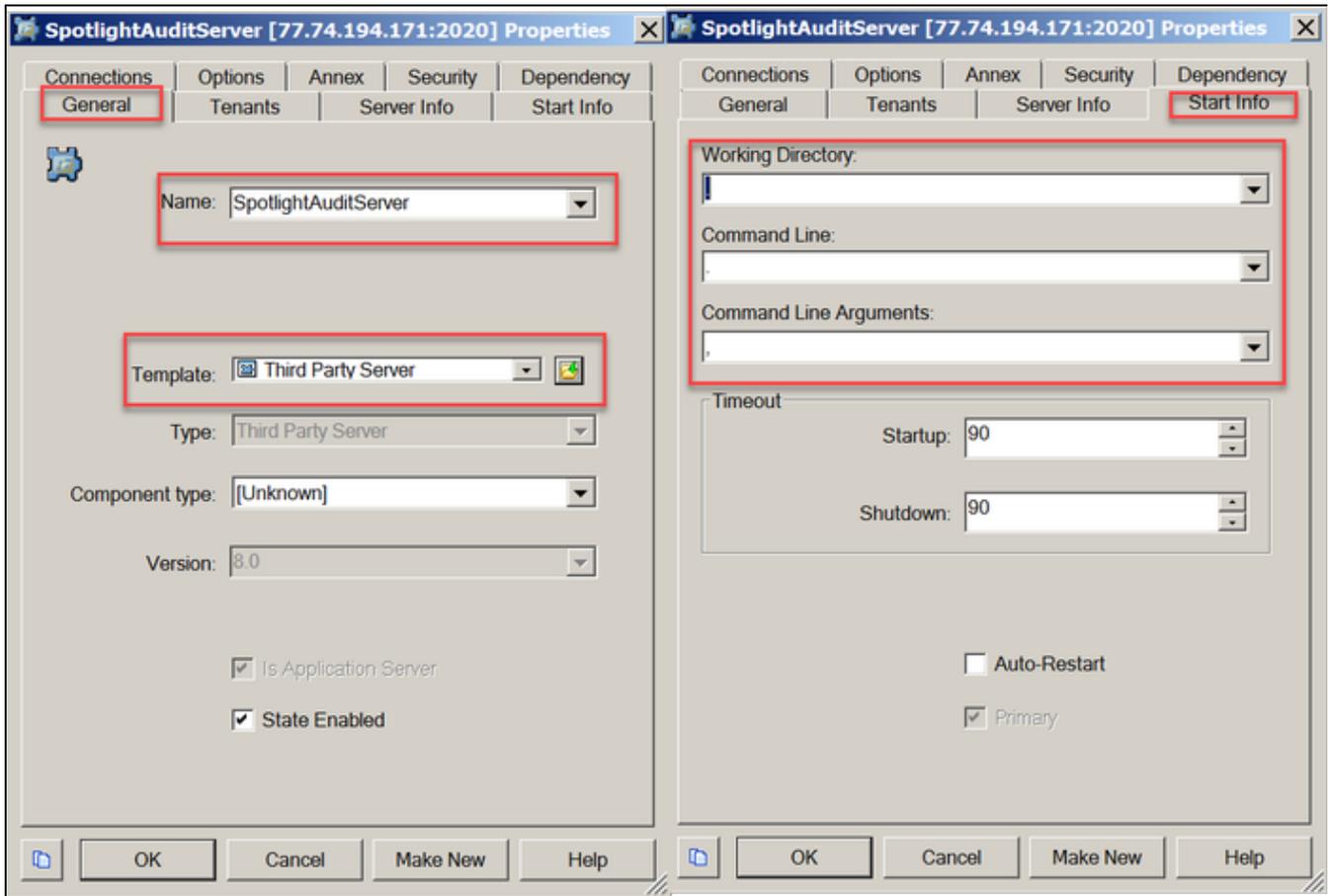
- **Configuration Server application (primary and backup)**
 - In the log options set "print-attributes" = "true"
 - Log section must include - **buffering = false**
 - Logging must be set to include "network".
- **Configuration Server connection**
 - Configuration Server must be connected to Message Server.
- **Configuration Manager connections**
 - Configuration Manager must have a connection to Message Server.
- **Message Server connection**
 - Message Server must have a connection to the Database Access Point for the Log database

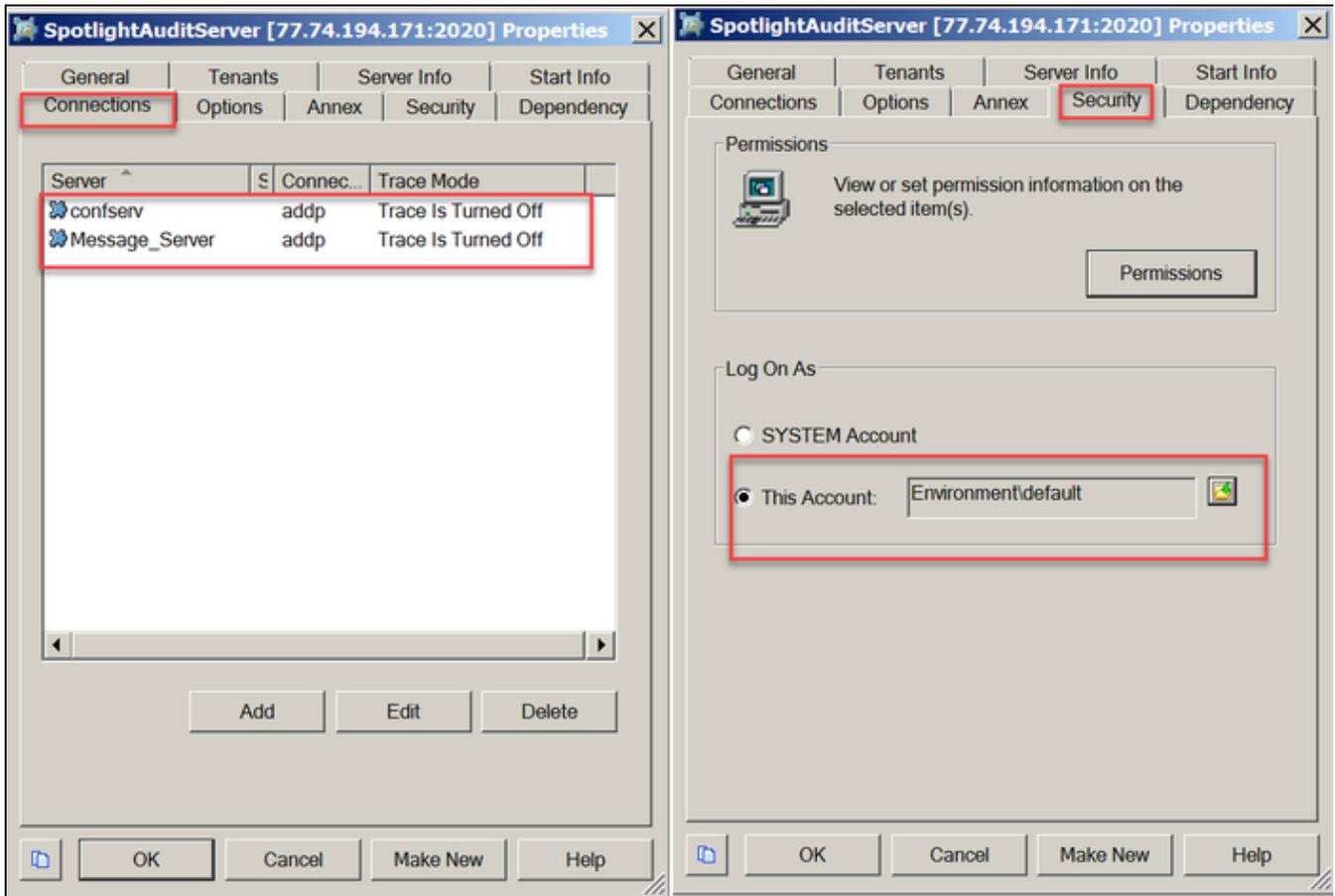
SDP Genesys Applications

A client prerequisite of Spotlight is that Applications (**SpotlightAuditServer & SpotlightAuditServerEC**) of type **Third Party Server** with connection to **Configuration Server/Proxy (CS/CSP)** and **Genesys Message Server (MS)** should be created as follows:

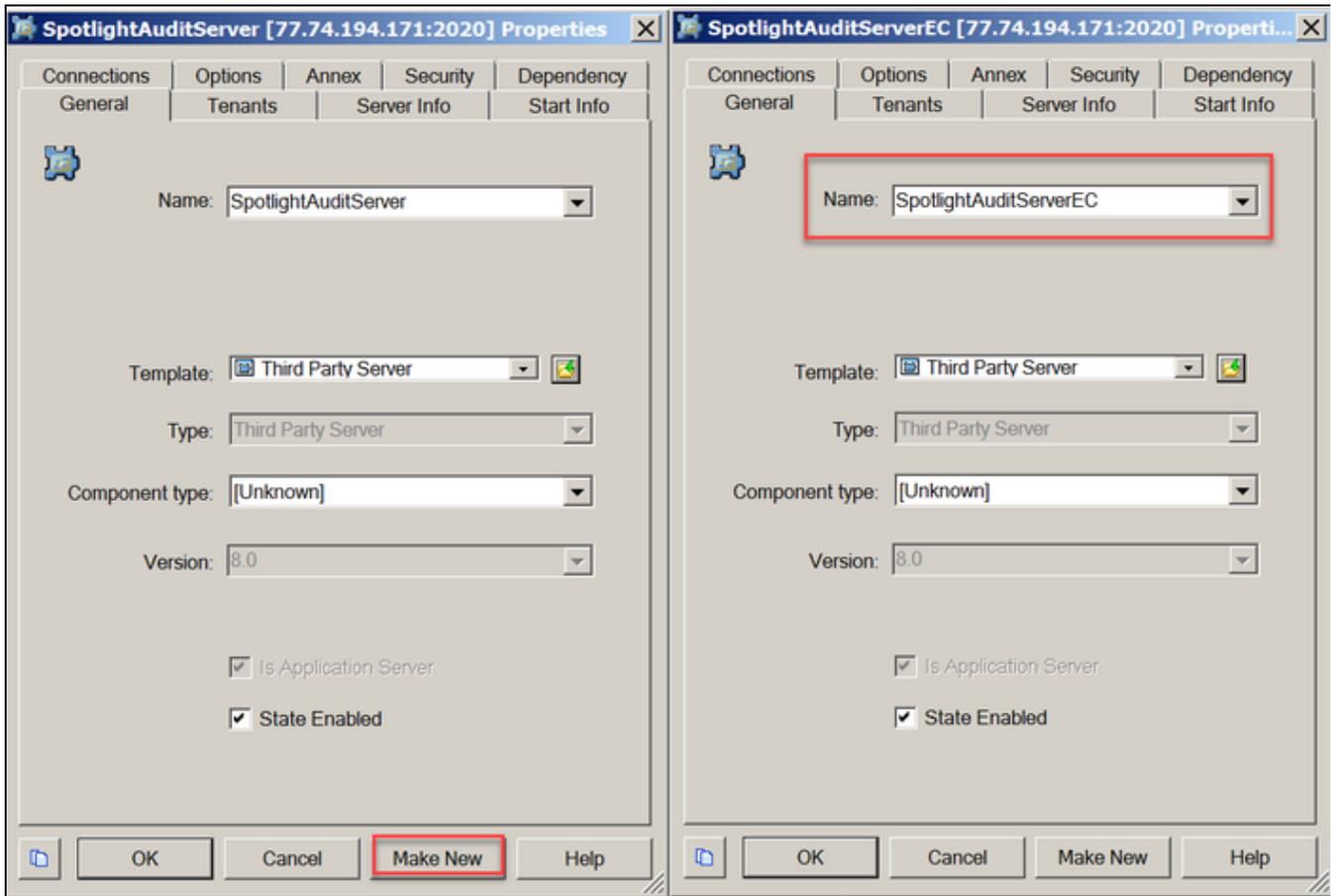
Create a new application in Genesys with the following settings

- **Name** - SpotlightAuditServer
- **Template** - Third Party Server
- **Working Directory** - dot (.)
- **Command Line** - dot (.)
- **Command Line Arguments** - dot (.)
- **Connections** - add connections to config server proxy and message server
- This Account should be set to **Default** user in the **Security** tab





- Create a duplicate application by selecting **Make New**
- Rename as **SpotlightAuditServerEC**



Installation

Spotlight Folder Structure

Provided with the Spotlight software is a **cmd** file called **FolderStructure2.cmd**. This file can be used to create a uniformed folder structure in which to install the Spotlight components.

NOTE: *If possible the installation of the Spotlight software on the C: drive should be avoided unless requested to do so by the customer.*

To create the folders:

- Right click the file and select **Run as Administrator**
- Enter the data drive location – eg **D:** (If the customer request that the Spoltight folders be placed in a particular location enter the location accordingly e.g **D:MyFolder**)
- Select **Enter**
- Enter the log drive location – eg **D:** (If the customer request that the Spoltight folders be placed in a particular location enter the location accordingly e.g **D:MyFolder**)
- Select **Enter**
- Select **Enter** to close

```

C:\Windows\System32\cmd.exe
Enter the drive letter and location for the DATA folders.
IMPORTANT NOTE: Entry must NOT end with a back slash (\).

Enter location for data folders:D:\MyFolder

Enter the drive letter and location for the LOG folders.
IMPORTANT NOTE: Entry must NOT end with a back slash (\).

Enter location for log folders:D:\MyFolder

*** Folders created. ***

*** LogPurge.bat file created. ***

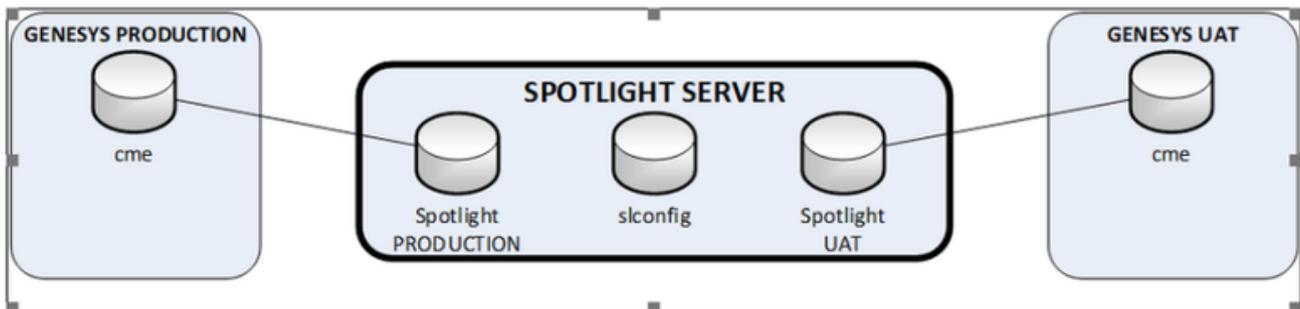
Hit enter to close.

```

The folder structure, and **LogPurge.bat** file, will now be created. One of the Spotlight folders created is called **...BlackchairSoftware**. It is recommended that the Spotlight install files and any other Spotlight software provided by Blackchair is placed into this folder prior to installation.

Spotlight Databases

Spotlight uses two types of database; a configuration store and a model store.



A Spotlight instance contains a single configuration store named **"slconfig"**. This database contains information about the configuration of the Spotlight environment and the model databases. This database is only a few megabytes in size.

Each Genesys environment being audited has a corresponding model store database in Spotlight. The database is usually named **"spotlight <environmentname>"** e.g. **"spotlightPRODUCTION"**, **"spotlightUAT"**.

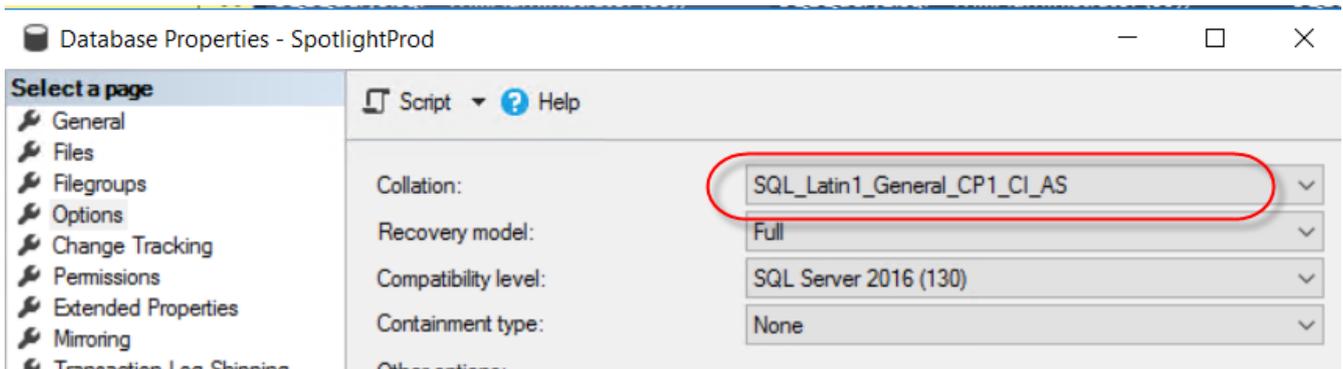
The database will start approximately the same size as the corresponding Genesys configuration database (taking into account any RDBMS differences) and will grow by ½KB per processed change. An example of growth for a system starting at 1GB and processing 70,000 changes per week follows:

Initial size of Spotlight database	1000	MB
Average changes per week	70000	
	3640000	= average changes per year
	2820	Spotlight database size year 1 in MB
	4640	Spotlight database size year 2 in MB
	6460	Spotlight database size year 3 in MB
	8280	Spotlight database size year 4 in MB
	10100	Spotlight database size year 5 in MB

This example system will have a database approximately 2.8GB after one year growing to 10GB after 5 years.

Database Collation General

When creating any Spotlight database, including the SLConfig database, the Collation must be set to SQL_Latin1_General_CP1_CI_AS



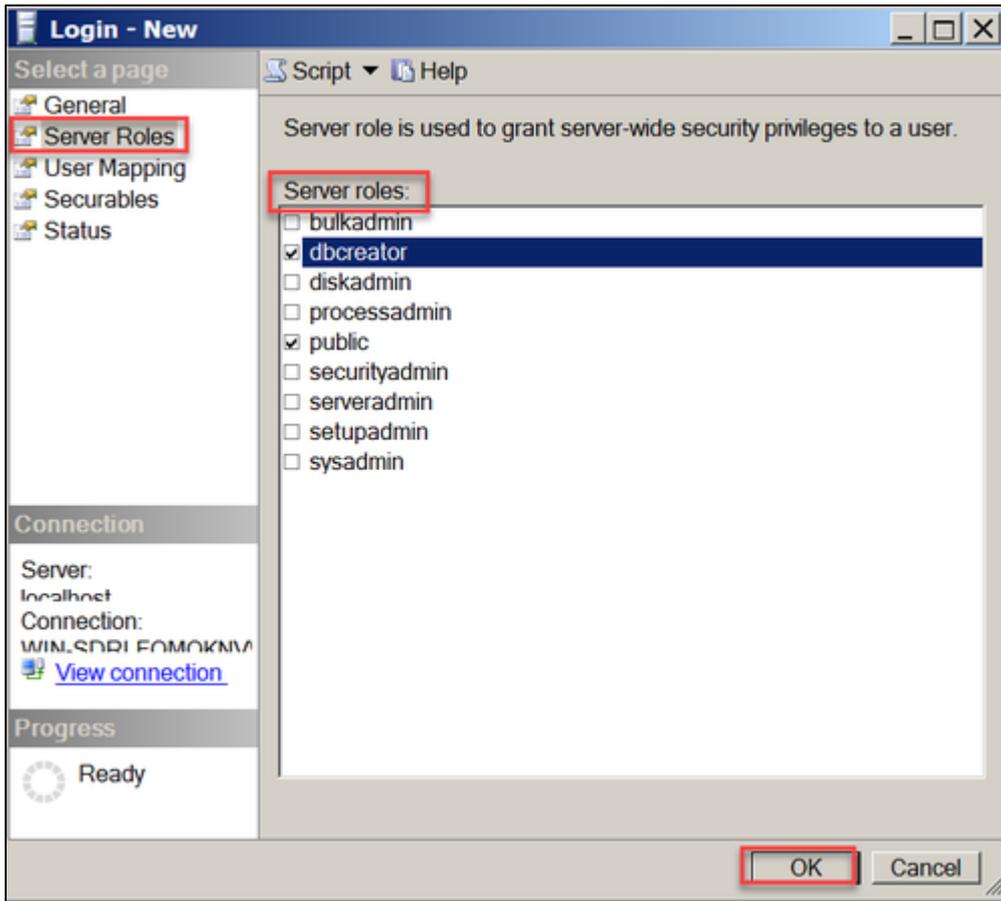
Create DB Owner

All Spotlight databases, configuration and model, are owned by the same **SQL Server** login. Using **SQL Server Management Studio** create a new login with SQL server authentication and no enforcement of password policy, as shown in the following example.

