

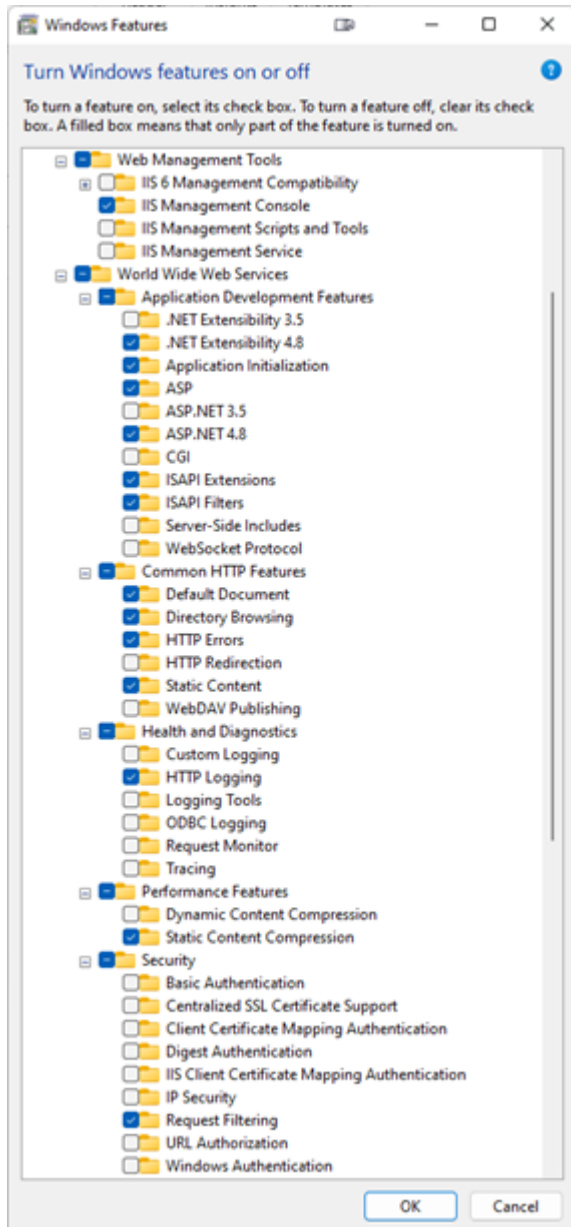
# Related to third party software

FAQ related to the Windows operating system (OS), Internet Information Services (IIS), SQL Server, etc.

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# Installation of Internet Information Services (IIS)

To install IIS, at least the following components need to be selected:

