



# SETTING UP SQL SERVER

Product concerned: SES

Document last update: December 21, 2020 Reference: ses-en-how to set up\_SQL\_Server



## Table of contents

Setting up SQL Server	3
Limiting processor load for high volume requests	3
Limiting how often high volume requests are parallelized	Ē
Limiting disk load	6
Backing up transaction logs	7

In the documentation, Stormshield Endpoint Security is referred to in its short form: SES.



### Setting up SQL Server

This document applies to Stormshield Endpoint Security in version 7.2.0 and higher, and gives recommendations on how to configure the SQL Server instance that the server and SES console use.

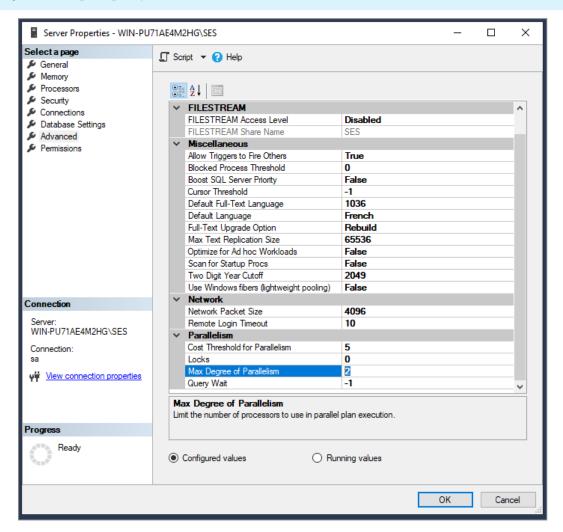
#### Limiting processor load for high volume requests

To limit processor load and prevent all resources from being used up when high volume requests are processed, we recommend that you allocate no more than 25% of available processors to process such requests.

In the properties of the SQL Server instance, select the menu **Advanced** > **Parallelism** and change the **Max degree of parallelism** setting.

#### **EXAMPLE**

If you have eight logical processors, set this value to 2.

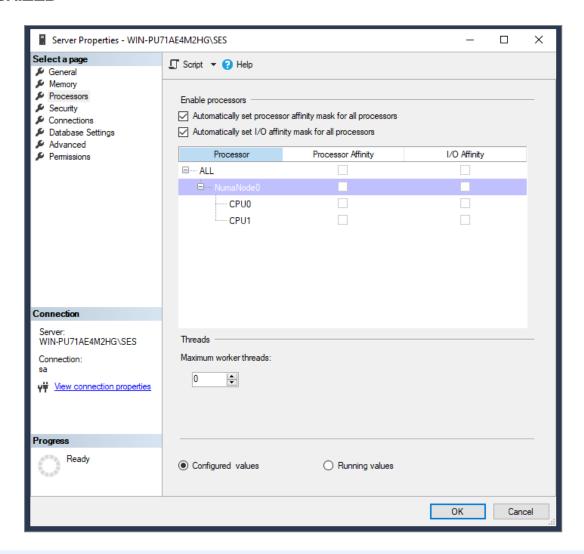


In the above screen capture, since we only have two logical processors, we will set it to 1.

If you do not know how many logical processors are allocated to the SQL Server instance, select the **Processors** page and expand the tree under the **Processor** column.







#### **1** NOTE

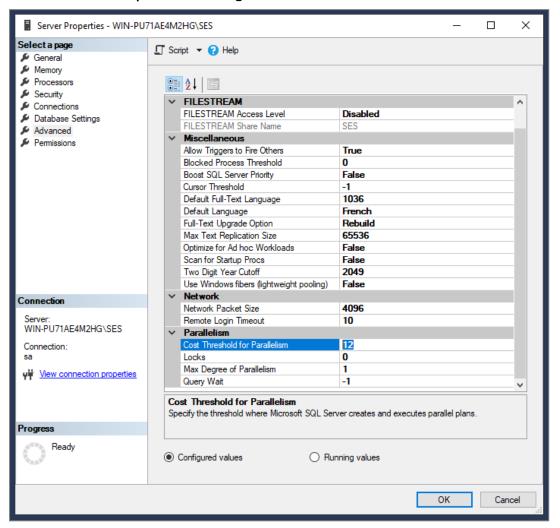
If your database administrator(s) specifically configured the **Processor affinity** and **I/O affinity**, inform them before making any changes.