- Expand **Security**, right click **Logins** and select **New Login**



- Enter a Login Name, "**spotlight**" is recommended however any login name can be created.
 - Select **SQL Server Authentication**, then enter a password and confirm the password
 - Ensure **Enforce Password Expiration** and **User must change password at next login** are unchecked.
-
- In the Server Roles page ensure the new user has **dbcreator** role assigned

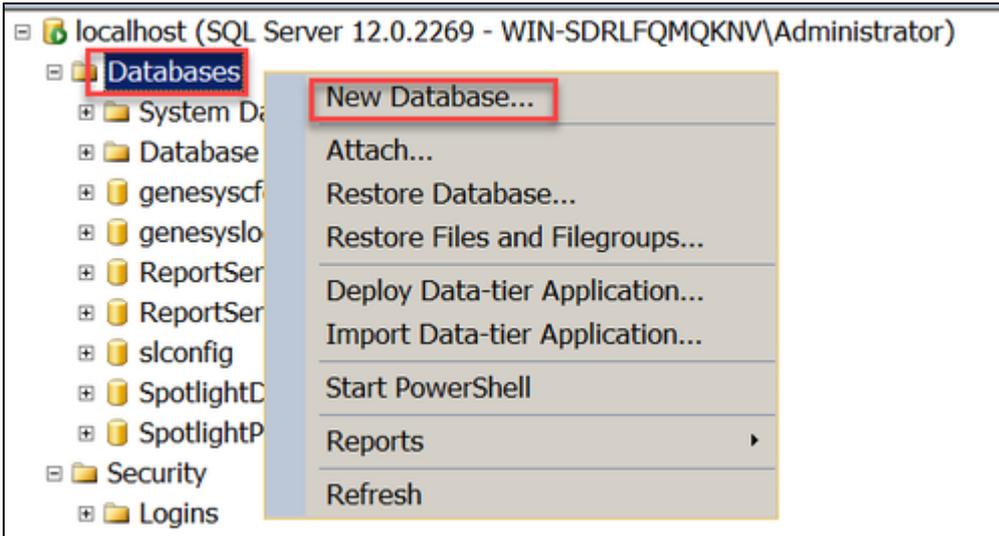


- Select **OK**

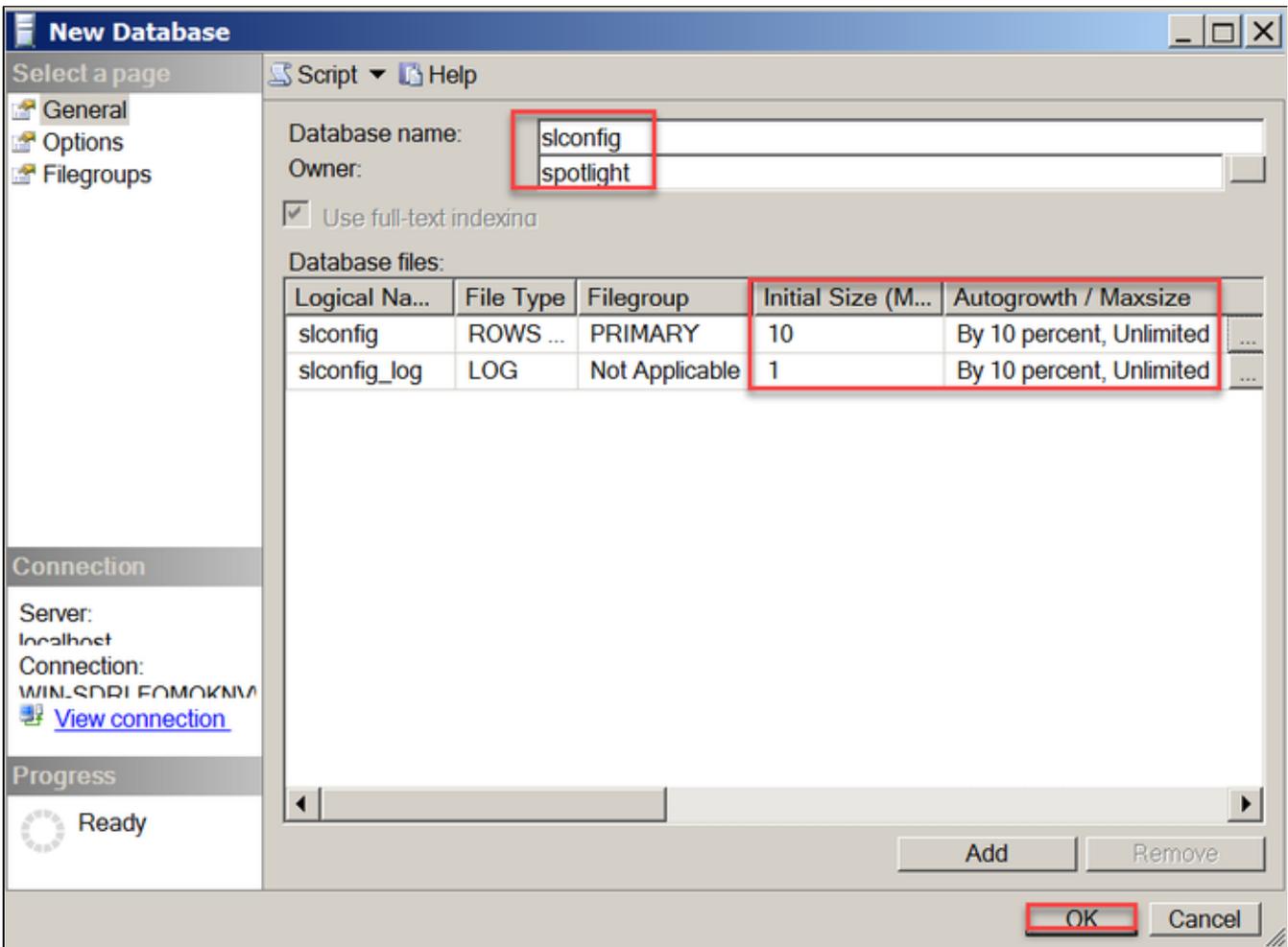
Create SIConfig DB

Using **SQL Server Management Studio** create a new database of initial size **10MB** owned by the login (e.g. **spotlight**) created in the previous step, as shown in the following example. Database name "**siconfig**" is recommended however any database name can be chosen.

- Right click **Database** and select **New Database**



- Set the following values as shown:
 - Database Name**
 - Owner** - user created previously
 - Initial Size** - 10MB and 1MB for log
 - Autogrowth** - By 10 percent

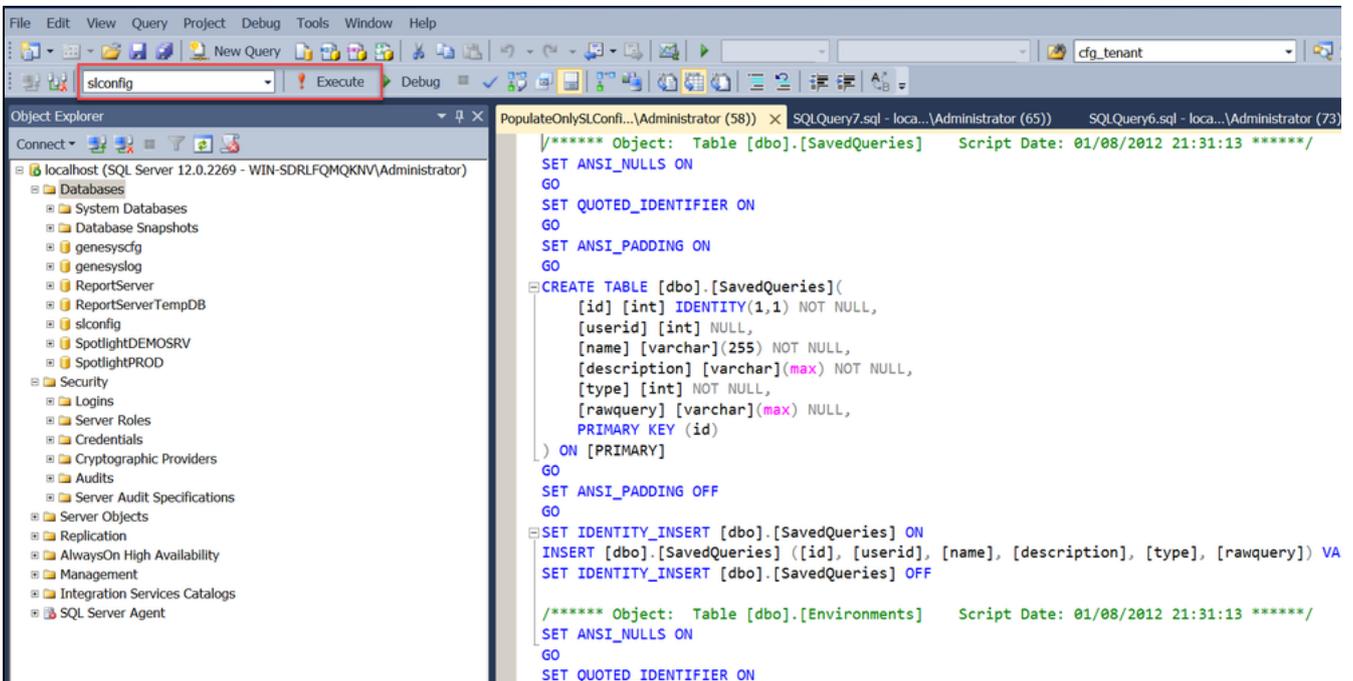
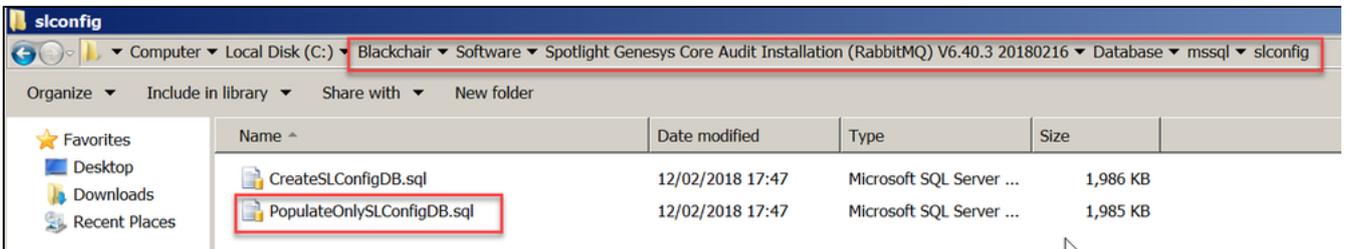


- Select **OK**

Create Slconfig DB Structure

Create the slconfig db structure:

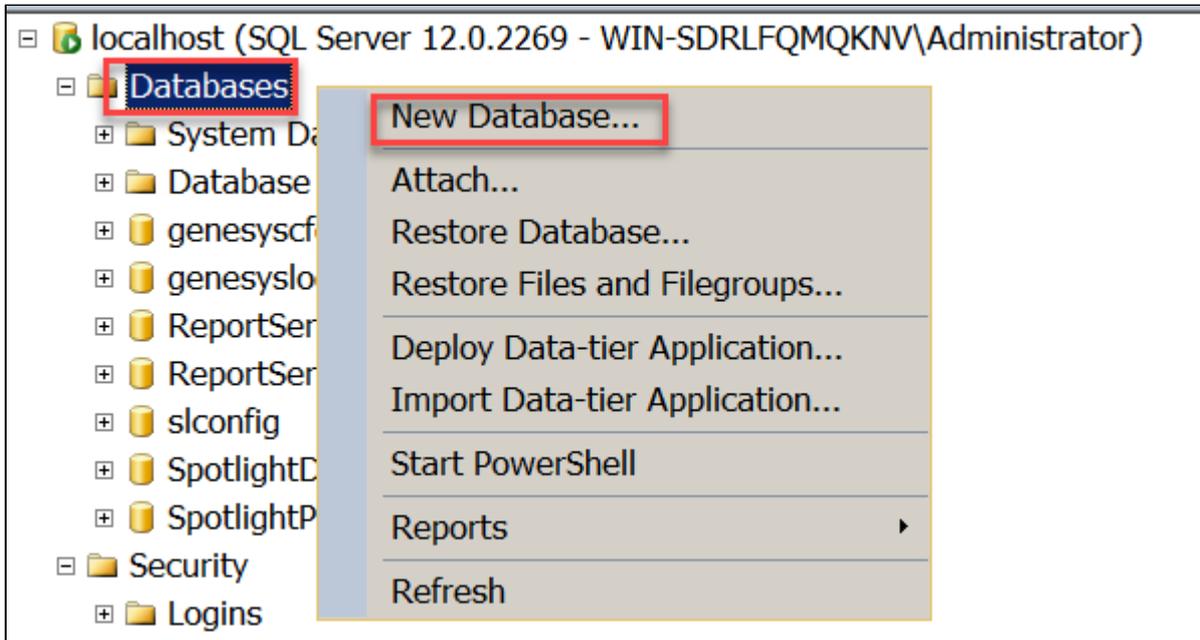
- Locate the script "**PopulateOnlySLConfigDB.sql**" in the "**Spotlight Core Audit Installation Vn ddmmyyy\database\mssql\slconfig**" folder in your installation files
- Execute this in a query window in **SQL Server Management Studio** against the previously created **slconfig** database



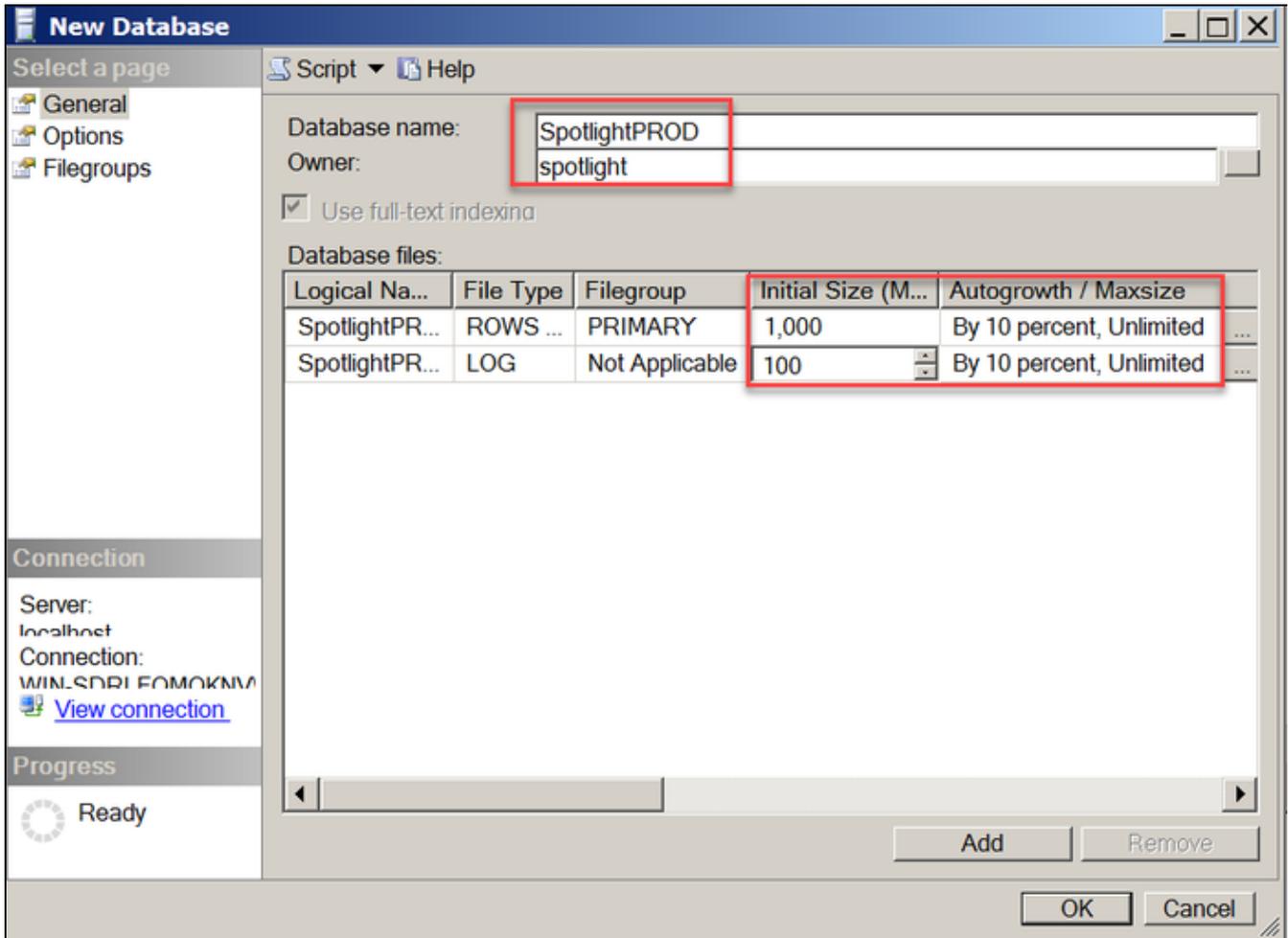
Create Spotlight DB

Using **SQL Server Management Studio** create a new database of initial size **1000MB** , Auto growth set to **10%**, owned by the login (e.g. **spotlight**) created in the previous step, as shown in the following example. Database name "**spotlight[Environment Name]**" is recommended, where **[Environment Name]** is a friendly name for the Genesys environment being audited, however any database name can be chosen.

- Right click **Databases** and select **New Database**



- Set the following values as shown:
 - **Database Name**
 - **Owner** - user created previously
 - **Initial Size** - 1000MB and 100MB for log
 - **Autogrowth** - By 10 percent



- Select **OK**

Create Spotlight DB Structure

The structure of the model database is slightly different depending whether it is associated with a **Genesys V8.0, V8.1 or V8.5+** environment. Separate folders containing batch and script files are provided for the three cases.

- Locate the batch file "**ManualBuild-nocreate.bat**" in the "**Spotlight Core Audit Installation Vn** `ddmmyyy\database\mssql\spotlight\CME\8.5`" or "`...8.1`" or "`...8.0`" folder in your installation files on the Spotlight server
- Edit the file to contain the correct values for the installation
 - **spotlightdbname** is set to the name of the model database created above
 - **sqlservername** is set to the name of the SQL Server instance hosting the model database. If the default instance is used this will be of the form "**servername**". If a named instance has been used this will be of the form "**servername\instancename**"
 - **sqladminusername** is set to the login created above that owns the model database
 - **sqladminpassword** is set to the password for the login above

```

ManualBuild-nocreate.bat [2]
1 @echo off
2
3 set spotlightdbname=SpotlightPROD
4 rem include instance in sql server name if not default instance
5 set sqlservername=WIN-SDRLFQMCKNV
6 set sqladminusername=spotlight
7 set sqladminpassword=spotlight
8
9 echo Creating Spotlight Database: "%spotlightdbname%"
10
11 BuildDatabase-nocreate.bat "%spotlightdbname%" "%sqlservername%" "%sqladminusername%" "%sqladminpassword%" "sqlcmd.exe" .

```

- Save the file
- Working on the Spotlight server itself, open a command prompt and navigate to the folder containing the **ManualBuild-nocreate.bat** file you just edited.
- In the command prompt, type **ManualBuild-nocreate.bat** to execute the batch file.
 - Messages "**Caution: Changing any part of an object name could break scripts and stored procedures.**" may be expected depending on the exact version/service pack and can be ignored. Any other error messages cannot be ignored and must be addressed.

Install Assistant

Spotlight configuration is held in the siconfig database and in various xml files. The **Spotlight Install Assistant** included in the installation files collects configuration information, checks its validity and configures configuration files and scripts ready for installation.

To run the Install Assistant:

- Locate the file "**SpotlightInstallAssistant.exe**" in the "**Spotlight Core Audit Installation**" folder in the installation package.
- **Run as Administrator** on the Spotlight server itself

Name ^	Date modified	Type	Size
Database	20/02/2018 17:18	File folder	
SAM Tools	20/02/2018 17:18	File folder	
Silent Install	20/02/2018 17:18	File folder	
Upgrade	20/02/2018 17:18	File folder	
Utils	20/02/2018 17:18	File folder	
FolderStructure2.cmd	19/01/2018 14:53	Windows Command S...	5 KB
Spotlight Core Audit Installation V6.40.3 201802...	16/02/2018 14:50	Text Document	3 KB
SpotlightApplicationInstaller.exe	16/02/2018 14:01	Application	250,353 KB
SpotlightInstallAssistant.exe	07/02/2018 20:44	Application	5,196 KB

- The Assistant comprises multiple vertical tabs for collecting configuration information all of which are mandatory and must be entered accurately.
- When all fields are complete the **Go!** button activates and the configuration can be checked
- The "**Report**" tab shows the results of the information checking and configuration preparation.

Spotlight Install Assistant v6.45.0 blackchair

Spotlight DB	Is the Spotlight database in a SQL Server Default instance or Named instance?	Default *
Genesys Config	Enter the name of the database server hosting the Spotlight database:	5.101.171.61 *
GAX	Enter the name of the SLConfig database:	slconfig_GK *
Comms Server	Enter the name of the Spotlight database:	Spotlight_GK *
Environment	Enter the user account for the owner of the Spotlight and SLConfig databases:	spotlight *
File Locations	Enter the password for the owner of the Spotlight and SLConfig databases:	Sp0tl1ght! *
Security		
Spotlight Reports		
Report		

Go! View Log

The input for each tab is described below

Spotlight Database

- Specify whether the **SQL Server** instance hosting the Spotlight databases is the **default** instance or a **named** instance.
- Enter the name of the database server hosting the spotlight database
 - If the default instance the name of the database server hosting the Spotlight database will be just a server name e.g. **genspot01**; if a named instance the name will be server name and instance name e.g. **genspot01instance01**
 - If the instance has a custom port then use the '**Default**' option and the name will be server name and port e.g. **genspot01,7109** (see **Custom Port Number** section at the end of this guide for additional configuration information for this type of server).
- Enter the name of the **SLConfig** database created earlier, e.g. **slconfig**.
- Enter the name of the **Spotlight** model database created earlier, e.g. **SpotlightPROD**.
- Enter the user account name of the owner of both databases as created above, e.g. **spotlight**
- Enter the password of the owner of both databases as created above, e.g. **spotlight**

Spotlight Install Assistant v6.45.0 blackchair

Spotlight DB Is the Spotlight database in a SQL Server Default instance or Named instance? Default *

Genesys Config Enter the name of the database server hosting the Spotlight database: 5.101.171.61 *

GAX Enter the name of the SLConfig database: slconfig_GK *

Comms Server Enter the name of the Spotlight database: Spotlight_GK *

Environment Enter the user account for the owner of the Spotlight and SLConfig databases: spotlight *

File Locations Enter the password for the owner of the Spotlight and SLConfig databases: Sp0tl1ght! *

Security

Spotlight Reports

Report

Go! View Log

Genesys Config

- Enter the following Genesys Config Server Proxy information:
 - Host IP of the primary Config Server/CS Proxy
 - Port of the primary Config Server/CS Proxy
 - Host IP of the backup Config Server/CS Proxy - **optional**
 - Port of the backup Config Server/CS Proxy - **optional**
- Enter the Application name used by Configuration Manager
- Select the check box if TLS is enabled – **optional**
- Enter the following Genesys Message Server information:
 - Host IP of the primary Message Server
 - Port of the primary Message Server
 - Host IP of the backup Message Server - **optional**
 - Port of the backup Message Server - **optional**
- Enter the read only user account to access Genesys
- Enter the password to access Genesys

Spotlight Install Assistant
v6.45.0
blackchair

Spotlight DB	Enter the host IP for the primary Config Server Proxy:	<input type="text" value="178.159.11.xx"/> *
Genesys Config	Enter the port for the primary Config Server Proxy:	<input type="text" value="2020"/> *
GAX	Enter the host IP for the backup Config Server Proxy:	<input type="text" value="178.159.11.xx"/>
Comms Server	Enter the port for the backup Config Server Proxy:	<input type="text" value="2020"/>
Environment	Enter the App Name used by Configuration Manager:	<input type="text" value="default"/> *
File Locations	Are the connections to Genesys TLS enabled?	<input type="checkbox"/>
Security	Enter the host IP for the primary Message Server:	<input type="text" value="178.159.11.xx"/> *
Spotlight Reports	Enter the port for the primary Message Server:	<input type="text" value="7002"/> *
Report	Enter the host IP for the backup Message Server:	<input type="text" value="178.159.11.xx"/>
	Enter the port for the backup Message Server:	<input type="text" value="7002"/>
	Enter the user account to access Genesys (read only):	<input type="text" value="default"/> *
	Enter the password to access Genesys:	<input type="text" value="password"/> *

Go!