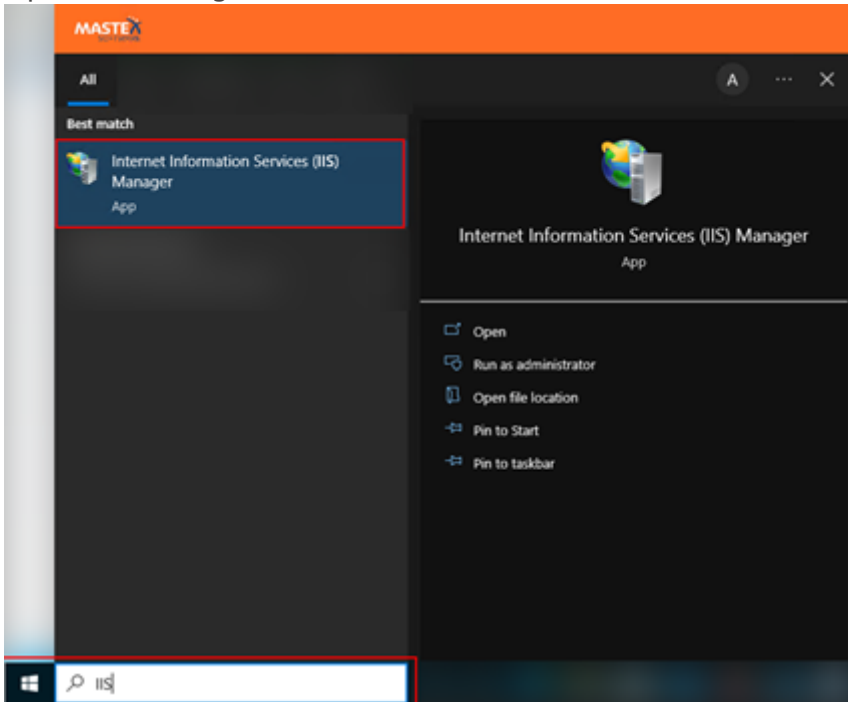


## Extra add-ons

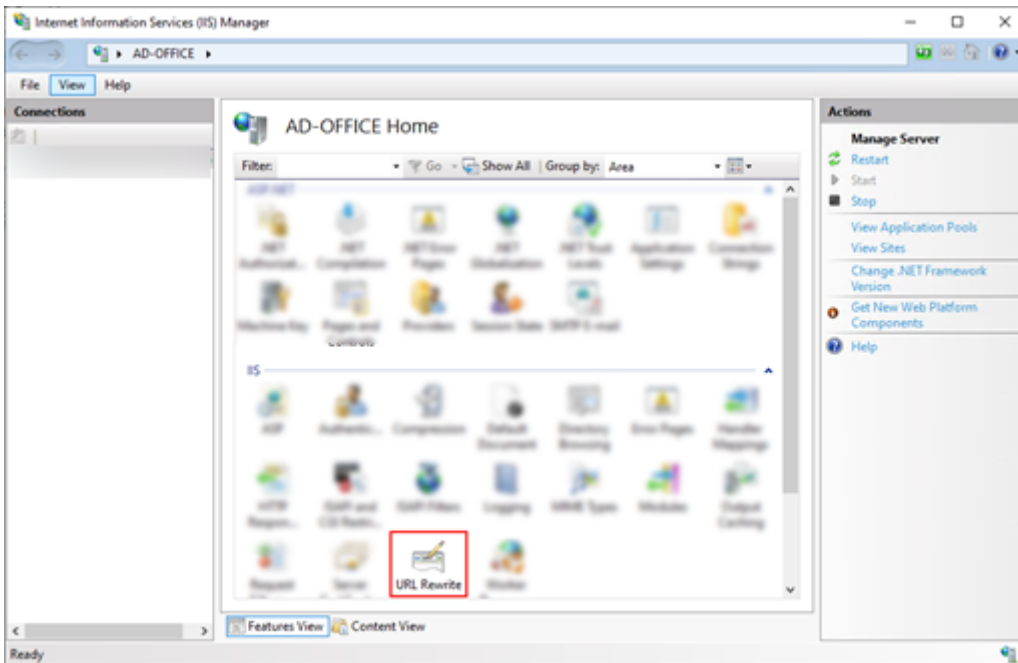
Before MXSuite can be opened via your browser, the IIS add-on **URL Rewrite** must be installed at the IIS server.

To check if URL Rewrite is installed, follow the below steps:

- Open IIS manager.



- Check if URL Rewrite is installed



If the icon is not visible, please download and install URL Rewrite [here](#).

# IIS MXSuite web redirect HTTP to HTTPS

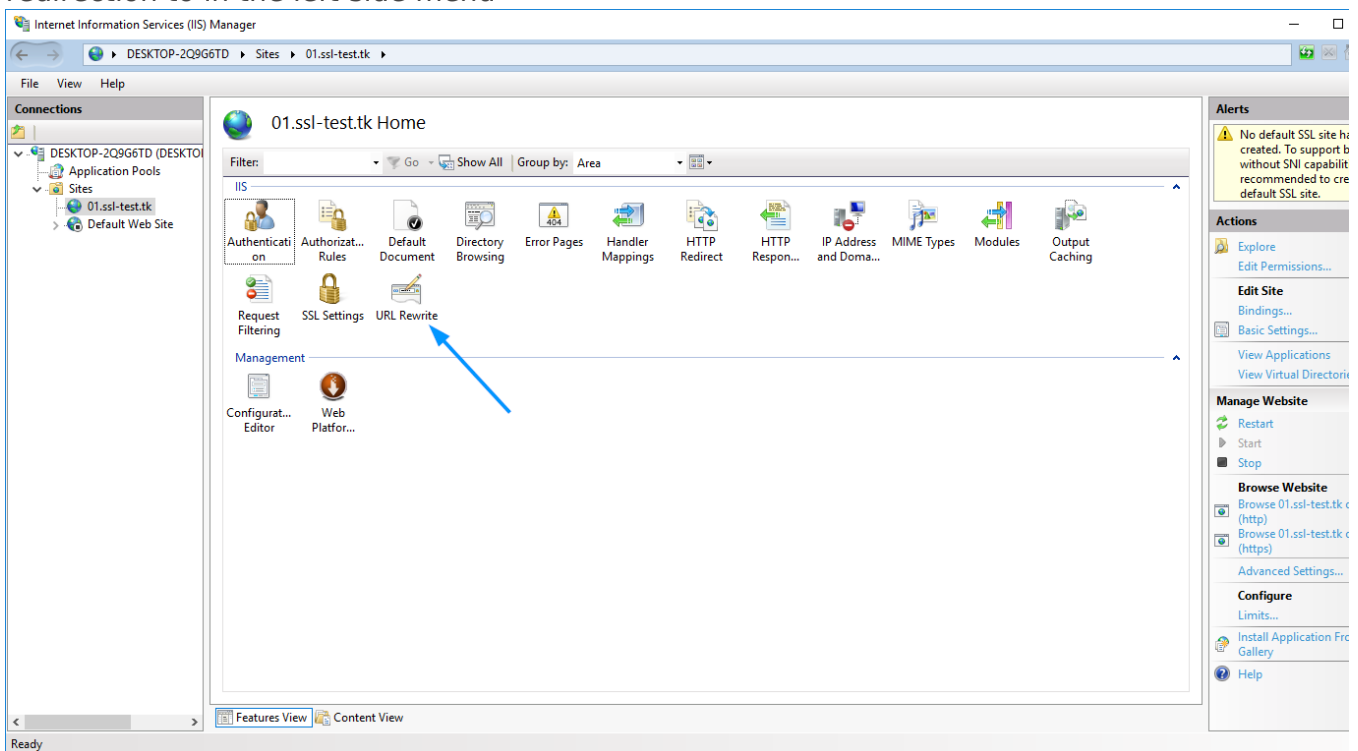
Once the SSL certificate is installed, MXSuite remains accessible via a regular insecure HTTP connection. To connect securely, visitors must specify the https:// prefix manually when entering MXSuite's address in their browsers.