### Limiting how often high volume requests are parallelized

You are advised to raise the threshold that the SQL Server uses to decide on whether to parallelize a request.

In the properties of the SQL Server instance, select the menu **Advanced** > **Parallelism** and change the **Cost threshold for parallelism** setting.



The value that Stormshield recommends is 12.

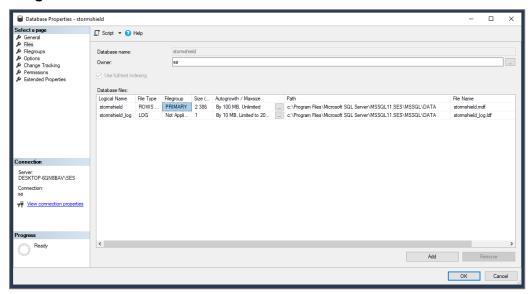


#### Limiting disk load

When SQL Server must increase the size of data files or transaction log files, it suspends all ongoing transactions during the operation.

As SQL Server's default values may initiate frequent disk operations, we recommend that you change four values on the *stormshield* and *urd* databases on SES, and depending on your license, the *srkey* database as well.

In each database's properties in the menu Files, modify the values for Size (MB) and Autogrowth/Maxsize.



The configuration of these values depends on the size of the pool in which SES agents are installed.

For most pools, Stormshield recommends the following values for the *stormshield* and *urd* databases:

Data file size	10000 MB (10 GB)
Autogrowth/Maxsize of data files	1000 MB (1 GB)/unlimited
Log file size	1000 MB (1 GB)
Autogrowth/Maxsize of log files	100 MB/unlimited

Stormshield recommends the following values for the srkey database:

Data file size	1000 MB (1 GB)
Autogrowth/Maxsize of data files	100 MB/unlimited
Log file size	100 MB
Autogrowth/Maxsize of log files	10 MB/unlimited

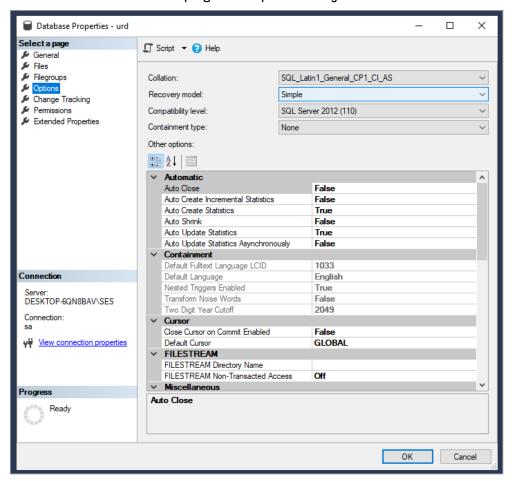
For pools that are already installed, change only the autogrowth values.



#### **Backing up transaction logs**

When SES is installed, the recovery model of databases is set to "simple". In this model, SQL Server fully manages the maintenance and backup of the transaction log.

Stormshield recommends keeping the "simple" recovery model.



However, if your SQL Server infrastructure requires the recovery model to be changed to "full", you will need to personally back up the transaction log on a regular basis (instruction TSQL: BACKUP LOG) to purge its contents. This maintenance task must be scheduled regularly in addition to data backups (instruction TSQL: BACKUP DATABASE).

We encourage you to contact your database administrator to schedule regular backups of all databases concerned.

Databases and transaction logs should be regularly backed up to prevent disk saturation on the database and defects in the SES program.





documentation@stormshield.eu

All images in this document are for representational purposes only, actual products may differ.

Copyright SkyRecon Systems 2020. All rights reserved. All other company and product names contained in this document are trademarks or registered trademarks of their respective companies.