View Log

NB: Spotlight can now be configured to use multiple Message Servers, however this requires to be done after the installation is complete. For further instructions, please refer to the **Commissioning Multiple Message Server** section of this guide

GAX

The **GAX** page is optional, and is used to enable Spotlight to track a selection of changes made in **GAX**.

- Select the check to enable GAX Monitoring
- Enter the GAX **host**
- Enter the GAX **port**
- Enter a GAX **Username**
- Enter a GAX **Password**

Spotlight Install Assistant v6.45.0 blackchair

Spotlight DB	Enable GAX Monitoring?	<input checked="" type="checkbox"/>
Genesys Config	Is GAX version <= 8.5.1?	<input checked="" type="checkbox"/>
GAX	Enter the GAX host:	178.159.11.xx *
	Is GAX host on https?	<input type="checkbox"/>
Comms Server	Enter the GAX port:	8040 *
Environment	Enter the GAX user name:	default *
File Locations	Enter the GAX password:	password *
Security		
Spotlight Reports		
Report		

Go! View Log

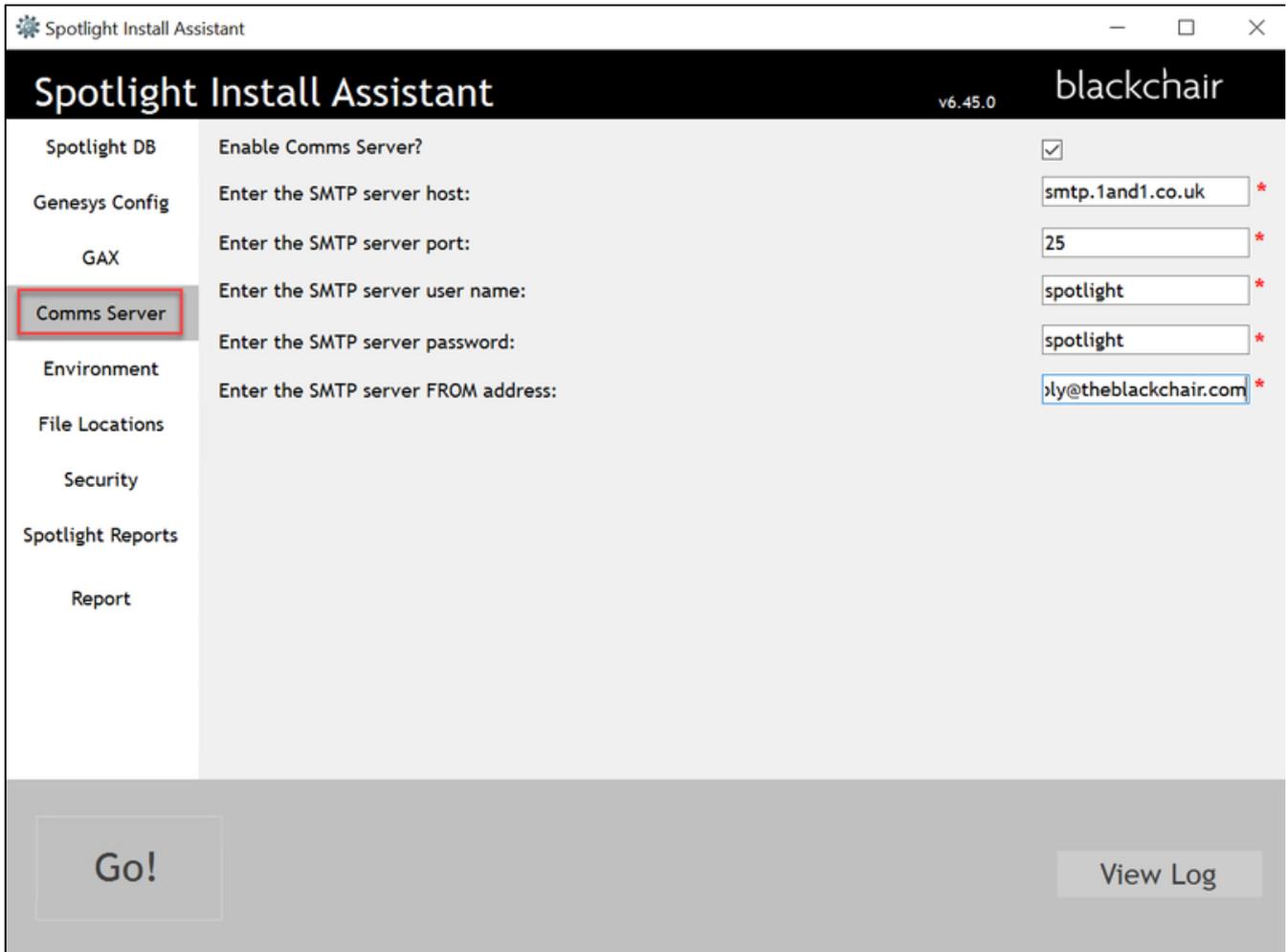
Comms Server

The **Spotlight Comms Server** is used by Spotlight to send email notifications – such as when a item on a user **Watchlist** changes or when a **Release Management Configuration Package** is deployed

- Select the **Enable Comms Server** check box if you also wish to install and configure the **Spotlight Comms Server**

Enter the following details:

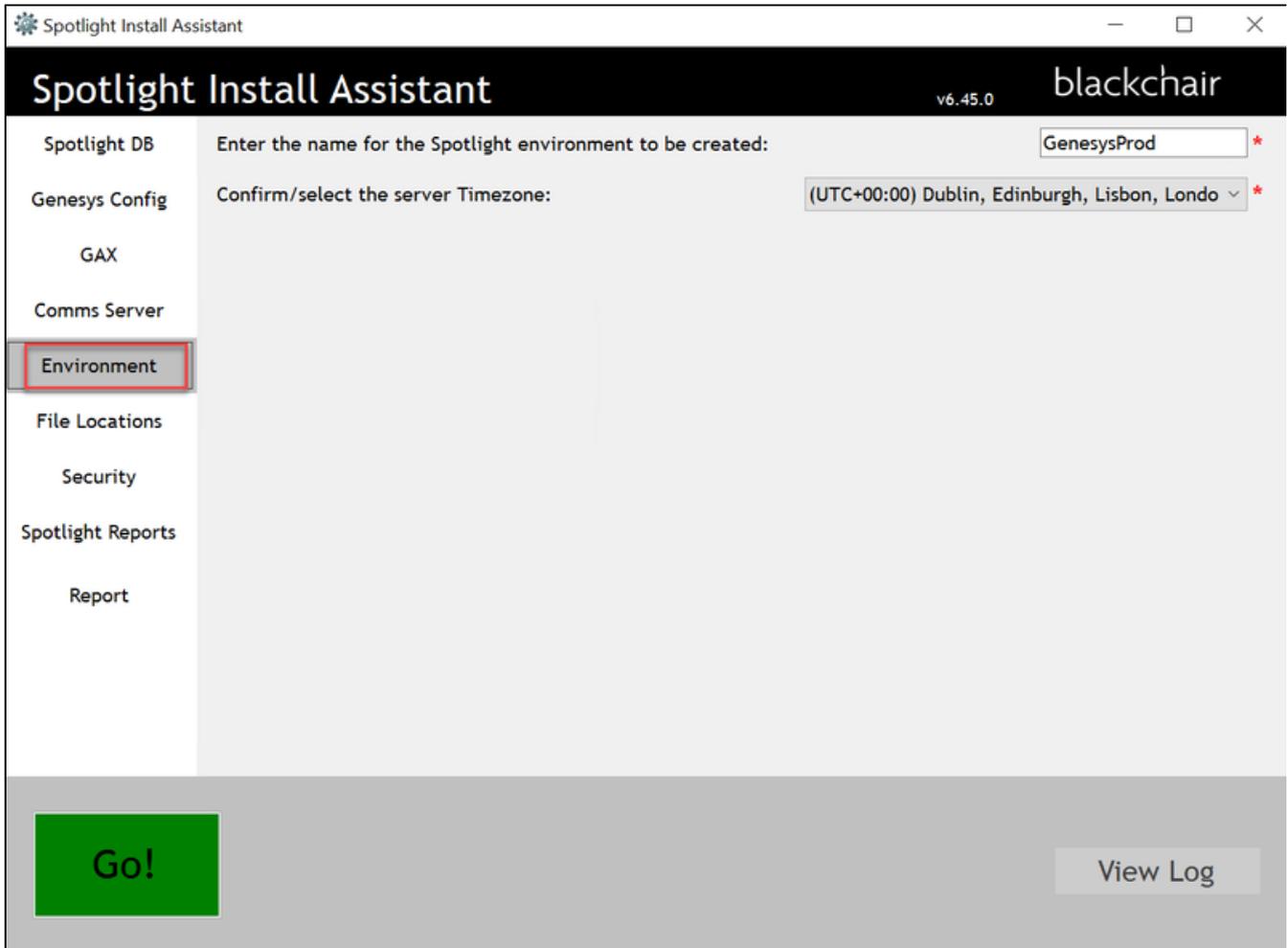
- SMTP Server host for the SMTP Server.
- SMTP Server port for the SMTP Server.
- SMTP Server login name for the SMTP Server account.
- SMTP Server login password for the SMTP Server account above.
- SMTP Server FROM address shown in the received email e.g. donotreply@theblackchair.com



Environment

Enter the following details:

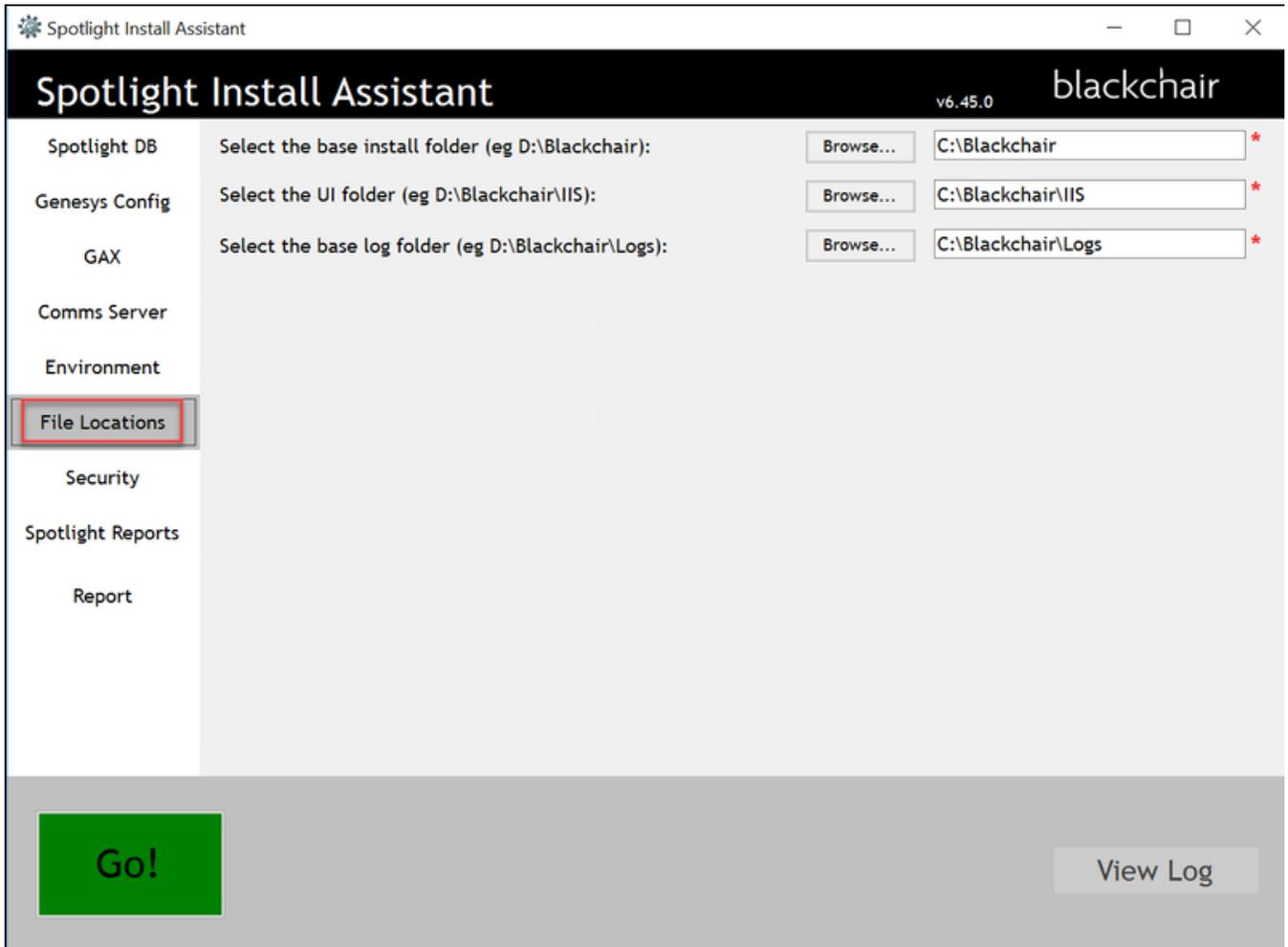
- Name for the Spotlight environment to be created - This is a friendly name that the system will be called in the Spotlight interface.. It does not need to match the name of the spotlight model database, however it should be related - **eg Environment PROD for Spotlight db SpotlightPROD**
- The Timezone should be set to the timezone the server is situated in



File Locations

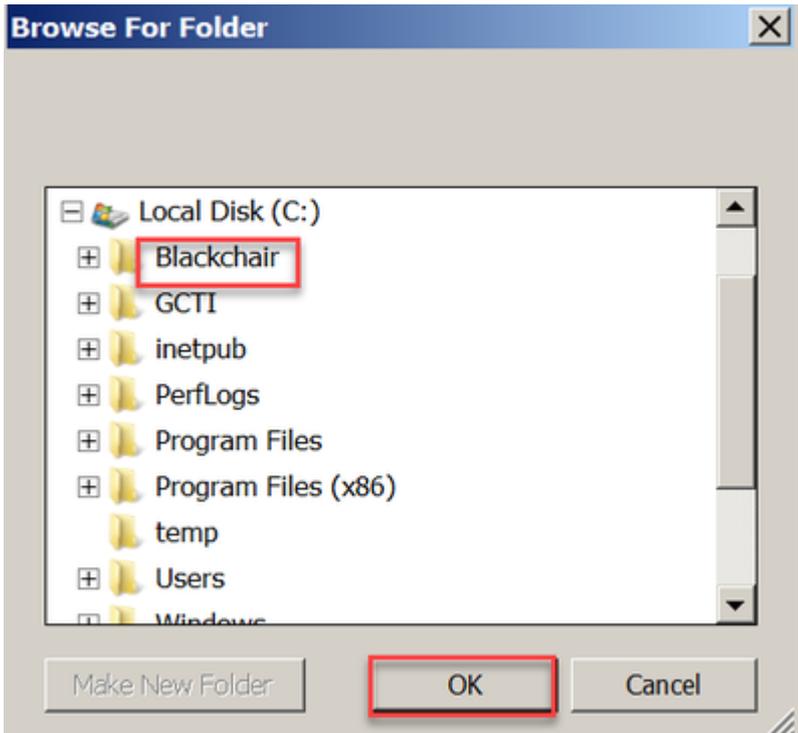
Enter the following details:

- Base Install Folder location eg **D:\Blackchair**
- UI folder location - eg **D:\Blackchair\UIS**
- Base Log Folder location **eg D:\Blackchair\Logs**



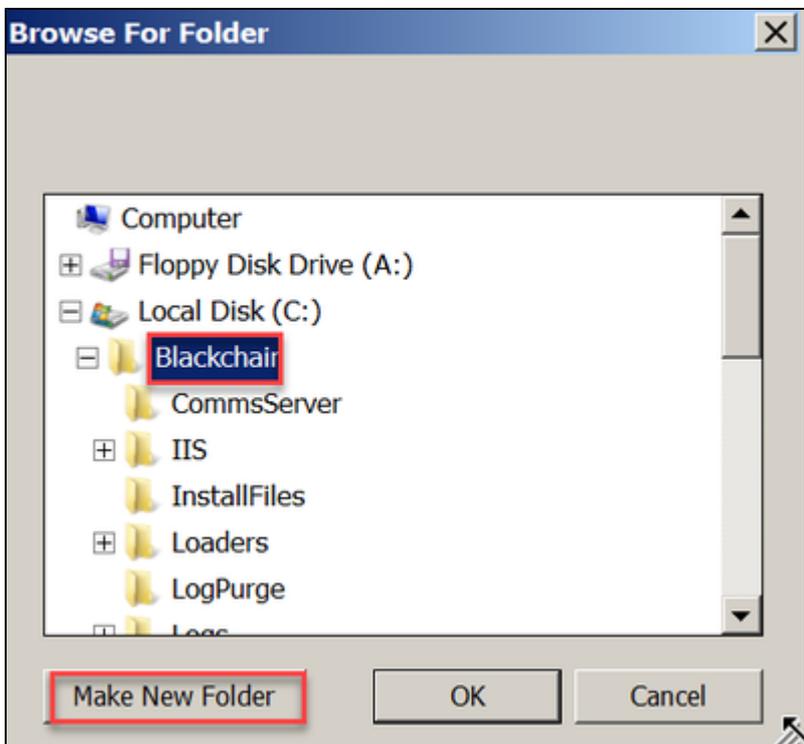
The Browse buttons beside each folder choice can be used to locate the desired folders:

- Select **Browse**
- Select an existing folder
- Select **OK**

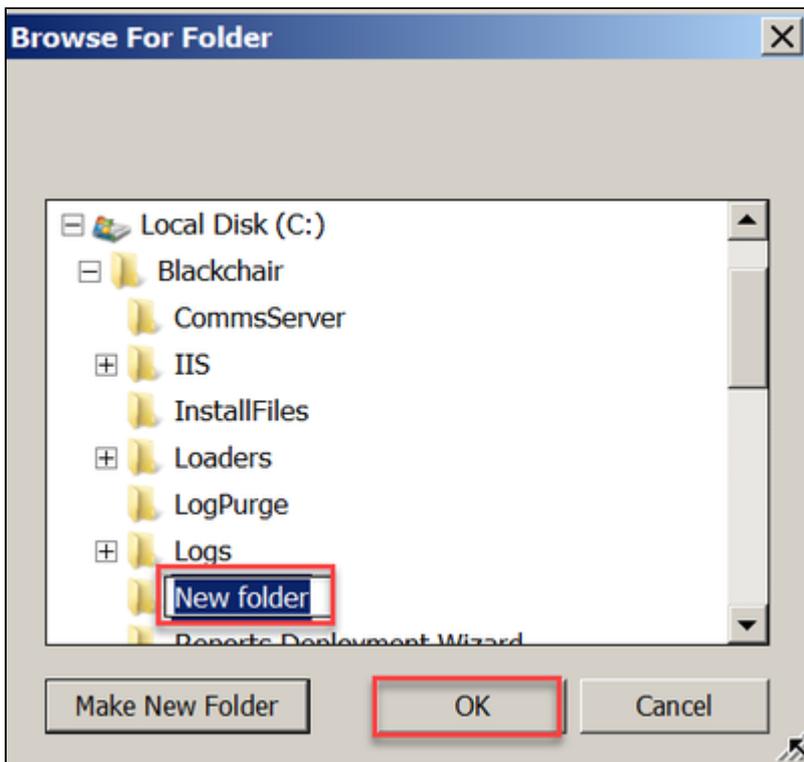


or

- Select **Browse**
- Select **Make New Folder**

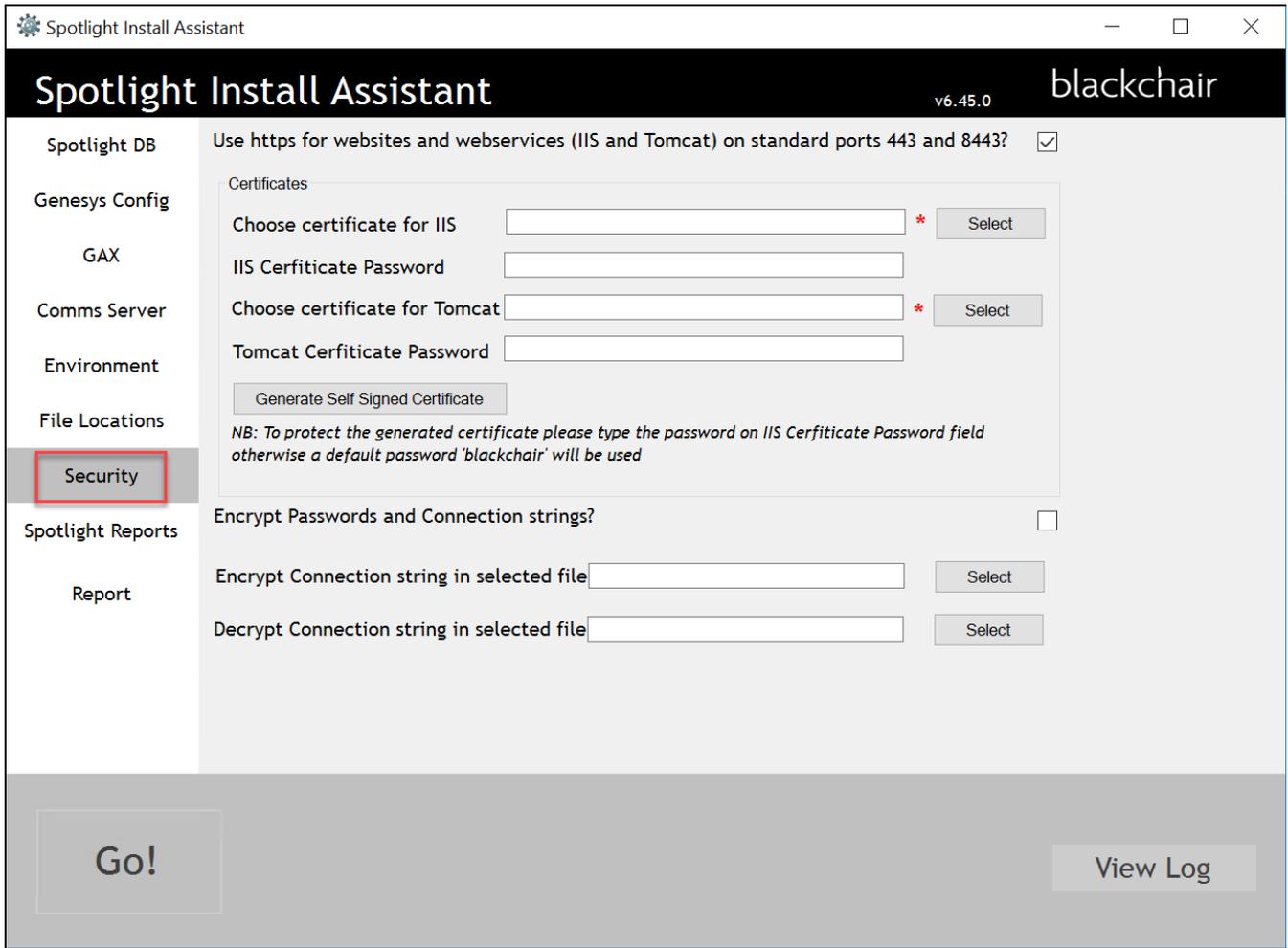


- Enter a folder name
- Select **OK**



Security

The **Security Settings** page is used to configure **Tomcat** and the **Spotlight UI** to use **HTTPS** and also to encrypt usernames/password in any Spotlight connection strings.