To force a secure connection, it is necessary to set up a certain HTTP/HTTPS redirection rule. This way, anyone who enters MXSuite using a link like "mxsuite.company.com" will be redirected to "https://mxsuite.company.com" making the traffic encrypted between the server and the client side.

## Configure the redirect

Below are steps to setup a IIS HTTPS redirect:

1. Download and install the URL Rewrite module.
2. Open the **IIS Manager** console and select the website you would like to apply the redirection to in the left-side menu



3. Double-click on the **URL Rewrite** icon.
4. Click **Add Rule(s)** in the right-side menu.

5. Select **Blank Rule** in the **Inbound** section, then press **OK**.

Add Rule(s) ? X

Select a rule template:

**Inbound rules**

- Blank rule
- Rule with rewrite map
- Request blocking

**Inbound and Outbound Rules**

- User-friendly URL
- Reverse Proxy

**Outbound rules**

- Blank rule

**Search Engine Optimization (SEO)**

- Enforce lowercase URLs
- Canonical domain name
- Append or remove the trailing slash symbol

Select this template to create a new inbound rule without any preset values. This template opens the "Edit Rule" page that you can use to define a new rewrite rule for changing the requested URL address.

OK Cancel

6. Enter any rule name you wish.
7. In the **Match URL** section:
- Select **Matches the Pattern** in the **Requested URL** drop-down menu
  - Select **Regular Expressions** in the **Using** drop-down menu
  - Enter the following pattern in the **Match URL** section: **(.\*)**
  - Check the **Ignore case** box



### Edit Inbound Rule

Match URL

Requested URL: Matches the Pattern Using: Regular Expressions

Pattern:  Test pattern...

☒ Ignore case

8. In the **Conditions** section, select **Match all** under the **Logical Grouping** drop-down menu and press **Add**.

9. In the prompted window:

- Enter **{HTTPS}** as a condition input
- Select **Matches the Pattern** from the drop-down menu
- Enter **^OFF\$** as a pattern
- Press **OK**

The image shows two overlapping windows from a configuration tool. The 'Conditions' window on the left has a 'Logical grouping' dropdown set to 'Match All'. It contains a table with the following data:

Input	Type	Pattern
{HTTPS}	Matches the Pattern	^OFF\$

Below the table is a checkbox labeled 'Track capture groups across conditions' which is unchecked. To the right of the table are buttons: 'Add...', 'Edit...', 'Remove', 'Move Up', and 'Move Down'. The 'Edit Condition' window on the right shows the configuration for the selected condition. It has a 'Condition input' field with '{HTTPS}', a 'Check if input string:' dropdown set to 'Matches the Pattern', a 'Pattern' field with '^OFF\$', and an unchecked 'Ignore case' checkbox. There are 'Test pattern', 'OK', and 'Cancel' buttons at the bottom.

10. In the **Action** section, select **Redirect** as the action type and specify the following for **Redirect URL**:

`https://{HTTP_HOST}{REQUEST_URI}`

11. Un-check the **Append query string** box.

12. Select the Redirection Type of your choice. The whole **Action** section should look like this:

The image shows the 'Action' configuration window. The 'Action type:' dropdown is set to 'Redirect'. Under 'Action Properties', the 'Redirect URL:' field contains the code `https://{HTTP_HOST}{REQUEST_URI}`. The 'Append query string' checkbox is unchecked. The 'Redirect type:' dropdown is set to 'Permanent (301)'.

4 redirect types of the redirect rule can be selected in that menu:

- Permanent (301) – preferable type in this case, which tells clients that the content of the site is permanently moved to the HTTPS version. Good for SEO, as it brings all the traffic to your HTTPS website making a positive effect on its ranking in search engines.
- Found (302) – should be used only if you moved the content of certain pages to a

new place \*temporarily\*. This way the SEO traffic goes in favour of the previous content's location. This option is generally not recommended for a HTTP/HTTPS redirect.

- See Other (303) – specific redirect type for GET requests. Not recommended for HTTP/HTTPS.

- Temporary (307) – HTTP/1.1 successor of 302 redirect type. Not recommended for HTTP/HTTPS.