To configure HTTPS Security Settings:

- Select the **Use https for websites and webservices** check box

- If the client has provided an IIS certificate file
 - Select **Select** and locate the certificate
 - Enter the provided password
- If the client has provided an Tomcat certificate file
 - Select **Select** and locate the certificate
 - Enter the provided password

Use https for websites and webservices (IIS and Tomcat) on standard ports 443 and 8443?

Certificates

Choose certificate for IIS

*

Select

IIS Certificate Password

Choose certificate for Tomcat

*

Select

Tomcat Certificate Password

Generate Self Signed Certificate

NB: To protect the generated certificate please type the password on IIS Certificate Password field otherwise a default password 'blackchair' will be used

- If these certificates are yet to be provided, we can generate a temporary certificate by selecting **Generate Self Signed Certificate**

Generate Self Signed Certificate

NB: To protect the generated certificate please type the password on IIS Certificate Password field otherwise a default password 'blackchair' will be used

- Select **OK** at the confirmation message

Success



Successfully saved a new self-signed certificate to blackchair.pfx

OK

- The location and password of the self signed certificate will be populated in the **IIS** and **Tomcat** fields
- The password chosen by Spotlight can be changed by manually typing a new password in the provided fields

NB: the self signed certificate will require to be replaced by a provided customer certificate. Please refer to the IIS Tomcat guide for full instructions.

Encrypt Passwords and Connection strings?

Encrypt Connection string in selected file

Decrypt Connection string in selected file

- Select "**Encrypt Password and Connection Strings**" if you do not wish the Spotlight db and configuration files to hold plain text usernames/passwords

- The **Encrypt** and **Decrypt** fields can be used post install in circumstances where the username/password needs to change
- To decrypt an existing connection string choose "**Select**" and then locate the file containing the connection string
- Save the file
- Open and adjust the username/password
- Save the file
- It can now be encrypted again by choosing "**Select**" and saving the file again

Spotlight Reports

Spotlight Reports tab can be used to deploy the top 10 spotlight reports by automating the following steps

- Deploying Top 10 Reports SQL database objects functions/stored procedures/views
- Deploying Top 10 Report RDL & Data Source
- Configure Data Source
- Connecting and configuring multi environment reports

For these reports to function properly the following prerequisites should be met:

- Reporting services should be configured.
- SQL Server Reporting services should be running.
- Report Server and Report Manager URL should work.
- Report Setup file should be configured with proper values.
- User running the tool should have administrative privileges
- User that connects to the reporting server should have the right permissions, being in the System Administrator, Content Manager or Report Publisher roles should suffice

To deploy the reports:

- Select the Deploy to 10 reports check box
- Enter the report server URL
- Enter a folder name where the reports should be deployed
- Enter a folder name where the Report Data Source should be deployed
- Enter a username/password to connect to report server if the current user does not have access

Spotlight Install Assistant v6.45.0 blackchair

Spotlight DB Deploy top 10 reports to reporting server?

Genesys Config Enter the Reporting Server URL: localhost/reportserver *

GAX Reports Folder: Top 10 *

Reports Data Source Folder: Top 10 DS *

Comms Server Credentials to connect to reporting server (leave blank to use default/current user) or specify the username and password that can deploy reports to reporting server

Environment User Name:

File Locations Password:

Security

Spotlight Reports

Report

Go! View Log

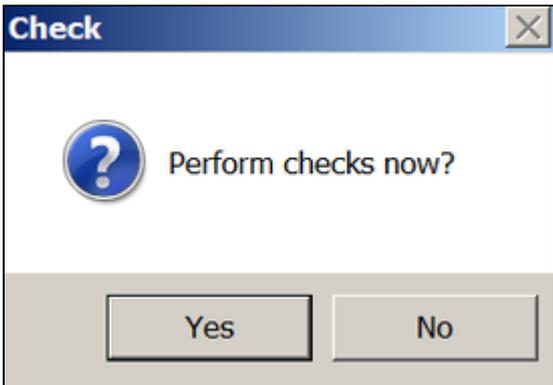
GO\Report

When all the fields in each tab non optional tabs have been completed the **Go** button becomes available. This can be selected to allow the Install Assistant to check the provided data and prepare the configuration files for installation

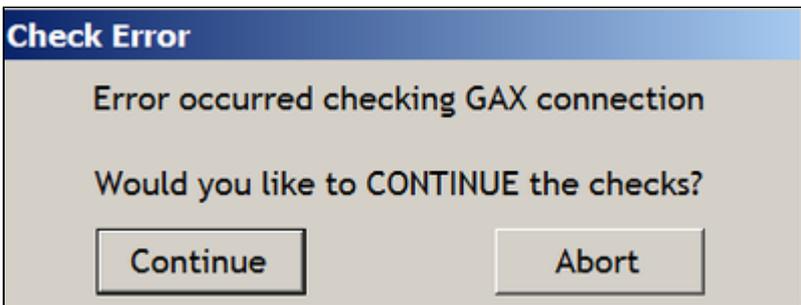
- Select **GO**



- Select Yes to proceed No to cancel



- If any of the checks fail, you will receive a message indicating such
- Select **Continue** to perform the remaining checks, or **Abort** to cancel all remaining checks



- The checks take only a short time and the **Report** tab will show summarised result of the checks including the number of tests passed.
- If all tests were successful, the **Install Assistant** can be closed and we can proceed with the installation

The screenshot shows the 'Spotlight Install Assistant' window. The title bar includes the application name and version 'v6.45.0' and the 'blackchair' logo. The main content area displays configuration details for various components:

- Spotlight DB:** Spotlight Install Assistant Check performed at 2019-09-10 10:42:27
- Genesys Config:** Spotlight DB Instance Type: Default; Spotlight DB Server: 5.101.171.61; SLConfig DB Name: slconfig_GK; Spotlight DB Name: Spotlight_GK; Spotlight DB User: spotlight; Spotlight DB Password: Sp0ll1ght!
- GAX:** SMTP Host: smtp.1and1.co.uk; SMTP Port: 25; SMTP User: spotlight; SMTP Password: spotlight
- Comms Server:** SMTP From Address: donotreply@theblackchair.com; Enable Comms: true; Spotlight Environment: GenesysProd
- Environment:** Server Timezone: GMT Standard Time
- File Locations:** Loader Folder: C:\Blackchair; IIS Folder: C:\Blackchair\IIS
- Security:** Log Folder: C:\Blackchair\Logs; SC Https: false; SC EncryptPasswords: false
- Spotlight Reports:** TomcatCertificatePassword: ; IISCertificatePassword: ; TomcatCertificateFile: ; IISCertificateFile: ; RS Reporting Server URL: <http://localhost/reportserver>; RS Reports Folder: Top 10; RS Reports Datasource Folder: Top 10 DS; RS Deploy Reports: false; RS Reports Username: ; RS Reports Password: ;

A 'Report' button is highlighted with a red box. At the bottom, a green 'Go!' button is visible, along with the text 'Checks passed: 42/43' and a 'View Log' button.

- If any tests were unsuccessful, the **Report Tab and Install Log** should be checked to see why the checks failed
- Selecting **View Log** will open the location of the Install Assistant log file
- Review the log information
- Alter the provided data as required or take corrective action
- Re-run the checks until all are successful

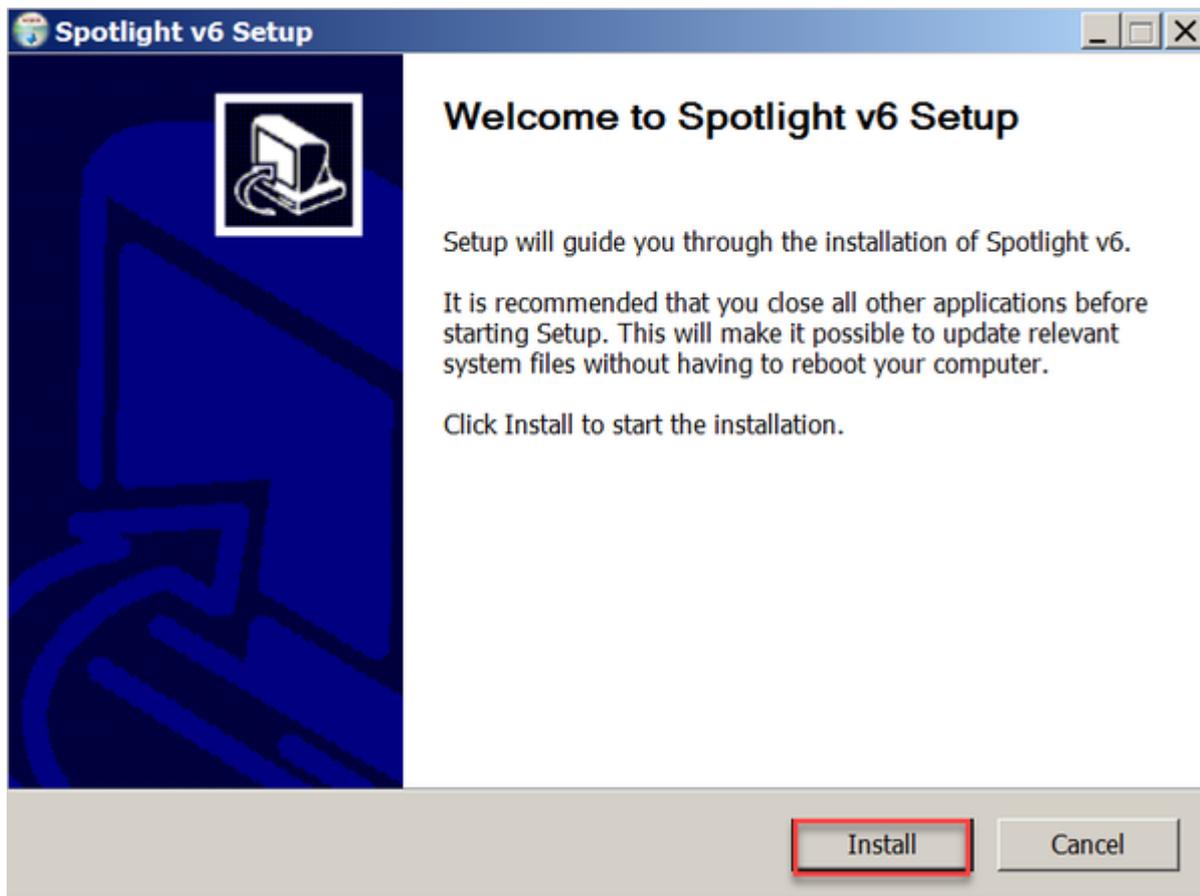
Software Installation

To Install the Spotlight Software:

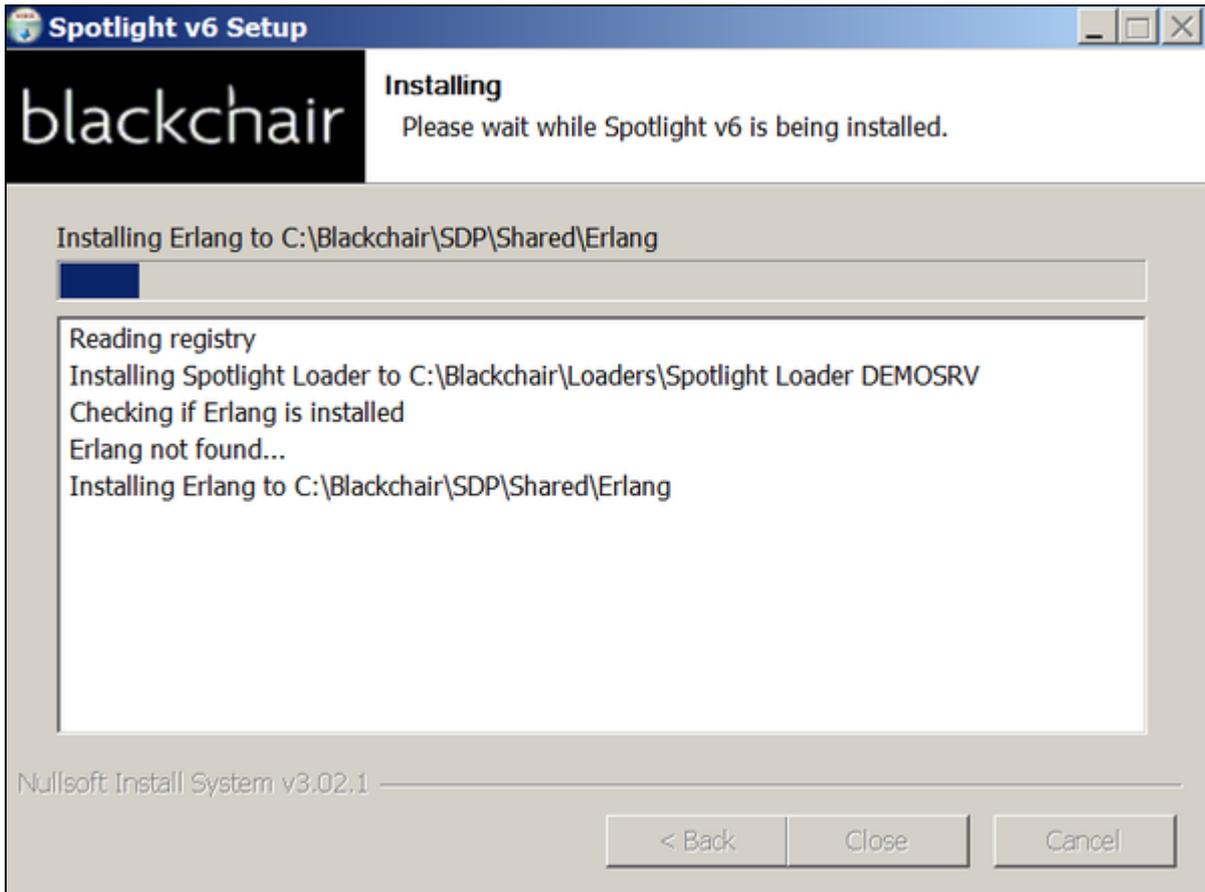
- Locate "**SpotlightApplicationInstaller.exe**" in the "**Spotlight Core Audit Installation**" folder of your installation files
- Select **Run as Administrator**.

Name ^	Date modified	Type	Size
Database	06/12/2017 16:32	File folder	
SAM Tools	06/12/2017 16:32	File folder	
Silent Install	06/12/2017 16:32	File folder	
Upgrade	06/12/2017 16:32	File folder	
Utils	06/12/2017 16:32	File folder	
Spotlight Core Audit Installation V6.40 20171204...	06/12/2017 07:37	Text Document	1 KB
SpotlightApplicationInstaller.exe	06/12/2017 12:33	Application	187,232 KB
SpotlightInstallAssistant.exe	06/12/2017 07:22	Application	10,133 KB

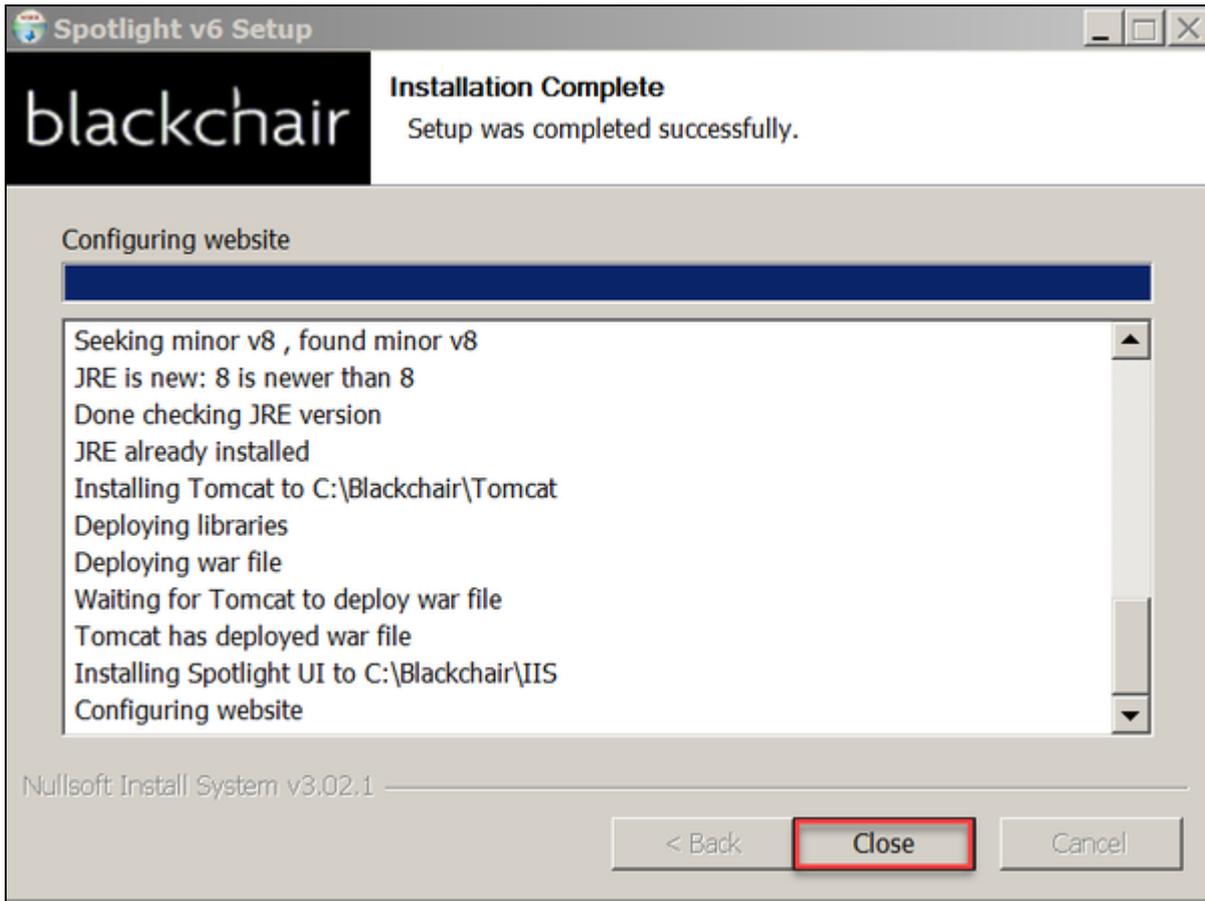
- Select **Install**



- The installation progress window will display progress and notify completion.



- When the install is complete select **Close**



Create RabbitMQ Queue

Next we require to create a queue within the **RabbitMQ Management UI** for the Genesys environment. This is equivalent to the Kafka topics used on v 6.30.

- In any web browser, go to <http://localhost:15672>, this is the **RabbitMQ Management UI**
- Log in as user '**guest**', password: '**guest**' (not this user only works if you are actually local to the box)



Username: *

Password: *

- Go to the 'Queues' page

Overview Connections Channels Exchanges **Queues** Admin

- Go to the 'Add A New Queue' section
- For the first environment give it the name 'genesys-audit-log-1'
- Ensure 'Durability' is set to 'Durable'
- Leave all other options and press 'Add Queue'

▼ Add a new queue

Name: *

Durability:

Auto delete: ?

Arguments: =

Add Message TTL ? | Auto expire ? | Max length ? | Max length bytes ? | Overflow behaviour ?
 Dead letter exchange ? | Dead letter routing key ? | Maximum priority ?
 Lazy mode ? | Master locator ?

Initial Data Load

Before tracking changes to the configuration, it is necessary to take a baseline copy of all the current objects in CME

NB: This process can also be used to synchronise spotlight with Genesys (if required) once Spotlight has been fully installed.

Pre Initial Load Services\SDP Licensing

- Place a copy of the provided "**license.properties**" File in the '**GENAuditPRD**' (Audit Producer) and '**GENAuditCON**' (Audit Consumer) folders.. If the Folder Structure was created as per this document, these folders will be located in **Blackchair\SDP\EnvName**
- Place a copy of the provided "**InstallLicense.dat**" File in the **Loader** folder. If the Folder Structure was created as per this document, these folders will be located in **Blackchair\Loaders\Spotlight Loader EnvName**
- Take a copy of the provided "**InstallLicense.dat**" File, rename to **cmdInstallLicense.Dat** and place in the **Loader** folder. If the Folder Structure was created as per this document, these folders will be located in **Blackchair\Loaders\Spotlight Loader EnvName**
- In Windows Services set the following Services to Startup Type "**Automatic (Delayed Start)**" and start the services
 - Spotlight Loader
 - Spotlight Comms Server (if installed)
- In Windows Services set all other Spotlight Services, except for the '**SLS**' loader, to Startup Type "**Automatic**".
- Start up the following services
 - Spotlight DP GENAuditCON
 - Spotlight DP GENAuditPRD

Initial Load - CME

The Consumer has an embedded web server that provides baseline tool functionality. The server is bound to **localhost** and can therefore only be run from the server itself (for security reasons).

- Open the Baseline tool by entering in a web browser - **localhost:5670**
- Click on the **Start Sync** button This will open the SDK connection to Configuration Server and retrieve every object in CME one object type at a time.

The screenshot shows a web interface for 'SDP - Audit Consumer' with a 'Configuration Sync' tab. The main content area is titled 'Configuration Sync' and shows a 'Sync Status: Ready' indicator. Below this are two buttons: 'Start Sync' (blue) and 'Stop Sync' (red). At the bottom right, there are two buttons: 'Select All' and 'Select None'. Below these buttons is a table header with three columns: 'Selected', 'Item Type', and 'Completed/Total'.

- For each object it receives it will:
 - Create a new, version 1 item if the object doesn't currently exist in Spotlight
 - Create a version n+1 object if the object does exist in Spotlight
 - Create a version n+1 delete object if the object **does** exist in Spotlight, but **does not** in CME
- As the baseline runs it will show a list of already processed object types as shown:

Configuration Sync

Sync Status: **Running**

Started: **Mon Mar 12 2018 13:40:18 GMT+0000 (GMT Standard Time)**

Current Object Type: **CfgApplication**

Start Sync **Stop Sync**

Select All **Select None**

Selected	Item Type	Completed/Total
<input checked="" type="checkbox"/>	CfgTenant	1/1
<input checked="" type="checkbox"/>	CfgHost	3/3
<input checked="" type="checkbox"/>	CfgActionCode	3/3
<input checked="" type="checkbox"/>	CfgAlarmCondition	30/30
<input checked="" type="checkbox"/>	CfgApplication	0/217
<input checked="" type="checkbox"/>	CfgAppPrototype	0/220

Once complete the status will return to **Ready**

The same tool can be used (if necessary) to resync the system. When doing so, users can:

- Resync all tables
- Choose which tables to resync using the relevant check box
- Stop the sync at any point

Configuration Sync

Sync Status: Ready

Start Sync Stop Sync

Select All Select None

Selected	Item Type	Completed/Total
<input checked="" type="checkbox"/>	CfgTenant	
<input checked="" type="checkbox"/>	CfgHost	
<input checked="" type="checkbox"/>	CfgActionCode	
<input checked="" type="checkbox"/>	CfgAlarmCondition	
<input checked="" type="checkbox"/>	CfgApplication	
<input checked="" type="checkbox"/>	CfgAppPrototype	

Initial Load - GAX

- If Spotlight is tracking **Genesys GAX**, the initial load will commence once the loader has been started.
- Data will only be populated into the UI once all data has been processed

NB: in order to tell if the GAX data has initial loaded, check the spotlight database LoadParameter table. All GAX entries should now have a current date assigned unless there is no data in GAX for that GAX item

To resync GAX with Spotlight:

- In **SQL Management Studio**, execute the stored procedure – **sp_GAXSetSync**.
- Once the initial load is complete, run the stored procedure – **sp_GAXSetAudit**
- These stored procedures are located in the Spotlight database in **Programability\Stored Procedures**

Commissioning

Once The Initial Load has been completed, it is necessary to undertake a few further steps in order to commission Spotlight for ongoing use as follows:

Tomcat HTTPS

If HTTPS was selected during the install process, please refer to the [IIS Tomcat](#) guide and follow the instructions to complete the configuration

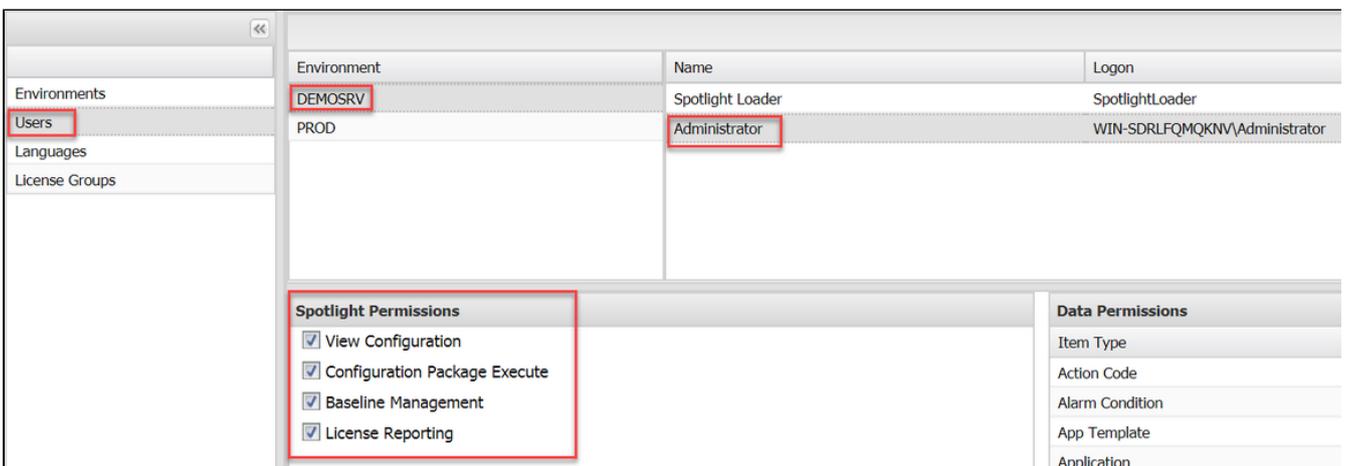
Website

The Windows user that the Install Assistant was run from is automatically made an administrator of the Spotlight system. This user is given **View** permission to the Environment and its data in Spotlight, check this permission has been applied

- On the Spotlight server login to the web UI at <http://localhost/spotlight+>. If challenged for login credentials the username is domain\username, the password is the Windows password.
- Select **ADMIN**



- Click on **Users**
- Click on the environment name
- Click on the administrator user that installed spotlight
- In the **Spotlight Permissions** section, ensure **View Configuration** is selected



- Confirm the user can access data in the **Dashboard** tab

Change Tracking Test

To test change tracking in Spotlight, make a simple addition to the Genesys environment, for example create a test Person. When that new Person appears in the Spotlight website the data processing is current.

If the person does not appear in Spotlight, check the Spotlight logs for any exceptions, and escalate to Blackchair if necessary.

Log File Management

Log files are created in the folder you specified for application log files in the Install Assistant tool.

These log files should be managed by a daily scheduled job on the windows server that deletes files older than a specified age, 7 days is recommended.

Use Windows **Task Scheduler** to run the batch **LogPurge.bat** file provided which is located in the ...**Blackchair\LogPurge** folder after install.

The bat file should automatically be set up to point to the ...**Blackchair\Log** folder by the **FolderStructure.cmd** file run earlier in this document. An example of the command in the **LogPurge.bat** file is shown below:

```
forfiles /p "D:\Blackchair\Logs" /m *.log /s /c "cmd /c del @file" /d -7
```

If the number of days of log file needs to be increased or decreased then the numeric value at the end, following the **/d** parameter, can be changed accordingly.

Multiple Message Servers

Spotlight can be configured to use multiple message servers per Genesys environment. To do so

- Open the **messageserver-configuration.json** file located in the **Blackchair\SDP\Environment Name\GENAuditPRD\Config** folder
- Copy lines 3 to 41
- Enter a comma after the bracket on line 41
- Paste the copied text into line 42
- Adjust the copied text to reflect the settings of the second message server
- Close and save the file
- Restart the **GENAuditPRD** service

```
1  {
2  "messageServers": [
3  {
4  "acceptMessageIds": [
5  10101,
6  22121,
7  24200,
8  24201,
9  24202,
10 24203,
11 24204,
12 24301
13 ],
14 "addpClientTimeout": 30,
15 "addpServerTimeout": 60,
16 "addpTraceMode": "full",
17 "applicationName": "SpotlightAuditServerGK",
18 "characterEncoding": "windows-1252",
19 "configChangeIds": [
20 24200,
21 24201,
22 24202,
23 24203,
24 24204,
25 10101
26 ],
27 "tlsEnabled": "false",
28 "useADDP": true,
29 "warmStandbyBackupDelay": 2000,
30 "warmStandbyBackupHost": "192.168.188.40",
31 "warmStandbyBackupPort": "7001",
32 "warmStandbyConnectionTimeout": 10000,
33 "warmStandbyPrimaryHost": "192.168.188.40",
34 "warmStandbyPrimaryPort": "7001",
35 "warmStandbyReconnectionRandomDelayRange": 5000,
36 "warmStandbyRetryDelay": [
37 100,
38 500,
39 5000
40 ],
41 },
42 {
43 "acceptMessageIds": [
44 10101,
45 22121,
46 24200,
47 24201,
48 24202,
49 24203,
50 24204,
51 24301
52 ],
```

```

53     "addpClientTimeout": 30,
54     "addpServerTimeout": 60,
55     "addpTraceMode": "full",
56     "applicationName": "SpotlightAuditServerGK",
57     "characterEncoding": "windows-1252",
58     "configChangeIds": [
59         24200,
60         24201,
61         24202,
62         24203,
63         24204,
64         10101
65     ],
66     "tlsEnabled": "false",
67     "useADDP": true,
68     "warmStandbyBackupDelay": 2000,
69     "warmStandbyBackupHost": "192.168.188.41",
70     "warmStandbyBackupPort": "7001",
71     "warmStandbyConnectionTimeout": 10000,
72     "warmStandbyPrimaryHost": "192.168.188.41",
73     "warmStandbyPrimaryPort": "7001",
74     "warmStandbyReconnectionRandomDelayRange": 5000,
75     "warmStandbyRetryDelay": [
76         100,
77         500,
78         5000
79     ]
80 }
81
82 ]
83 }

```

Filtering

Spotlight supports the ability to filter out changes to **Flexible Property** and **Application Option** key/value pairs and whole sections based on some simple text pattern matching rules.

The rules for these are stored in the **Blackchair\SDP[Environment Name]\GENAuditCON\config\FilterList.json** file

```

1 {
2   "filters": {
3     "FlexProp": {
4       "excludeSectionsList": [],
5       "excludeKeysList": []
6     }
7   }
8 }

```

You place the pattern matching rules in the **excludeSectionList** and **excludeKeysList** sections of the file. Note that the [] denotes that it should contain a comma separated list of items.

There is a rudimentary pattern matching format which consists of a keyword followed by a string in single quotes. The keywords are:

- *contains* 'item1' - contains the string somewhere, similar to '%item1%'
- *starts* 'item1' - starts with the string
- *ends* 'item1' - end with the string
- *is* 'item1' - equals the string

Note: Pattern matching is case insensitive

Example 1 - Filter out all sections and keys that start with the string **'agent'** and all sections that have a section name called **'virtual'**.

```

1 {
2   "filters": {
3     "FlexProp": {
4       "excludeSectionsList": [
5         "starts 'agent'",
6         "is 'virtual'"
7       ],
8       "excludeKeysList": [
9         "starts 'agent'"
10      ]
11    }
12  }
13 }

```

Example 2 - Exclude property names that begin with **'customcontact'** or **'contactucs'**.

```

1  {
2    "filters": {
3      "FlexProp": {
4        "excludeSectionsList": [
5          ],
6        "excludeKeysList": [
7          "starts 'customcontact'",
8          "starts 'contactucs'"
9        ]
10     }
11  }
12 }

```

Aside from the keywords above, there are also 'negative' versions:

- notcontains
- notstarts
- notends
- isnot

It is unlikely these would be used in production as they will filter out all sections/keys apart from the ones that match. However they would be useful in development or test where you are testing changes to a single value.

Once a filter has been put in place, the **Consumer** service needs to be restarted

NB: From Spotlight v6.41.2 onward, the **FilerList.json** file by default is configured to exclude **Interaction Workspace** flexible properties

```

"filters": {
  "FlexProp": {
    "excludeSectionsList": [ "starts 'interaction-workspace' " ],
    "excludeKeysList": []
  }
}

```

Not Supplied

Spotlight is informed of changes made in Genesys via two messages sent by Genesys, one by the Config Server and one by the Message Server. If Spotlight does not receive the Message Server message within 5 seconds of the Config Server message, then Spotlight is unable

to record which Genesys user made the change. Spotlight, therefore records this change in the User Interface as Not Supplied.

This situation also occurs when an agent is assigned to a Virtual Agent Group (VAG) in Genesys, as Genesys does not inform Spotlight of which user made the change. In these circumstances, it may be appropriate to either exclude these changes from Spotlight or identify them as a user other than "Not Supplied"

The following changes can be made in the Producer Applications.Properties file

- **producer.filterVirtualAgentGroupMessages = false**- The default value is true and excludes any VAG changes. Set it false to include these
- **producer.technicalUserName = Genesys** - The user that will be recorded against any VAG changes. Any name can be used, eg Genesys, VAG etc

- Once these changes have been made, save the file and restart the Producer service
- Repeat in further environments as required

Service Alerts

Service Alerts are used to indicate if each Spotlight database has been updated in the last day. If the answer is NO, an alert appears in the top right corner of each spotlight screen.



Service Alerts can be turned off for individual environments by entering new key values in the **EnvironmentsKV** sconfig table as follows.

- **Envid** – the environment id as found in the Environment table
- **Envkey** – ENV_SHOW_ALERT
- **Envvalue** - False

Customer Logo

A nice touch is to replace the Blackchair logo in the Spotlight UI with that of the customer. To do so:

- Navigate to the Spotlight Images folder on the Spotlight Server: **<drive>\Blackchair\IIS\Spotlight\wwwroot\images**
- Locate the **"bc_logo.png"** file and rename it to **"bc_logo_ORG.png"**
- Put the customer logo in that directory and rename it to **"bc_logo.png"**
 - It must be EXACTLY this name and extension.
 - The ideal size for the logo should be **190w x 50h** (pixels) but anything close to these dimensions will work fine.
 - The file **MUST** be named as in #3, and **MUST** be a .png file
 - Easy to find any customer logo by googling it
- Refresh your browser

Release Management

Release Management (RM) is enabled by the following steps:

- Install the Release Management license file supplied by blackchair
- Set flags in the configuration database to switch on RM at the environment level

Install License File

The **InstallLicense.dat** referenced in earlier sections will include a feature for **Release Management** if purchased by the customer.

- Take a copy of the **InstallLicense.dat** and place it in the Spotlight website folder (**Blackchair\IIS\Spotlight**)
- Restart **IIS** using **IIS Manager**.

Switch on Release Management

The availability of RM is set at the environment level in the configuration database. Usually availability will be set in all environments in the instance unless there is a specific reason to exclude certain environments.

- For each of the Environment entries listed in the Environments table of slconfig, ensure the following are set to **TRUE** in the **EnvironmentKV** table
 - **ENV_PERM_ENABLECONFIGPACKAGE**
 - **ENV_PERM_ENABLEBASELINE**
- Restart **IIS** using **IIS Manager**.

envid	envkey	envalue
1	ENV_CME_SDK	
1	ENV_CME_SERVER_NAME	default
1	ENV_CME_URL	tcp://127.0.0.1:2020
1	ENV_CME_URL_BACKUP	tcp://127.0.0.1:2020
1	ENV_CP_FILE_UPLOAD	c:\temp
1	ENV_CUST_URL_REPORTS	http://192.168.184.132/Reports
1	ENV_DB_BASE_URL	http://192.168.184.132/Spotlight
1	ENV_DB_PASSWORD	IA4GMR+gqx10Dwl9kBpb2Q==
1	ENV_DB_URL	Data Source=WIN-SDRLFQMKNV;Initial Catalog=Spotli...
1	ENV_DB_URL_JAVA	jdbc:jtds:sqlserver://WIN-SDRLFQMKNV/SpotlightPRO...
1	ENV_DB_USERNAME	spotlight
1	ENV_GAX_PASSWORD	
1	ENV_GAX_URL	
1	ENV_GAX_USERNAME	
1	ENV_PERM_ENABLEBASELINE	true
1	ENV_PERM_ENABLECONFIGPACKAGE	true

From Spotlight v6.41.2, the Release Management module can utilise two methods of connections to Genesys - **.NET** and **Java**. By default Spotlight will use **.NET**, but can be switched to use Java to allow connections to TLS1.2 enabled Genesys systems.

To enable Java connections :

- In SQL Management Studio, locate the **slconfig** database
- Right click the table "**GlobalParams**" and select "**Edit Top 200 Rows**"
- Add a new entry as follows
 - GKey - **ENV_RMJAVAWS_ENABLED**
 - GValue - **True**
- Select "**Execute**" to save
- Right click the table "**EnvironmentKV**" and select "**Edit Top 200 Rows**"
- Add a new entry as follows
 - envid - **the id of the environment as found in the Environments table**
 - envkey - **ENV_CME_TLS_ENABLED**
 - envalue - **True**
- Select "**Execute**" to save

To revert to using a .NET connection, set **GValue** to **False**

SAM

The core audit installation process also installs all the software required for **Software Asset Management (SAM)**. A separate tool is available to configure **SAM** to collect the license feature counts specific to a customer; deployment guide for the SAM Configuration Tool is available separately.

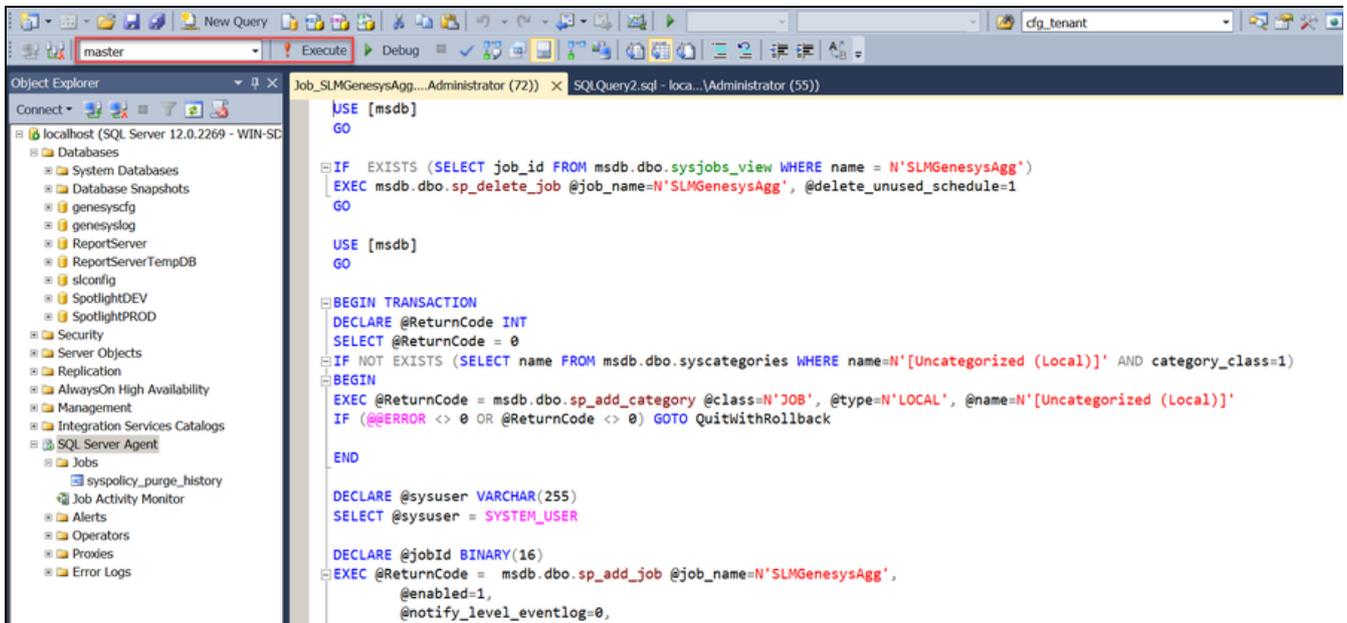
The following SAM components are installed during the core audit installation process:

- A loader service to connect with a Genesys statsserver
- Database tables
- Database functions and stored procedures

These all lie dormant until the **SAM Configuration Tool** is run to configure the appropriate feature collections. The Statsserver loader service is installed and set disabled, and should be left disabled.

It is necessary to schedule a SQL Server job to aggregate **Spotlight Asset Management** data (Licence Reporting):

- Locate the file "**Job_SLMGenesysAgg.sql**". It will be located in the folder you selected for **Install Assistant**
- Open the sql script in **SQL Server Management Studio**
- Ensure the master database is selected
- Select **Execute**



```
USE [msdb]
GO

IF EXISTS (SELECT job_id FROM msdb.dbo.sysjobs_view WHERE name = N'SLMGenesysAgg')
EXEC msdb.dbo.sp_delete_job @job_name=N'SLMGenesysAgg', @delete_unused_schedule=1
GO

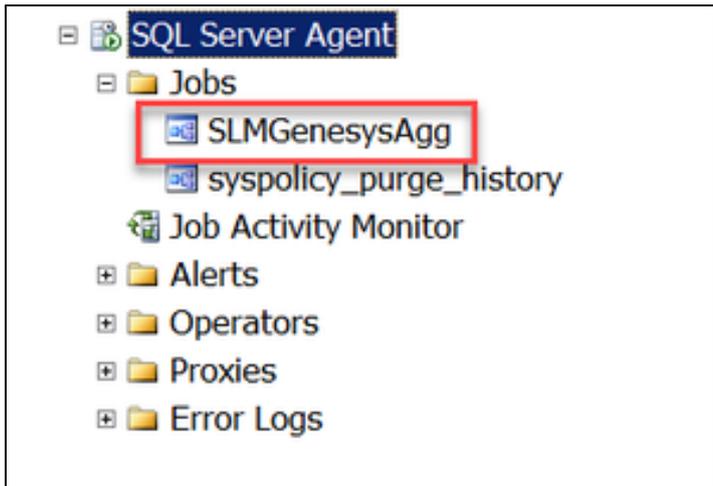
USE [msdb]
GO

BEGIN TRANSACTION
DECLARE @ReturnCode INT
SELECT @ReturnCode = 0
IF NOT EXISTS (SELECT name FROM msdb.dbo.syscategories WHERE name=N'[Uncategorized (Local)]' AND category_class=1)
BEGIN
EXEC @ReturnCode = msdb.dbo.sp_add_category @class=N'JOB', @type=N'LOCAL', @name=N'[Uncategorized (Local)]'
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
END

DECLARE @sysuser VARCHAR(255)
SELECT @sysuser = SYSTEM_USER

DECLARE @jobId BINARY(16)
EXEC @ReturnCode = msdb.dbo.sp_add_job @job_name=N'SLMGenesysAgg',
    @enabled=1,
    @notify_level_eventlog=0,
```

- This will create a job in the SQL Server Agent called "**SLMGenesysAgg**" which will run against the Spotlight database.