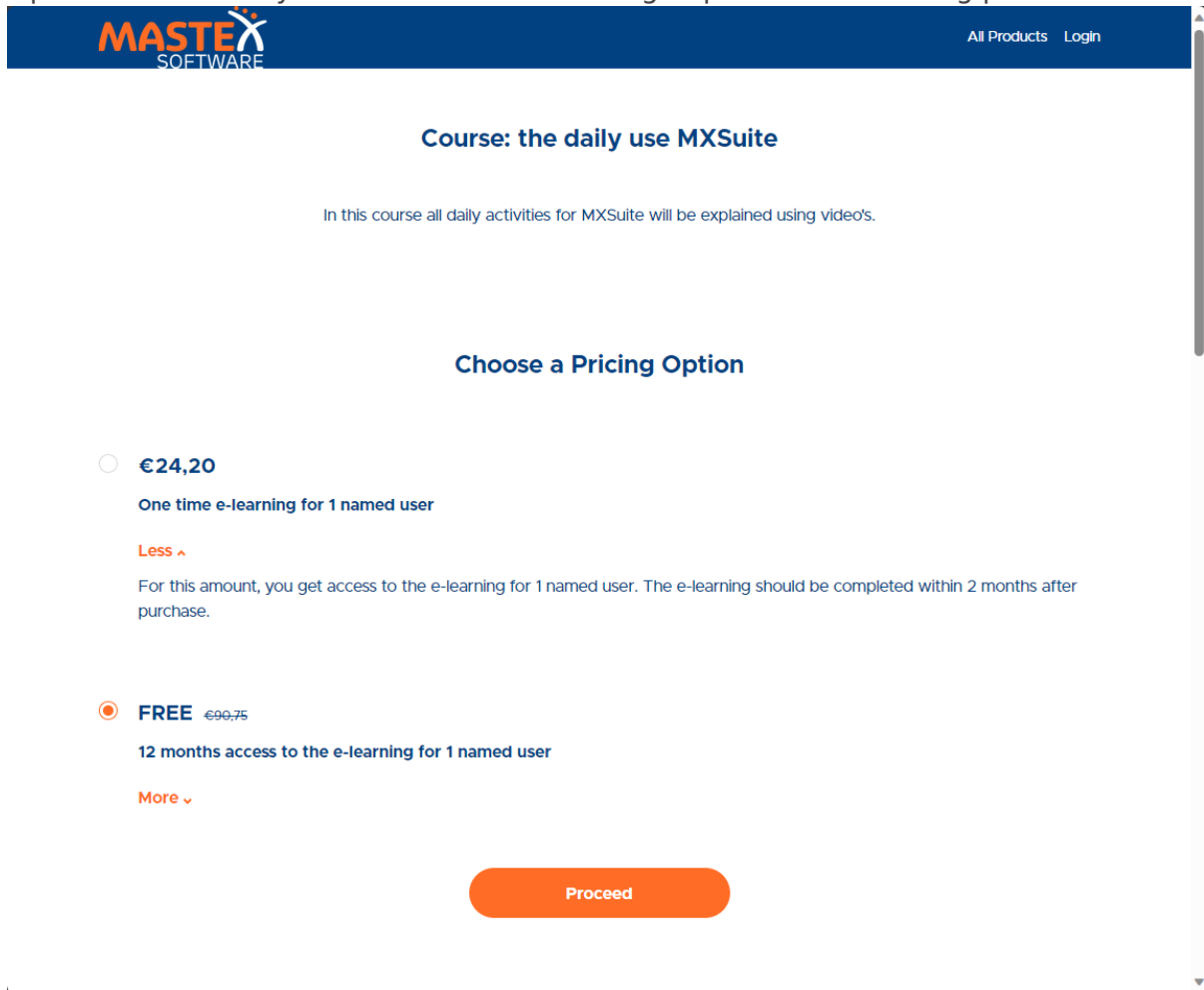
OPTION 2: Specify the **Redirect Rule** as **https://{HTTP\_HOST}/{R:1}** and check the **Append query string** box. The **Action type** is also to be set as **Redirect**.

13. Click on **Apply** on the right side of the **Actions** menu.

# Sign up for the e-learning platform

Follow the steps below to sign up for the e-learning platform of MXSuite.

1. Open the URL that you received from us to sign up for the e-learning platform.



The screenshot shows the MXSuite e-learning platform sign-up page. At the top, there is a dark blue header with the MXSuite logo on the left and links for 'All Products' and 'Login' on the right. Below the header, the page title 'Course: the daily use MXSuite' is centered. A sub-header states, 'In this course all daily activities for MXSuite will be explained using video's.' The main section is titled 'Choose a Pricing Option' and contains two radio button options. The first option is selected and is labeled '€24,20' with the description 'One time e-learning for 1 named user'. Below this, there is a 'Less' link with an upward arrow. The second option is labeled 'FREE' with a strikethrough price of '€99,75' and the description '12 months access to the e-learning for 1 named user'. Below this, there is a 'More' link with a downward arrow. At the bottom of the pricing section, there is an orange 'Proceed' button.

**MASTE**  
SOFTWARE

All Products Login

**Course: the daily use MXSuite**

In this course all daily activities for MXSuite will be explained using video's.

**Choose a Pricing Option**

☐ **€24,20**  
One time e-learning for 1 named user  
Less ▲  
For this amount, you get access to the e-learning for 1 named user. The e-learning should be completed within 2 months after purchase.

☒ **FREE** €99,75  
12 months access to the e-learning for 1 named user  
More ▼

**Proceed**

2. Check if the discounted course is selected and click **Proceed**.
3. If you ever made an account with Teachable, you can now login. If not, click **Sign up with email**.