In addition, if License Group functionality is to be enabled, add the following into the slconfig db Environment KV table for each Production environment

- EnvKey - ENV_PERM_SLM_GRP_RPT
- EnvValue - True

Additional Spotlight Environments

The following sections will describe the steps required to install an additional Spotlight environment.

Create Additional Spotlight Databases

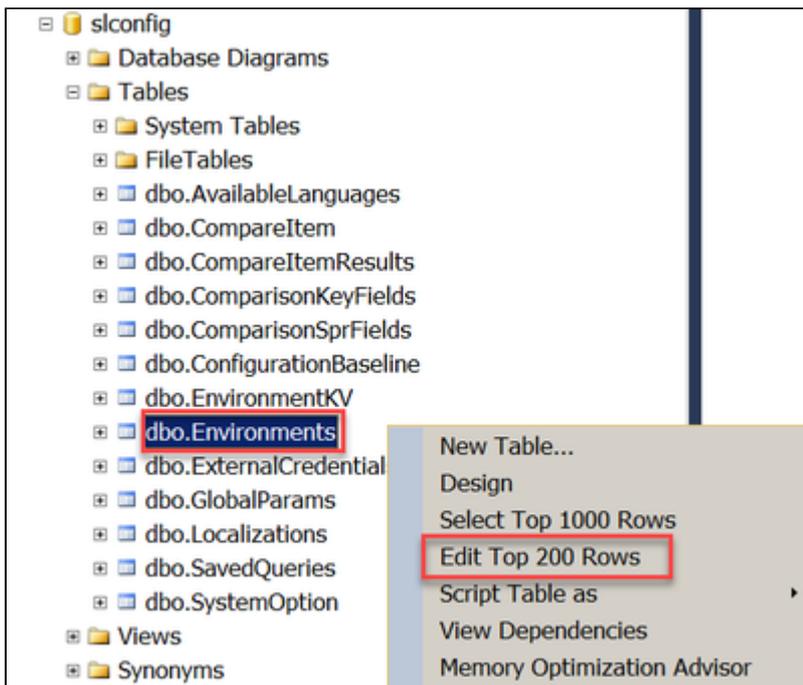
For each new Spotlight environment, follow the steps described previously to:

- Create a new Spotlight DB
- Create the Spotlight DB Structure

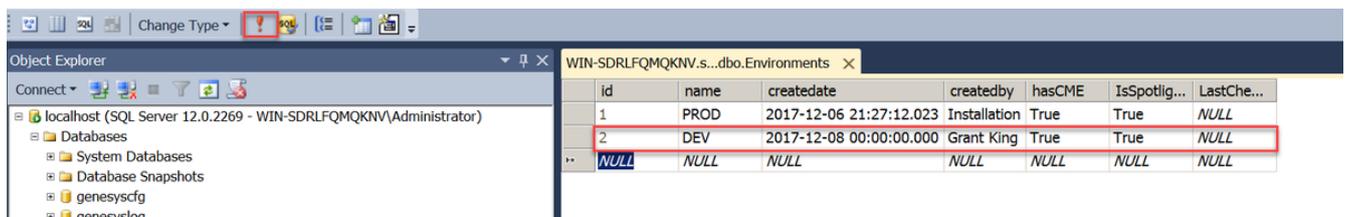
Configure SIconfig DB

The **slconfig** database requires to be updated manually to create a new Spotlight Environment and associated key values as follows:

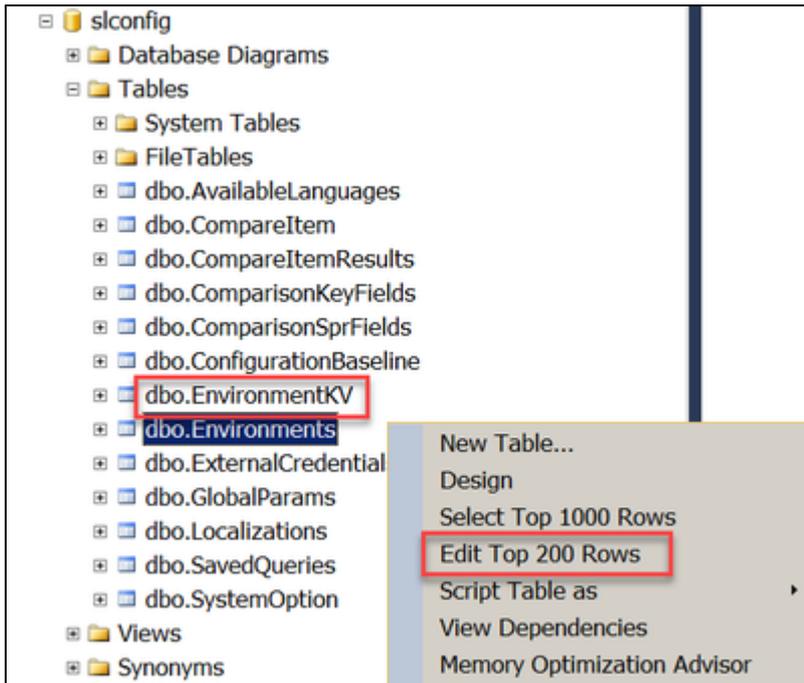
- Open **SQL Server Management Studio**
- Navigate to the **Environments** table within the **slconfig** database
- Right click and select **Edit Top 200 Rows**



- Create a new **Environment** entry by entering values for:
 - Name
 - Created Date
 - Created By
 - hasCME - **True**
 - IsSpotlight - **True**
- Select **Execute**



- Navigate to the **EnvironmentKV** table
- Right click and select **Edit Top 200 Rows**



- All the records related to the original Spotlight environment requires to be manually duplicated for the new Spotlight environment

envid	envkey	envvalue
1	ENV_CME_PASSWORD	Tkeq1v363g3Lax3rcXqV6g==
1	ENV_CME_SERVER_NAME	default
1	ENV_CME_TLS	false
1	ENV_CME_URL	tcp://127.0.0.1:2020
1	ENV_CME_URL_BACKUP	tcp://127.0.0.1:2020
1	ENV_CME_USERNAME	default
1	ENV_CP_FILE_UPLOAD	c:\temp
1	ENV_CUST_URL_REPORTS	http://192.168.67.128/Reports
1	ENV_DB_BASE_URL	http://192.168.67.128/Spotlight
1	ENV_DB_PASSWORD	IA4GMR+gqx10DwI9kBpb2Q==
1	ENV_DB_URL	Data Source=localhost;Initial Catalog=SpotlightPROD;Persist Security Info=True;User ID=spotlight;Password=spotlight
1	ENV_DB_URL_JAVA	jdbc:jtds:sqlserver://localhost/SpotlightPROD/?loginTimeout=10
1	ENV_DB_USERNAME	spotlight
1	ENV_GAX_PASSWORD	
1	ENV_GAX_URL	
1	ENV_GAX_USERNAME	
1	ENV_PERM_ENABLEBASELINE	true
1	ENV_PERM_ENABLECONFIGPACKAGE	true

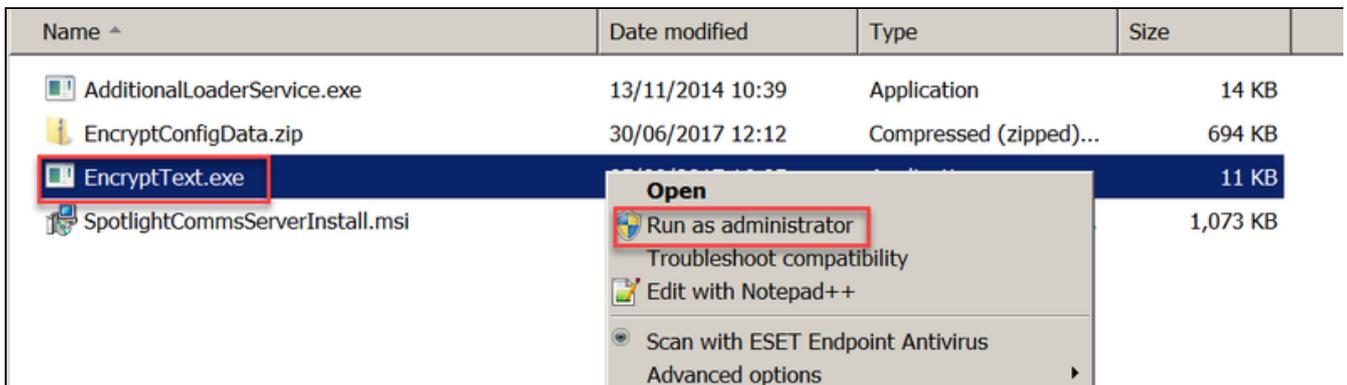
- Ensure when duplicating the records that the **envid** fields for all the new records match the **id** field in the **Environments** table for the corresponding environment

2	ENV_CME_PASSWORD	Tkeq1v363g3Lax3rcXqV6g==
2	ENV_CME_SERVER_NAME	default
2	ENV_CME_TLS	false
2	ENV_CME_URL	tcp://127.0.0.1:2020
2	ENV_CME_URL_BACKUP	tcp://127.0.0.1:2020
2	ENV_CME_USERNAME	default
2	ENV_CP_FILE_UPLOAD	c:\temp
2	ENV_CUST_URL_REPORTS	http://192.168.67.128/Reports
2	ENV_DB_BASE_URL	http://192.168.67.128/Spotlight
2	ENV_DB_PASSWORD	IA4GMR+gqx10DwI9kBpb2Q==
2	ENV_DB_URL	Data Source=localhost;Initial Catalog=SpotlightDEV;Persist Security Info=True;User ID=spotlight;Password=spotlight
2	ENV_DB_URL_JAVA	jdbc:jtds:sqlserver://localhost/SpotlightDEV/?loginTimeout=10
2	ENV_DB_USERNAME	spotlight
2	ENV_GAX_PASSWORD	
2	ENV_GAX_URL	
2	ENV_GAX_USERNAME	
2	ENV_PERM_ENABLEBASELINE	true
2	ENV_PERM_ENABLECONFIGPACKAGE	true

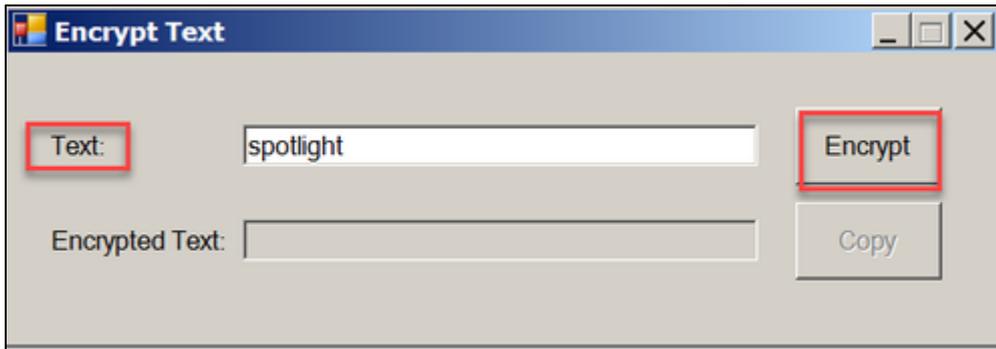
- The **envvalue** fields for the new **ENV_DB_PASSWORD** and **ENV_CME_PASSWORD** is automatically encrypted when spotlight is first installed, however for subsequent environments (if the password is different), this has to be done manually (see below)

The spotlight software includes a tool (**Encrypt Text.exe**) to allow you to encrypt passwords and is found in the **UTILS** folder.

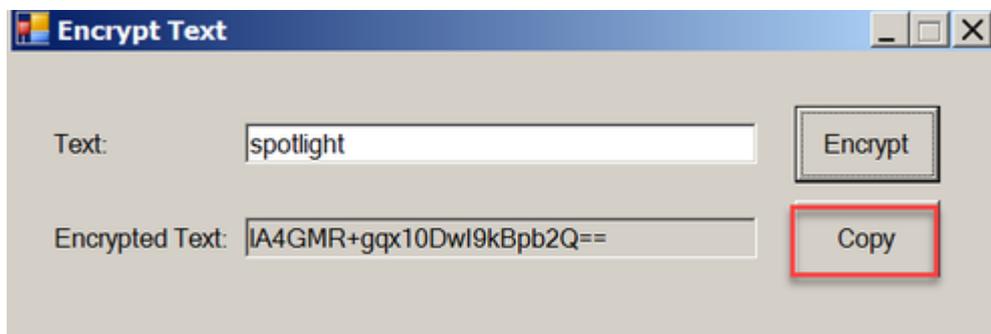
- Right click **Encrypt Text.exe** and select **Run as Administrator**



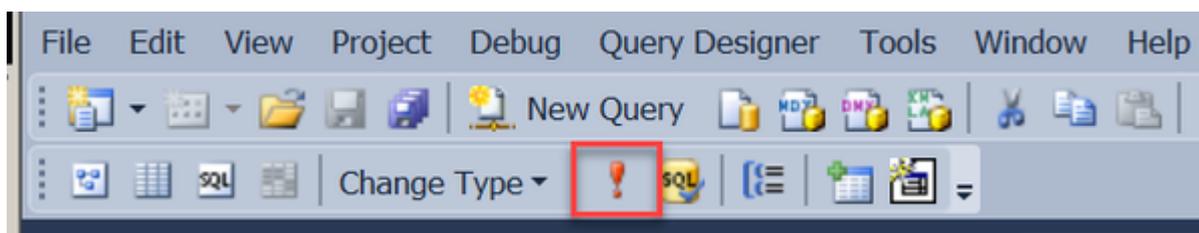
- Enter the **Spotlight db** password in the **Tex** field
- Select **Encrypt**



- The encrypted password now appears in the **Encrypted Text** field.
- Copy this using the **Copy** button



- Paste into the **Envvalue** field for the new **Envkey** of **ENV_DB_PASSWORD**
- Repeat this process for the **ENV_CME_PASSWORD**

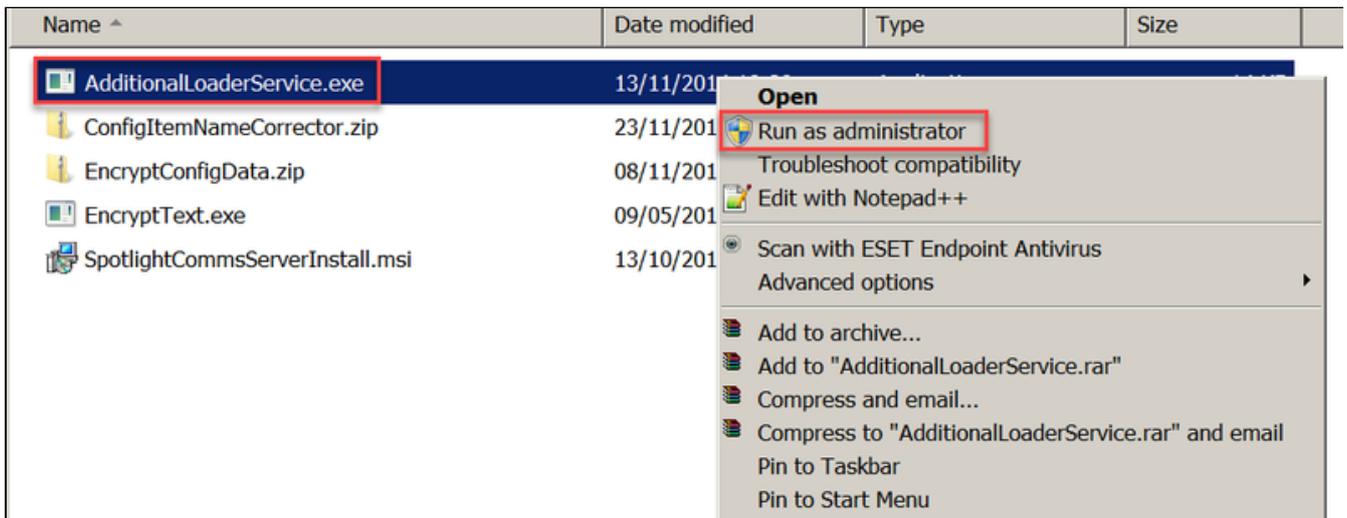


- When all values have been correctly set, select the **Execute** button
- Restart **IIS** using **IIS Manager**.

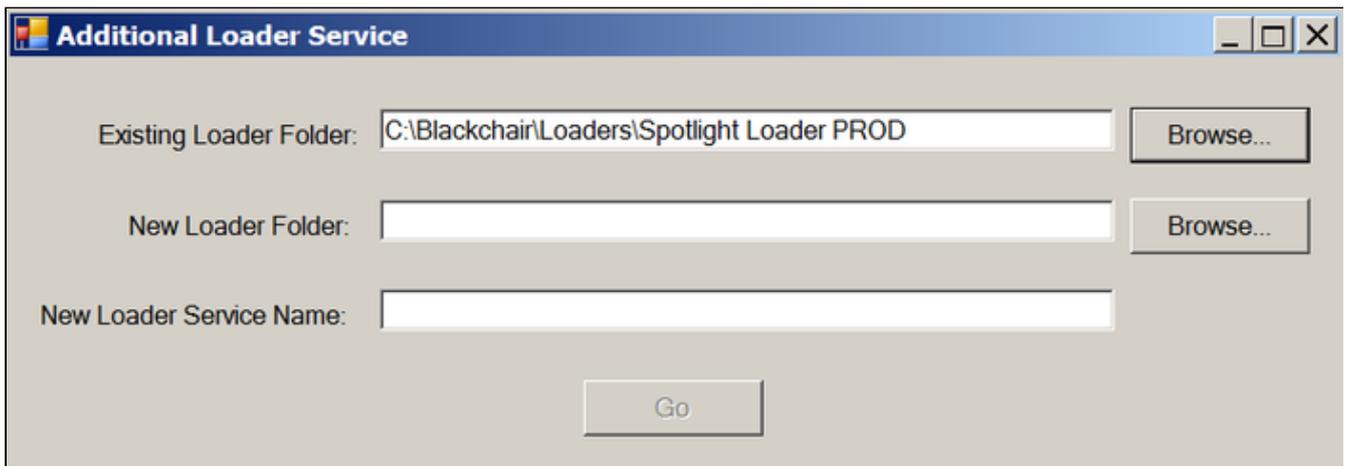
Create Additional Loader

To create additional Spotlight Loader files and service:

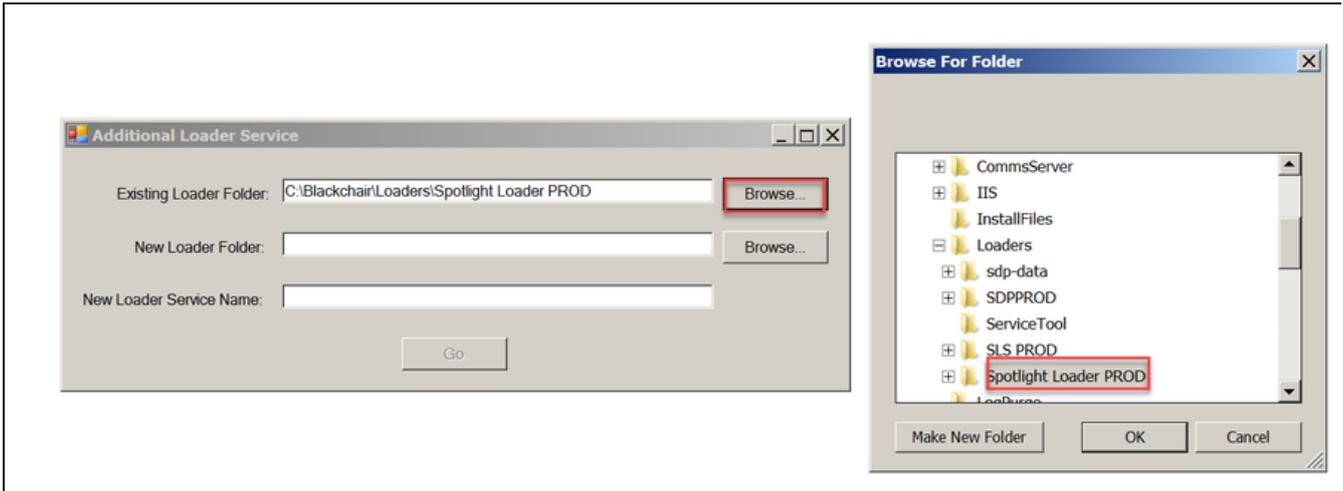
- Locate and open the **Utils** folder which is located **Spotlight Core Audit Installation V...** folder.
- Right click on the **AdditionalLoaderService.exe** and click on **Run as administrator**



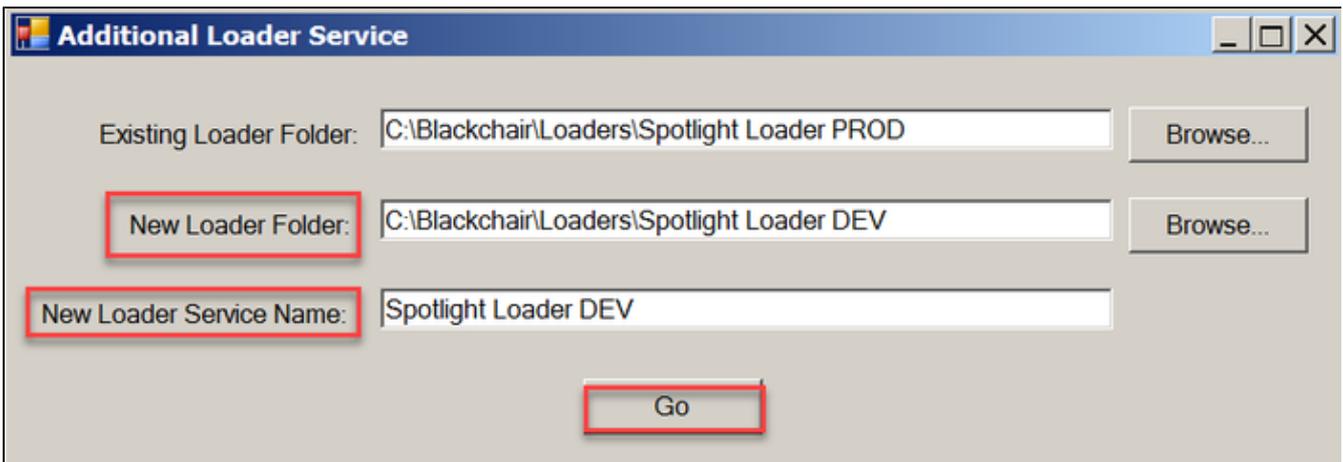
- This will display the **Additional Loader Service** window which has three fields;



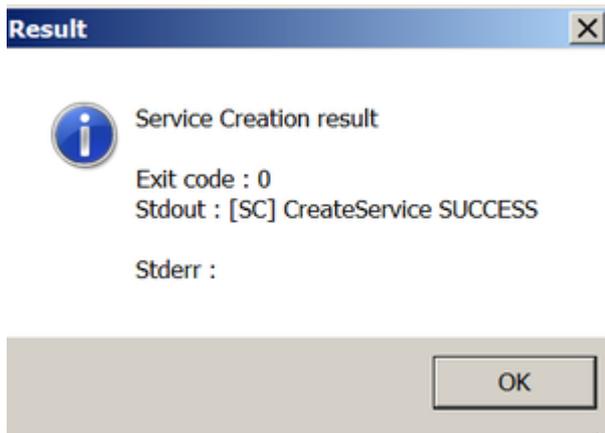
- Click on the **Browse** button for the **Existing Loader Folder** and navigate to the loader you wish to copy, then click the **OK** button



- Copy the full path of the existing loader and copy it in to the **New Loader Folder** field and adjust the name of the folder to match environment name that is to be used e.g. change **PRODUCTION** to **DEV**
- In the **New Loader Service Name** enter the name of the service to match that of the new loader being created.
- Click the **Go** button



- When the loader files and service have been created a **Result** window will be displayed indicating that it has been successful
- Select **OK**



Configure Loader Config Files

There are six configuration files within the new loader folder that will require to be altered manually. These are

- **SpotlightLoaderConfig.xml**
 - **SpotlightLoaderService.exe.config**
 - **SpotlightLoader.exe.config**
 - **ImportConfigPackage.exe.config (v6.41.1 and above)**
 - **StartConfigPackage.exe.config**
 - **StoreCPEExecution.exe.config (v6.41.1 and above)**
-
- Open all these files in a text editor and follow the instructions below to adjust them

SpotlightLoaderConfig.xml

- In the **SpotlightLoaderConfig.xml** files locate the data between the **<Servers>** tags and change the data between the **<Environment>** tags for the **Spotlight** server definition so the value matches the value in the **name** field within the **Environments** table in the **sl config** database

```

<Servers>
  <Server provider='Database'>
    <Name>Spotlight</Name>
    <Environment>DEV</Environment>
    <TimeZone>GMT Standard Time</TimeZone>
    <TimeOut>300</TimeOut>
    <EmulateCaseSensitivity>False</EmulateCaseSensitivity>
  </Server>
</Servers>

```

- Save the changes and close the file.

exe.config files

- Navigate to and open the **exe.config** files located within the new loader folder
 - **SpotlightLoaderService.exe.config**
 - **SpotlightLoader.exe.config**
 - **ImportConfigPackage.exe.config**
 - **StartConfigPackage.exe.config**
 - **StoreCPEExecution.exe.config**
- Locate the **Listeners** section in each file and
 - Change the log location e.g. from **C:\Blackchair\Logs\PROD** to **C:\Blackchair\Logs\DEV**
 - Change the log name e.g. from **svc-trace_PROD** to **svc_trace_DEV**

```

<listeners>
  <add name="Formatted EventLog TraceListener" type="Microsoft.Practices.EnterpriseLibrary.Logging.TraceListeners.Formatted
  listenerDataType="Microsoft.Practices.EnterpriseLibrary.Logging.Configuration.FormattedEventLogTraceListenerData, Mic
  source="Enterprise Library Logging" formatter="Text Formatter"
  log="Application" machineName="" traceOutputOptions="None" filter="All" />
  <add name="Rolling Flat File Trace Listener" type="Microsoft.Practices.EnterpriseLibrary.Logging.TraceListeners.RollingFl
  listenerDataType="Microsoft.Practices.EnterpriseLibrary.Logging.Configuration.RollingFlatFileTraceListenerData, Micro
  fileName="C:\Blackchair\Logs\DEV\svc-trace_DEV.log" footer="" formatter="Text Formatter"
  header="" rollFileExistsBehavior="Increment" rollInterval="Day"
  rollSizeKB="100000" timeStampPattern="yyyy-MM-dd" traceOutputOptions="LogicalOperationStack"
  filter="All" />
</listeners>

```

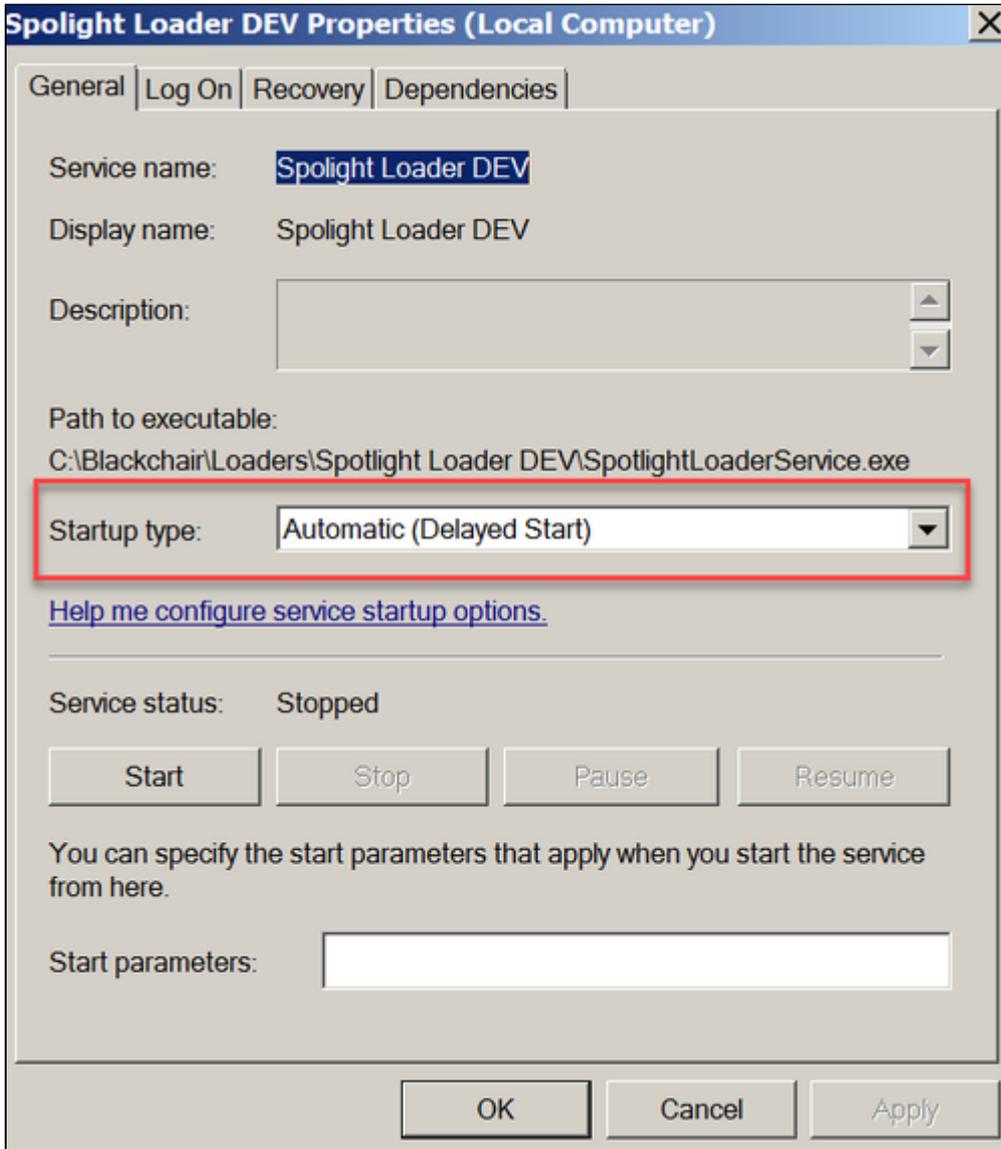
- Save the changes and close the files

NB: If the log folders specified do not exist, they will be created when the loader is first started

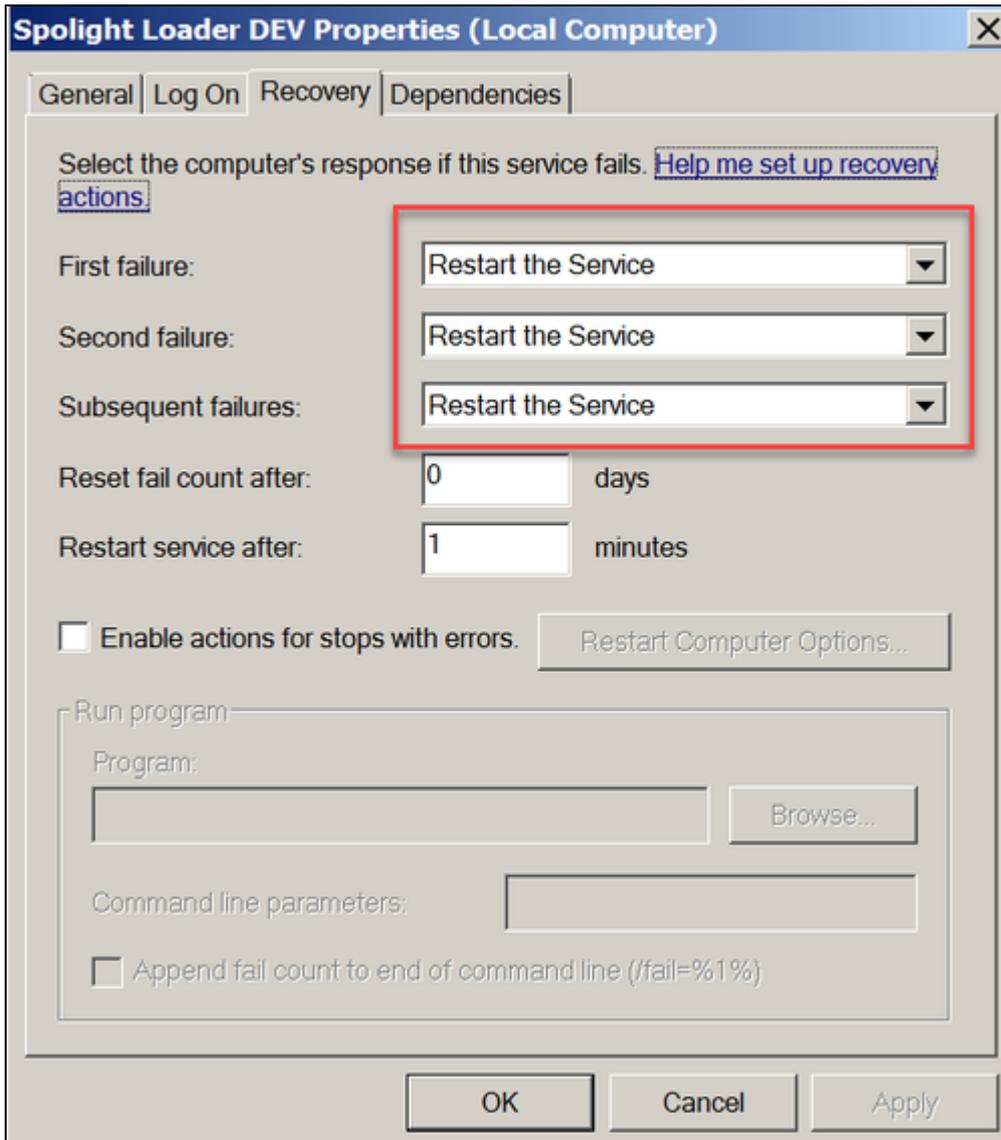
Loader Licensing\Start Loader Service

- Delete the existing **LocalLicense.dat** file with the new loader license provided
- In Windows Services

- Set the new loader to Startup Type "**Automatic Delayed Start**"



- In the **Recovery** tab set the first, second and third failures to **Restart the Service**



- Start the service

SDP Applications

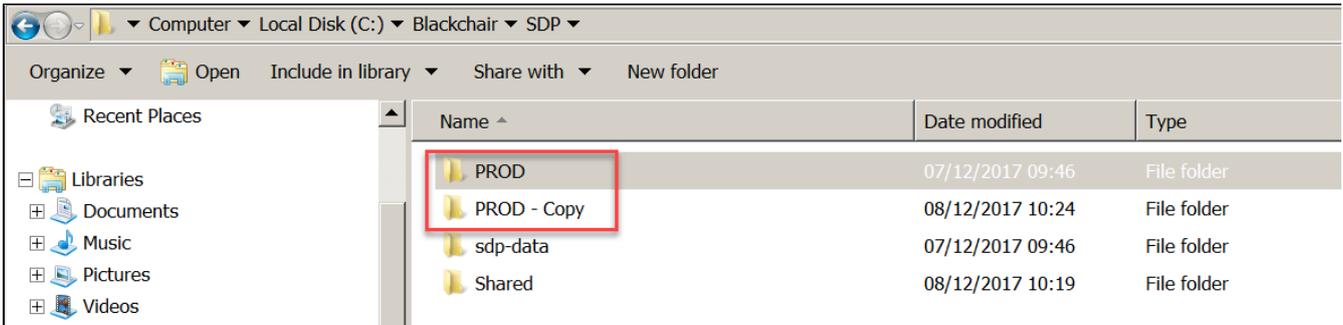
Create two new applications in Genesys for the new environment as described previously.

Create RabbitMQ Queue

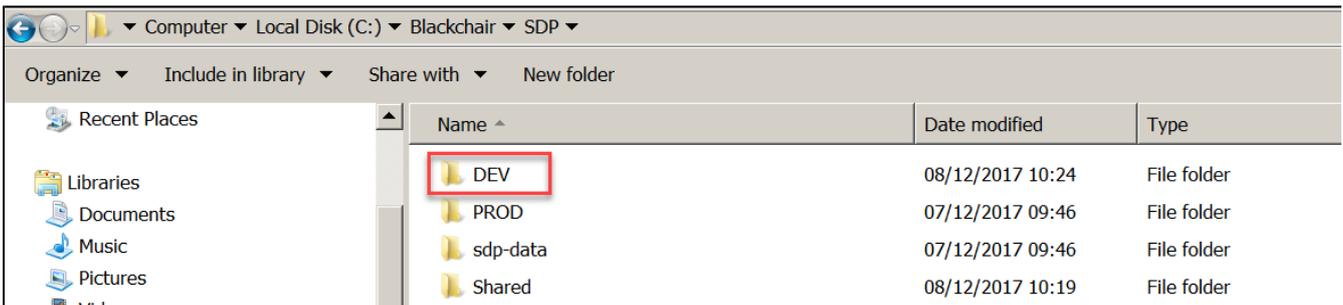
Create a queue within the **RabbitMQ Management UI** for the Genesys environment. as described previously. Ensure when doing so, the queue number is different. It is recommended to use the **ENVID** number for the new environment.

Install SDP Components as Services

- Take a copy of the existing **Blackchair\SDP\[Environment Name]** folder and paste in the same location



- Rename the folder to reflect the name of the new Spotlight environment



- Each of the new components needs to be installed as a windows service as follows
- Open the "**Blackchair\SDP\Shared**" folder and navigate to a cmd window as an administrator
- Create the SDP services by executing the command in a admin command prompt– **create_services_sdp.bat [Environment Name]**

Configure Services

It is now necessary to go to each of the new service installation folders, and set a number of parameters. Note that the below sections only highlight where you should change items from their current value.

WIP Audit Producer

- Open the "Blackchair\SDP\[Environment Name]\GENAuditPRD\Config" folder
- Open "application.properties" in any text editor
- In the **Config Service Properties** section -
 - Set the "warmStandby.primaryServer" IP address and Port – config server info of new environment
 - Set the "warmStandby.backupServer" IP address and Port – config server info of new environment

```
# Warm Standby Options - use the same servers in single node environment
configservice.warmStandbyPrimaryHost =77.74.194.168
configservice.warmStandbyPrimaryPort =2030
configservice.warmStandbyBackupHost=77.74.194.169
configservice.warmStandbyBackupPort=2030
configservice.warmStandbyBackupDelay = 2000
configservice.warmStandbyReconnectionRandomDelayRange = 5000
configservice.warmStandbyRetryDelay = 100,500,5000
configservice.warmStandbyConnectionTimeout = 10000
```

- In the **MessageService Properties** section -
 - Set the "warmStandby.primaryServer" IP address and Port – message server info of new environment
 - Set the "warmStandby.backupServer" IP address and Port – messageserver info of new environment

```
# Warm Standby Options - use the same servers in single node environment
messageservice.warmStandbyPrimaryHost =77.74.194.168
messageservice.warmStandbyPrimaryPort =7012
messageservice.warmStandbyBackupHost=77.74.194.168
messageservice.warmStandbyBackupPort=7012
messageservice.warmStandbyBackupDelay = 2000
messageservice.warmStandbyReconnectionRandomDelayRange = 5000
messageservice.warmStandbyRetryDelay = 100,500,5000
messageservice.warmStandbyConnectionTimeout = 10000
```

- In the **Client Options** section - change the **producer.environmentID** value
- In the **Rabbit Client Options** section - change the **producer.queue** log number - the name of the previously created Rabbit Queue

```

# Client Options
##
producer.environmentId = 1
producer.emptyUserName = Not Supplied
producer.joinWindow = 5

##
# Rabbit Client Options
##
producer.queue = genesys-audit-log-1
rabbit.brokerAddresses = 127.0.0.1:5672

```

- In the **Genesys Connection** section, check the **configservice.applicationName** is the correct application created for the new environment. **This is only required if the name is different from the original environment**

```

# Genesys Connection
configservice.applicationName = SpotlightAuditServer
configservice.characterEncoding = windows-1252
configservice.tlsEnabled =true

```

- Save the file

Audit Consumer

- Open the "Blackchair\SDP\[Environment Name]\GENAuditCON\Config" folder
- Open "application.properties" in any text editor
- In the **Config Service Properties** section -
 - Set the "warmStandby.primaryServer" IP address and Port – config server info of new environment
 - Set the "warmStandby.backupServer" IP address and Port – config server info of new environment

```
# Warm Standby Options - use the same servers in single node environment
configservice.warmStandbyPrimaryHost =77.74.194.168
configservice.warmStandbyPrimaryPort =2030
configservice.warmStandbyBackupHost=77.74.194.168
configservice.warmStandbyBackupPort=2030
configservice.warmStandbyBackupDelay = 2000
configservice.warmStandbyReconnectionRandomDelayRange = 5000
configservice.warmStandbyRetryDelay = 100,500,5000
configservice.warmStandbyConnectionTimeout = 10000
```

- In the **Client Options** section
 - Set the **consumer.environmentID** value
 - Set the **consumer.environmentName** value

```
# Client Options
##
consumer.environmentId = 1
consumer.abortOnException = false
consumer.environmentName =DEMOSRV
consumer.objectURL =http://192.168.184.138/Spotlight/ConfigurationItem.aspx?ID=%s&Env=%s
consumer.resyncUsername = Not Supplied
```

- In the **Rabbit Client Options** section - change the **consumer.queue** log number - the name of the previously created Rabbit Queue

```
##
# Rabbit Client Options
##
consumer.queue = genesys-audit-log-1
rabbit.brokerAddresses = 127.0.0.1:5672
```

- In the **Database Options** section
 - Set the **spotlight.db.url** value
 - Set the **spotlight.db.username** value
 - Set the **spotlight.db.password** value

```
spotlight.db.url=jdbc:sqlserver://WIN-SDRLFQMKNV;database=SpotlightDEMOSRV;loginTimeout=30;
spotlight.db.username=spotlight
spotlight.db.password=1A4GMR+gqx10DwI9kBpb2Q==
```

- In the **Baseline Tool Options** section

- Change the server.port to a new port number - eg server.port= 5680
- **NB: Any port number can be used that is not already in use**

```
# Baseline Tool Options
##
server.port = 5670
```

- In the **Genesys Connection** section, check the **configservice.applicationName** is the correct **EC** application created for the new environment. **This is only required if the name is different from the original environment**

```
# Genesys Connection
configservice.applicationName = SpotlightAuditServer
configservice.characterEncoding = windows-1252
configservice.tlsEnabled =true
```

- Save the file

Log File Configuration

The **Producer** and **Consumer** has a log configuration file - **config/log4j2.xml**

- Open both files in any text editor
- Change the **log-path** to refer to the new environment
- Change the environment name
- Save the file

```
<Property name="log-path">C:/Blackchair/Logs/DEV</Property>
  <Property name="provider">GENAuditPRD</Property>
<Property name="environment">DEV</Property>
</Properties>
```

NB: If the log folders specified do not exist, they will be created when the loader is first started

Initial Data Load

Pre Initial Load Services

In Windows Services set following services to Startup Type "**Automatic**", and then start.