4. Enter your name, Email and create a password.

## Sign Up

Full Name

Email

Password 



Sign up

Already have an account? [Log in](#)

5. click **Sign up**.
6. You are ready to start! Click **Start your course** to learn everything about MXSuite. Enjoy!

# SPF record setting in DNS for SaaS customers

If your MXSuite is hosted by Mastex Software, it could happen that emails sent from MXSuite are not received or marked as spam. Usually these emails are sent via the email server of Mastex Software. As this email server is not recognized as a valid email server for your domain, you should add the email server to your domain settings.

## **Solution:**

Add to your domain external DNS settings the following SPF records:

IP addresses from where usually SaaS emails are sent:

- 45.128.67.210
- 5.200.20.33/28

To be safe for the future, you could include **mxsuite.nl** where all IP addresses are included, even when we change them.

This is something that should be done by the domain administrator who can change the domain DNS settings.

SPF records can be tested here: <https://mxtoolbox.com/spf.aspx>

# End of life for Microsoft SQL server

Several versions of SQL Server have reached the end of their life. When MXSuite was first released in 2009, SQL Server 2008 was the standard, followed by some other versions.

The table below shows which SQL Server versions are no longer supported. Mastex Software usually follows the date Microsoft uses as the end date for mainstream support. This means that future versions of MXSuite will not work with old SQL Server versions.

SQL version	End-of-life Mainstream support
Microsoft SQL Server 2008	8 July 20214
Microsoft SQL Server 2008 R2	8 July 2014
Microsoft SQL Server 2012	11 July 2017
Microsoft SQL Server 2014	9 July 2019
Microsoft SQL Server 2016	13 July 2021
Microsoft SQL Server 2017	11 October 2022
Microsoft SQL Server 2019	7 January 2025
Microsoft SQL Server 2022	11 January 2028

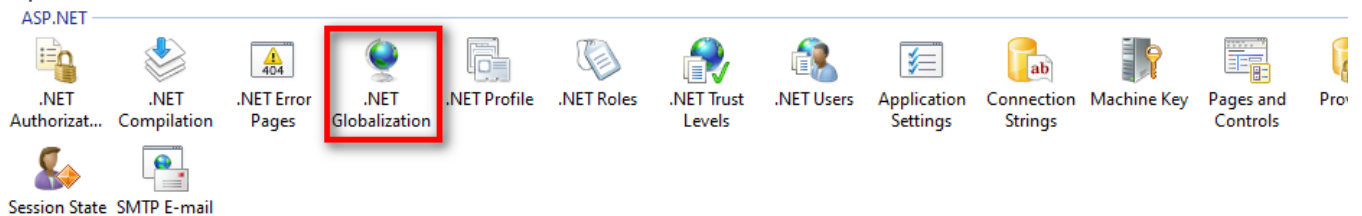
Do you use an SQL Server version on board or in the office that is red in the table? Change it to the newest SQL version as fast as you can.

Do you have a version that is orange in the list? Then it is okay for now, but not for much longer and we strongly advice to upgrade.

# Set the regional settings of MXSuite

If you want to use local formatting for date and time, but also for the formatting of the numbers, you can apply the region or cultural setting to the IIS site.

1. Open **IIS**
2. Select the **site** that should be changed
3. Open **.NET Globalization**



4. Select the **Culture** and **UI Culture** and set **Enable Client Based Culture** to **True**

▼ <b>Culture</b>	
Culture	Dutch (Netherlands) (nl-NL)
Enable Client Based Culture	True
UI Culture	Dutch (Netherlands) (nl-NL)

5. Apply the settings (right column)
6. Restart the website

# How to resolve a "Connection timeout" error?

"Connection timeout" is an error that occurs as a result of a script exceeding the maximum timeout value.

The timeout should be added to the following files:

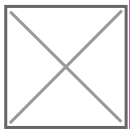
- C:\Windows\Microsoft.NET\Framework\v4.0.XXXX\Config\machine.config
- C:\Windows\Microsoft.NET\Framework64\v4.0.XXXX\Config\machine.config

**Note:** The framework version could change.

Check in machine.config if the connection timeout is added at the end, just before the last line. If not, add the following lines at the end (before `</configuration>` in the machine.config:

```
<system.transactions>
  <defaultSettings distributedTransactionManagerName="" timeout="23:59:00" />
<machineSettings maxTimeout="23:59:00" />
</system.transactions>
```

So it will



```
</system.web>
  <system.transactions>
    <defaultSettings distributedTransactionManagerName="" timeout="23:59:00" />
    <machineSettings maxTimeout="23:59:00" />
  </system.transactions>
</configuration>
```

# Use of Dymo LabelWriter printer in MXSuite

In MXSuite you have the option to print labels for a Dymo Labelwriter.

## MXSuite V2:

- the max allowed version of Dymo software is: Dymo Labelwriter 8.7.5
- download that version [here \(right mouse click at the version > save as..\)](#)

## MXSuite V3:

- you can also use the latest Dymo Connect (if that LabelWriter type is supported).
- requires the web service which you can enable during installing Dymo Connect
- the DYMO software should be installed on the IIS server!

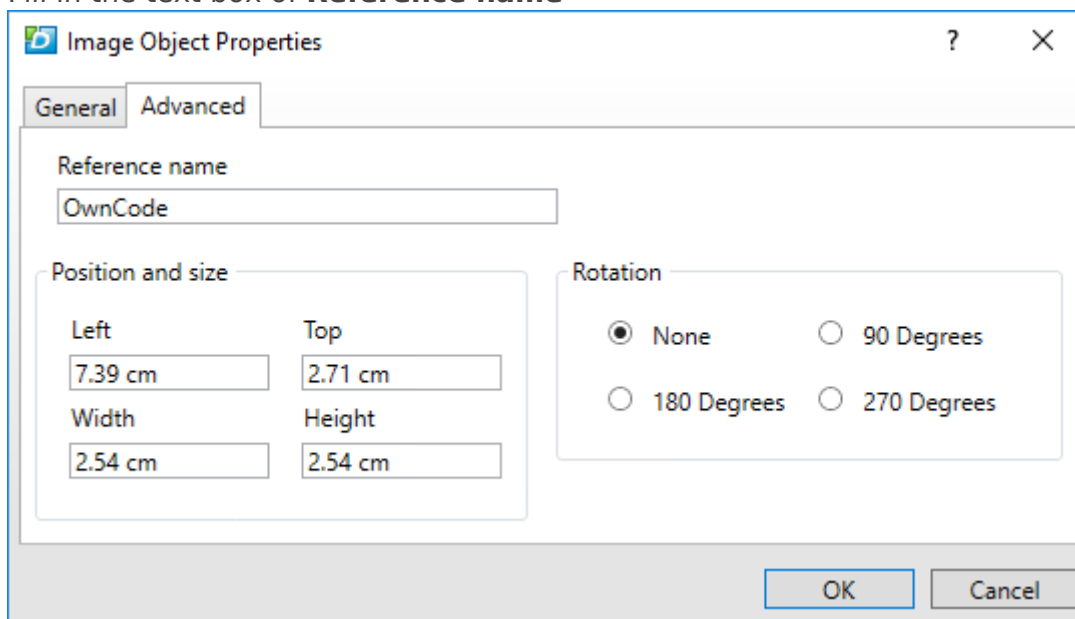
The following reference names are used to create the label template:

Label	Type	Reference name	Additional info
Part number	Barcode	PartNumber	Code 39 recommended
Company	text	Company	Presented as MXSuite - [Companyname]
Location	text	Location	Name of License
Name	text	Name	Description of part
Part number	text	PartNumberText	
Own code	text	OwnCodeText	
Storage/Box	text	Storage/Box	both fields storage and box are shown

QR code	image	OwnCode	<p>The following icon is used to generate QR</p> <p>image-1679320635350.png</p>
---------	-------	---------	---

The Reference name of the objects can be set up as following:

- Right mouse click on the text / icon
- Choose **Properties**
- Go to tab **Advanced**
- Fill in the text box of **Reference name**



The label template is built using the label template: **Shipping** which has the label size of **101mm x 54mm**

# SQL Server optimization



# Modify growth settings

In lots of databases, the file growth settings are left as the default value: 1MB or 10%. This is not optimal. It can cause all kinds of issues, which rear their ugly heads as performance problems.

We have created a SQL Server agent job that runs monthly on the first day of the month, setting the growth settings to the proper values according to the database size.

The query to create the job is also attached to this page.

Source: [SQL RX](#)

```
USE [msdb]
GO

/***** Object: Job [Mastex - Modify File Growth Settings for All Databases] Script Date: 28-5-2025 13:42:24
*****/

BEGIN TRANSACTION
DECLARE @ReturnCode INT
SELECT @ReturnCode = 0
/***** Object: JobCategory [[Uncategorized (Local)]] Script Date: 28-5-2025 13:42:24 *****/
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 @jobId BINARY(16)
EXEC @ReturnCode = msdb.dbo.sp_add_job @job_name=N'Mastex - Modify File Growth Settings for All
Databases',
    @enabled=1,
    @notify_level_eventlog=0,
    @notify_level_email=0,
    @notify_level_netsend=0,
    @notify_level_page=0,
```

```

@@delete_level=0,
@@description=N'Query made by Mastex Software 2025',
@@category_name=N'[Uncategorized (Local)]',
@@owner_login_name=N'sa', @job_id = @jobId OUTPUT
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 0 AND 10 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 0 AND 10 (MB)',
@@step_id=1,
@@cmdexec_success_code=0,
@@on_success_action=3,
@@on_success_step_id=0,
@@on_fail_action=2,
@@on_fail_step_id=0,
@@retry_attempts=0,
@@retry_interval=0,
@@os_run_priority=0, @subsystem=N'TSQL',
@@command=N'DECLARE @MinDBSize INT = 0
DECLARE @MaxDBSize INT = 10
DECLARE @FileGrowth_MDF VARCHAR(10) = 10
DECLARE @FileGrowth_LDF VARCHAR(10) = 250

-----

DECLARE @dbname VARCHAR(200)
DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id