- Spotlight DP GENAuditCON
- Spotlight DP GENAuditPRD

Initial Load

The process to baseline a Genesys/Spotlight is described in the **Initial Load** section above. Ensure when opening the baseline tool, you use the correct port number as defined in the **Consumer\Applications.config** file

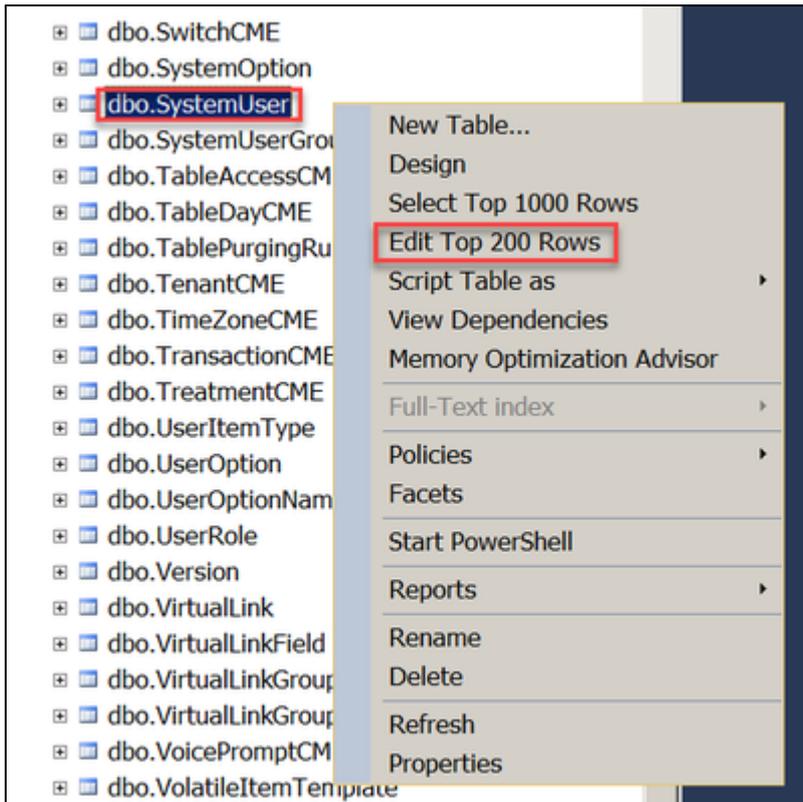
Commissioning

Once The Initial Load has been completed, it is necessary to undertake a few further steps in order to commission Spotlight for ongoing use as follows:

Adding an Admin User

Before the new environment can be viewed via the Spotlight UI a user will need to be created with administrative rights. This has to be done by adding the new user directly in to the "**SystemUser**" table of the new Spotlight database.

- Using **SQL Server Manager Studio** locate the **SystemUser** table within the new Spotlight database e.g. **SpotlightDEV**
- Right click on it and then click **Edit Top 200 Rows**



- Using the domain and user name provided to create the Spotlight environment enter the login details directly in to the table and set the **IsAdmin** field to **True**
 - The **Logon** field must follow the format of **Domain Name\User Name**

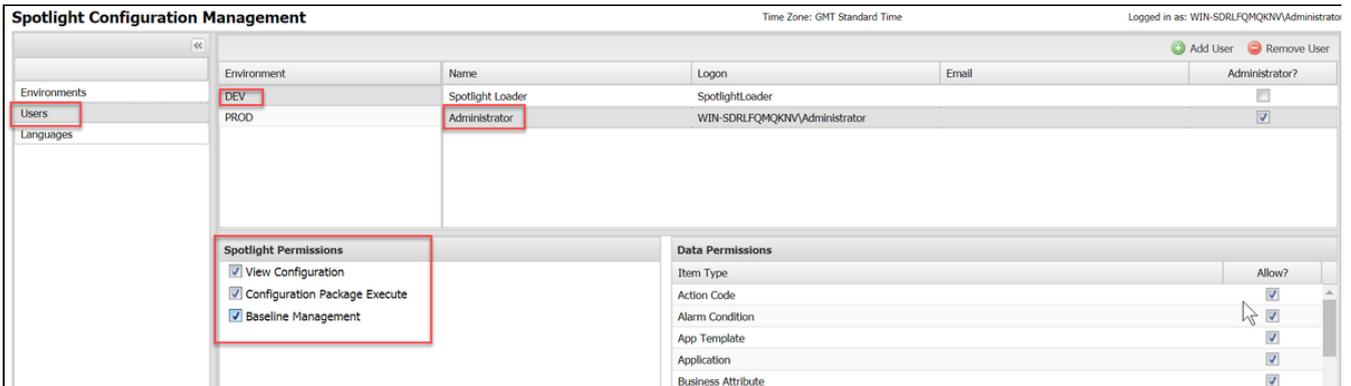
UserID	Logon	Name	IsGroup	IsAdmin	IsDeleted	IsDashb...
1	csview	csview	True	True	False	False
2	cscopy	cscopy	True	True	False	False
3	cscrollback	cscrollback	True	True	False	False
4	csexecute	csexecute	True	True	False	False
5	SpotlightLoader	Spotlight Loader	False	False	False	False
6	csbaseline	csbaseline	True	True	False	False
7	csslm	csslm	True	True	False	False
8	csslmadv	csslmadv	True	True	False	False
9	WIN-SDRLFQMKNV\Administrator	Admin	False	True	False	False
NULL	NULL	NULL	NULL	NULL	NULL	NULL

- Open the **Spotlight UI** in the browser and click on **ADMIN**



- Click on **Users**

- Click on the new environment name e.g. **DEV**
- Click on the administrator user that was added to the **SystemUser** table
- Click on the **View Configuration** check box in the **Spotlight Permissions** section, so it shows a tick in it



- Click on **DASHBOARD** and you will now see that the **Environment** drop down box will have the new Spotlight environment in e.g. **DEV**
- To test that the second environment is working correctly have a test change made in the Configuration Manager and check that Spotlight pick up the change.

Change Tracking Test

To test change tracking in Spotlight, make a simple addition to the Genesys environment, for example create a test Person. When that new Person appears in the Spotlight website the data processing is current.

If the person does not appear in Spotlight, check the Spotlight logs for any exceptions, and escalate to Blackchair if necessary.

WIP Multiple Message Servers

Spotlight can be configured to use multiple message servers per Genesys environment. To do so

- Open the **messageserver-configuration.json** file located in the **Blackchair\SDP\Environment Name\GENAuditPRD\Config** folder
- a
- b
- c
- d
- Close and save the file
- Restart the **GENAuditPRD** service

Filtering

Details regarding filtering **Flexible Property** and/or **Application Options** can be found in the **Commissioning\Filtering** section above

Comms Server

Once a new environment has been added, it is necessary to adjust several comms server files, in order for emails to be sent for the new environment as follows. Each file is located in the **Spotlight\Comms Server** folder

- **ContactMethods.xml** – in the "**<ServerParameters>**" tag, add the name of the new environment by copying the original line, pasting below, then adjusting the environment name

```
<ServerParameters>
  <Database>PROD</Database>
  <Database>DEV</Database>
  <Delay>30</Delay>
</ServerParameters>
```

- **ContactMethods.xml**– make the adjustment above also in the copy of this **ContactMethods.xml** file held in the **IIS\Spotlight** folder
- **SpotlightCommsServer.exe.config** & **Blackchair.Spotlight.Communications.Server.Service.exe.config** – Add connection string to the new environment by copying the original connection string, pasting below, then adjusting the required values
 - Data Source
 - Initial Catalog
 - User ID
 - Password

```
<connectionStrings>
  <add name="PROD" connectionString="Data Source=WIN-SDRLFQMOKNV;Initial Catalog=SpotlightPROD;Persist Security Info=True;User ID=spotlight;Password=spotlight"
    providerName="System.Data.SqlClient" />
  <add name="PROD" connectionString="Data Source=WIN-SDRLFQMOKNV;Initial Catalog=SpotlightDEV;Persist Security Info=True;User ID=spotlight;Password=spotlight"
    providerName="System.Data.SqlClient" />
</connectionStrings>
```

- Save and close all files

Optional Configuration

Alternative Authentication

The **Spotlight UI** uses **Windows Authentication** to automatically log users in. In some cases customers are not able to use this, so an alternative is to manage Spotlight user accounts within Spotlight itself.

To configure this, follow these steps:

- Create a **Users** table in **slconfig** DB to store the Logon-Password mapping. The password is stored using salted password hashing with PBKDF2-SHA1. To do so, run the following script against the **Slconfig** database in **SQL Management Studio**.

```
CREATE TABLE [dbo].[Users](
[Logon] [varchar](50) NOT NULL,
[Password] [varchar](1000) NULL,
CONSTRAINT [PK_Users] PRIMARY KEY CLUSTERED
(
[Logon] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON,
ALLOW_PAGE_LOCKS = ON) ON [PRIMARY]
) ON [PRIMARY]
GO
```

- Create an Admin user in **Slconfig** database with default password: **m5MrZyzq** To do so, run the following script against the **Slconfig** database in **SQL Management Studio**.

```
INSERT [dbo].[Users] ([Logon], [Password]) VALUES (N'Admin',
N'1000:S10uOyn569gNycpjU/nOmlmHdAOUfWoQ:VcQiO25snLuuWmnYhbmoTeKaiZCU4tDe')
GO
```

- Create the same Admin user in each **Spotlight** To do so, run the following script against the **Spotlight** database in **SQL Management Studio**.

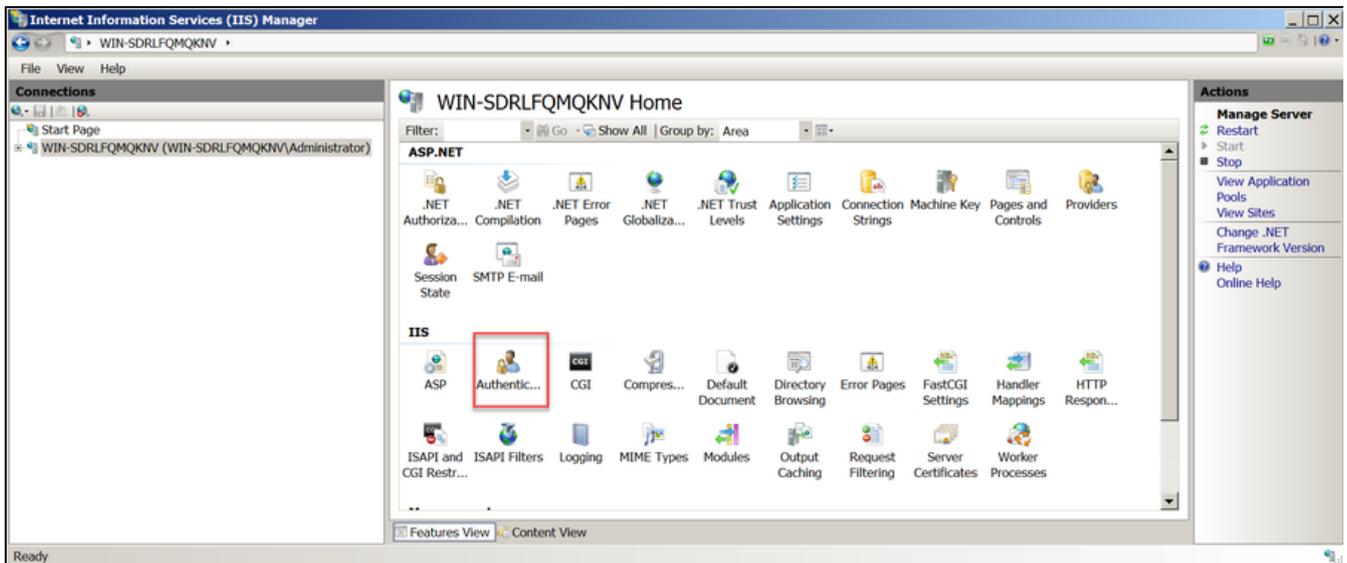
```
INSERT [dbo].[SystemUser] ([Logon], [Name], [IsGroup], [IsAdmin], [IsDeleted]) VALUES ('Admin', 'Admin', 0, 1, 0)GO
Uncomment the following line in the Web.config file, normally located in the IIS\wwwroot\SpotlightREST folder. This enable the internal password management:
```

- Uncomment the following sections in the **web.config** file, normally located in the **IIS\Spotlight** folder.

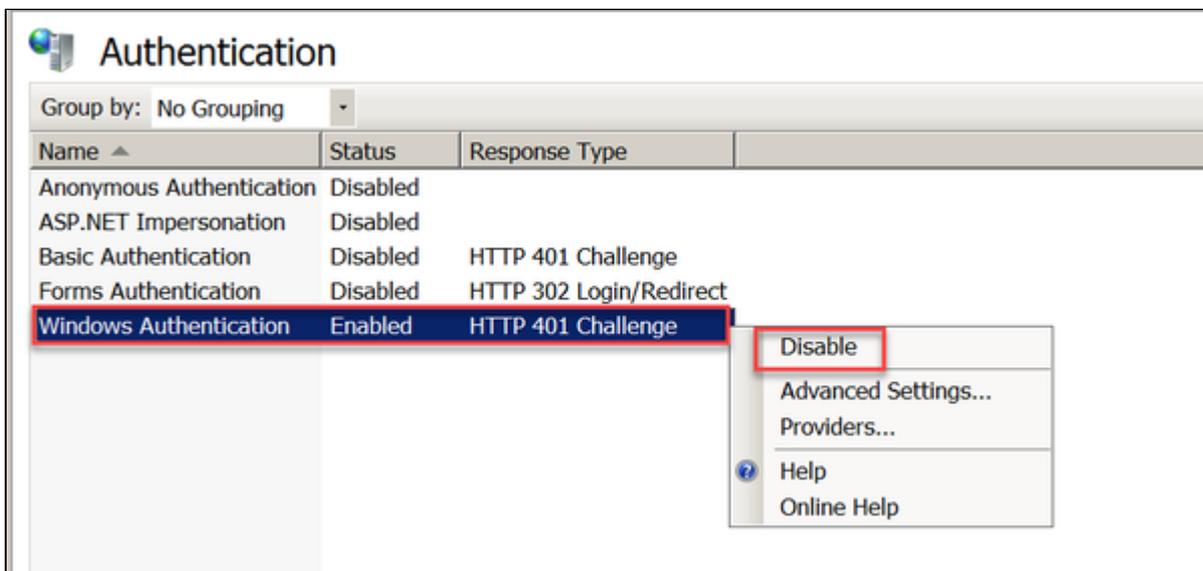
```
<appSettings>
  <add key="AuthenticationManagerAssembly" value="bin/BlackChair.Spotlight.Library.dll" />
  <add key="AuthorizationManagerAssembly" value="bin/BlackChair.Spotlight.Library.dll" />
  <add key="defaultConnection" value="SpotlightConfig" />
  <!--add key="AuthorizationManagerClass" value="BlackChair.Spotlight.Library.ItemLevelAuthorizationManager"/-->
  <!--add key="AuthenticationManagerClass" value="BlackChair.Spotlight.Library.PasswordAuthenticationManager"/-->
  <!--add key="TomcatProtocol" value="http" /-->
  <!--add key="TomcatPort" value="8080" /-->
</appSettings>

  <authentication mode="Windows" />
  <!--authorization>
  <deny users="?" />
</authorization-->
```

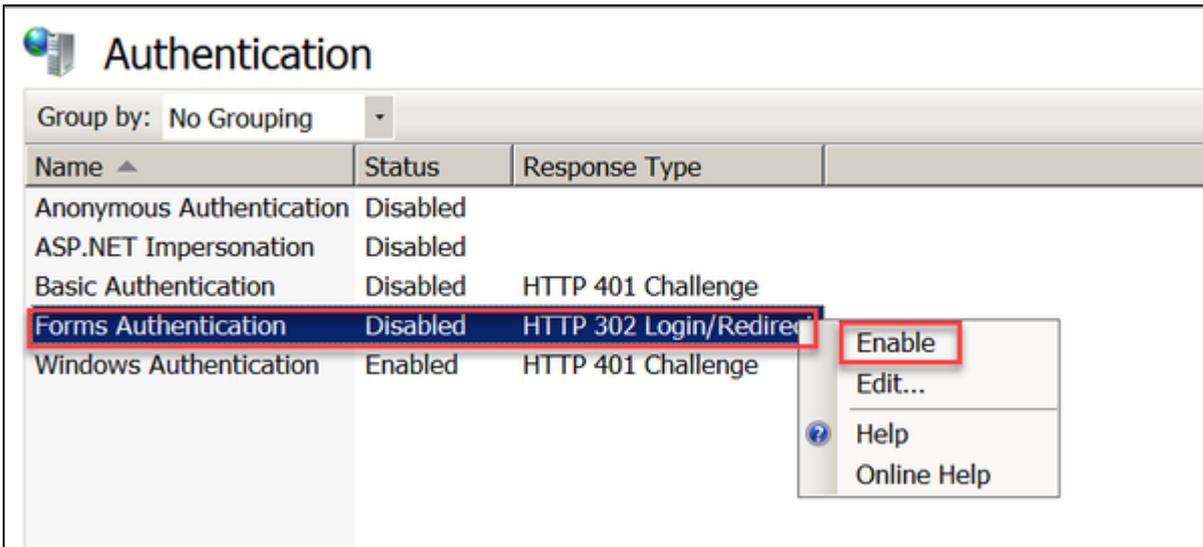
- Save and close **web.config**
- In **IIS Manager**, navigate to the **Spotlight Website Authentication** section



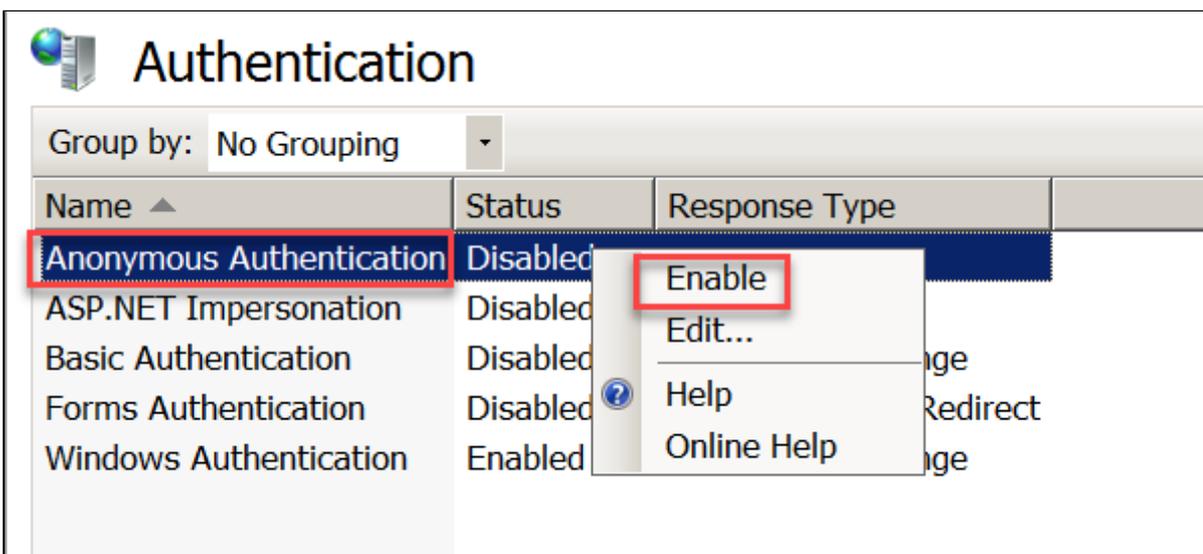
- Right click "**Windows Authentication**" and select "**Disable**".



- Right click "**Forms Authentication**" and select "**Enable**".



- Right click "Anonymous Authentication" and select "Enable".



- Restart IIS
- Close and Reopen your browser

Custom Port Number

When the SQL server name includes a custom port number then some manual adjustments to the configurations are required after the 'Spotlight Install Assistant' has been run.

- Open the 'EnvironmentsKV' table in the 'slconfig' database and locate all the records that have the 'envkey' value of 'ENV_DB_URL_JAVA'
- In the 'envvalue' replace the comma (,) between the server name and port number with a colon (🌟) e.g. 'dzwas2902,7109' becomes 'dzwas2901:7109'
- Locate and open the 'spotlight.properties' files which can be located in the 'Tomcat > webapps > SpotlightRESTServices > WEB-INF > classes' folder.

NOTE: The location of the 'Tomcat' folder will be defined in the 'File Locations' tab of the 'Spotlight Install Assistant'.

- For the 'spotlight.configdburl' replace the comma (,) between the server name and the port number with backslash (\) and colon (:🌟), e.g. 'dzwas2902,7109' becomes 'dzwas2902\7109'.
- Save and close the 'spotlight.properties' files and restart the Tomcat and IIS services.
- Repeat this process for the "sls.properties" file located in the SLS loader folder
- Locate and open the 'application.properties' files of the GENAuditCON service, Ensure the "spotlight.db.url.uri" value is set to include the custom port as above.

Troubleshooting

Issue Accessing UI

The following error is received when trying to access the UI

Server Error in '/Spotlight' Application.

Required permissions cannot be acquired.

Description: An unhandled exception occurred during the execution of the current web request. Please review the stack trace for more information about the error and where it originated in the code.

Exception Details: System.Security.Policy.PolicyException: Required permissions cannot be acquired.

Source Error:

An unhandled exception was generated during the execution of the current web request. Information regarding the origin and location of the exception can be identified using the exception stack trace below.

Resolution

The fix is to unblock each dll on the bin directory of the Spotlight UI.

In order to do that in one step please open an admin powershell session following command **gci c:\blachchair\IIS\Spotlight\bin | Unblock-File**

Configuration Sync Error

The following error is received when the Configuration Sync is started

Configuration Sync

Sync Status: Ready

Last Run Error:

```
javax.persistence.PersistenceException: org.hibernate.exception.SQLGrammarException: could not extract ResultSet
```

Resolution

This can be caused if the Spotlight databases are on SQL 2008. To resolve, add the following line to the **Consumer application.properties** file and then restart the **Consumer** service

```
spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.SQLServer2008Dialect
```

```
##  
# Database Options  
##  
spotlight.db.url=jdbc:sqlserver://WIN-JBLA13U5ERT;databaseName=SpotlightMF;loginTimeout=30  
spotlight.db.username=spotlight  
spotlight.db.password=1A4GMR+gqx10DwI9kBpb2Q==  
spotlight.db.driverclassname=com.microsoft.sqlserver.jdbc.SQLServerDriver  
spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.SQLServer2008Dialect  
## Verbose logging options
```