```

```

WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "ROWS" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
    FILEGROWTH = '''+@FileGrowth_MDF+'') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0

```

```

BEGIN

    SET @SqlCmd = "ALTER DATABASE [' + @dbname + '] MODIFY FILE (NAME = N'''''+@filename+''''',
    FILEGROWTH = '''+@FileGrowth_LDF+'')'' --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',
    @@database_name=N'master',
    @@flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 10 AND 50 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 10 AND 50 (MB)',
    @@step_id=2,
    @@cmdexec_success_code=0,
    @@on_success_action=3,
    @@on_success_step_id=0,
    @@on_fail_action=2,
    @@on_fail_step_id=0,
    @@retry_attempts=0,
    @@retry_interval=0,
    @@os_run_priority=0, @subsystem=N'TSQL',
    @@command=N'DECLARE @MinDBSize INT = 10
DECLARE @MaxDBSize INT = 50
DECLARE @FileGrowth_MDF VARCHAR(10) = 20
DECLARE @FileGrowth_LDF VARCHAR(10) = 250

-----

DECLARE @dbname VARCHAR(200)
DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')

```

```

AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "ROWS" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '"+@FileGrowth_MDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =

```

```

rs.replica_id
    WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '"+@FileGrowth_LDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',
    @database_name=N'master',
    @flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 50 AND 200 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 50 AND 200 (MB)',
    @step_id=3,
    @cmdexec_success_code=0,
    @on_success_action=3,
    @on_success_step_id=0,
    @on_fail_action=2,
    @on_fail_step_id=0,
    @retry_attempts=0,
    @retry_interval=0,
    @os_run_priority=0, @subsystem=N'TSQL',
    @command=N'DECLARE @MinDBSize INT = 50
DECLARE @MaxDBSize INT = 200
DECLARE @FileGrowth_MDF VARCHAR(10) = 50
DECLARE @FileGrowth_LDF VARCHAR(10) = 250

-----

DECLARE @dbname VARCHAR(200)

```

```

DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

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SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = 'SECONDARY') -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = 'ROWS' -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = 'ALTER DATABASE [' + @dbname + '] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '''+@FileGrowth_MDF+'')' --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id

```

```

WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''''+@filename+''''',
FILEGROWTH = '"+@FileGrowth_LDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',
@database_name=N'master',
@flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 200 AND 1.000 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 200 AND 1.000
(MB)',
@step_id=4,
@cmdexec_success_code=0,
@on_success_action=3,
@on_success_step_id=0,
@on_fail_action=2,
@on_fail_step_id=0,
@retry_attempts=0,
@retry_interval=0,

```



```

@@os_run_priority=0, @subsystem=N'TSQL',
@@command=N'DECLARE @MinDBSize INT = 200
DECLARE @MaxDBSize INT = 1000
DECLARE @FileGrowth_MDF VARCHAR(10) = 100
DECLARE @FileGrowth_LDF VARCHAR(10) = 250

-----

DECLARE @dbname VARCHAR(200)
DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "ROWS" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''''+@filename+''''',
FILEGROWTH = '"+@FileGrowth_MDF+"'" --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

```

CLOSE dbfiles

DEALLOCATE dbfiles

--LOG files

DECLARE dbfiles CURSOR FOR

SELECT sd.name AS DBName, mf.name AS LogicalName

FROM sys.master\_files mf

JOIN sys.databases sd ON sd.database\_id = mf.database\_id

WHERE DB\_NAME(mf.database\_id) NOT IN ('master','model','msdb','tempdb')

AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)

Change to correct size range

AND sd.name NOT IN (SELECT d.name

FROM sys.databases d

INNER JOIN sys.availability\_databases\_cluster adc ON d.group\_database\_id = adc.group\_database\_id

INNER JOIN sys.availability\_groups ag ON adc.group\_id = ag.group\_id

INNER JOIN sys.dm\_hadr\_availability\_replica\_states rs ON ag.group\_id = rs.group\_id AND d.replica\_id = rs.replica\_id

WHERE rs.role\_desc = 'SECONDARY') -- exclude dbs in AG secondary

AND sd.is\_read\_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline

AND mf.type\_desc = 'LOG' -- ROWS or LOG

OPEN dbfiles

FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH\_STATUS = 0

BEGIN

SET @SqlCmd = "ALTER DATABASE [' + @dbname + '] MODIFY FILE (NAME = N'''+@filename+''',  
FILEGROWTH = '''+@FileGrowth\_LDF+'') --Change to correct MB preference

EXEC (@SqlCmd)

PRINT @SqlCmd

FETCH NEXT FROM dbfiles INTO @dbname, @filename

END

CLOSE dbfiles

DEALLOCATE dbfiles',

@database\_name=N'master',

@flags=0

IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback

/\*\*\*\*\* Object: Step [BETWEEN 1.000 AND 2.000 (MB)] Script Date: 28-5-2025 13:42:25 \*\*\*\*\*/

EXEC @ReturnCode = msdb.dbo.sp\_add\_jobstep @job\_id=@jobId, @step\_name=N'BETWEEN 1.000 AND 2.000

```

(MB)',
@@step_id=5,
@@cmdexec_success_code=0,
@@on_success_action=3,
@@on_success_step_id=0,
@@on_fail_action=2,
@@on_fail_step_id=0,
@@retry_attempts=0,
@@retry_interval=0,
@@os_run_priority=0, @subsystem=N'TSQL',
@@command=N'DECLARE @MinDBSize INT = 1000
DECLARE @MaxDBSize INT = 2000
DECLARE @FileGrowth_MDF VARCHAR(10) = 250
DECLARE @FileGrowth_LDF VARCHAR(10) = 250

```

```

-----

DECLARE @dbname VARCHAR(200)
DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

```

```

DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
    FROM sys.databases d
    INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
    INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
    INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
    WHERE rs.role_desc = 'SECONDARY') -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = 'ROWS' -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

```

```

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''''+@filename+''''',
    FILEGROWTH = '"+@FileGrowth_MDF+"'" --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''''+@filename+''''',
    FILEGROWTH = '"+@FileGrowth_LDF+"'" --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename

```

END

CLOSE dbfiles

DEALLOCATE dbfiles',

@@database\_name=N'master',

@@flags=0

IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback

/\*\*\*\*\* Object: Step [BETWEEN 2.000 AND 4.500 (MB)] Script Date: 28-5-2025 13:42:25 \*\*\*\*\*/

EXEC @ReturnCode = msdb.dbo.sp\_add\_jobstep @job\_id=@jobId, @step\_name=N'BETWEEN 2.000 AND 4.500 (MB)',

@@step\_id=6,

@@cmdexec\_success\_code=0,

@@on\_success\_action=3,

@@on\_success\_step\_id=0,

@@on\_fail\_action=2,

@@on\_fail\_step\_id=0,

@@retry\_attempts=0,

@@retry\_interval=0,

@@os\_run\_priority=0, @subsystem=N'TSQL',

@@command=N'DECLARE @MinDBSize INT = 2000

DECLARE @MaxDBSize INT = 4500

DECLARE @FileGrowth\_MDF VARCHAR(10) = 250

DECLARE @FileGrowth\_LDF VARCHAR(10) = 500

-----  
  
DECLARE @dbname VARCHAR(200)

DECLARE @filename VARCHAR(200)

DECLARE @SqlCmd VARCHAR(2000)

DECLARE dbfiles CURSOR FOR

SELECT sd.name AS DBName, mf.name AS LogicalName

FROM sys.master\_files mf

JOIN sys.databases sd ON sd.database\_id = mf.database\_id

WHERE DB\_NAME(mf.database\_id) NOT IN ('master','model','msdb','tempdb')

AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)

Change to correct size range

AND sd.name NOT IN (SELECT d.name

FROM sys.databases d

INNER JOIN sys.availability\_databases\_cluster adc ON d.group\_database\_id = adc.group\_database\_id

```

[[[INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
[[[INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
[[[WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "ROWS" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [' + @dbname + '] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '''+@FileGrowth_MDF+'') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
[[[FROM sys.databases d
[[[INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
[[[INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
[[[INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
[[[WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles

```

```
FETCH NEXT FROM dbfiles INTO @dbname, @filename
```

```
WHILE @@FETCH_STATUS = 0
```

```
BEGIN
```

```
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',  
    FILEGROWTH = '"+@FileGrowth_LDF+"') --Change to correct MB preference
```

```
    EXEC (@SqlCmd)
```

```
    PRINT @SqlCmd
```

```
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
```

```
END
```

```
CLOSE dbfiles
```

```
DEALLOCATE dbfiles',
```

```
@@database_name=N'master',
```

```
@@flags=0
```

```
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
```

```
/***** Object: Step [BETWEEN 4.500 AND 20.000 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
```

```
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 4.500 AND 20.000  
(MB)',
```

```
    @step_id=7,
```

```
    @cmdexec_success_code=0,
```

```
    @on_success_action=3,
```

```
    @on_success_step_id=0,
```

```
    @on_fail_action=2,
```

```
    @on_fail_step_id=0,
```

```
    @retry_attempts=0,
```

```
    @retry_interval=0,
```

```
    @os_run_priority=0, @subsystem=N'TSQL',
```

```
    @command=N'DECLARE @MinDBSize INT = 4500
```

```
DECLARE @MaxDBSize INT = 20000
```

```
DECLARE @FileGrowth_MDF VARCHAR(10) = 250
```

```
DECLARE @FileGrowth_LDF VARCHAR(10) = 1000
```

```
-----  
  
DECLARE @dbname VARCHAR(200)
```

```
DECLARE @filename VARCHAR(200)
```

```
DECLARE @SqlCmd VARCHAR(2000)
```

```
DECLARE dbfiles CURSOR FOR
```

```

SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "ROWS" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '''+@FileGrowth_MDF+'') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name

```



```

FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '"+@FileGrowth_LDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',
@@database_name=N'master',
@@flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 20.000 AND 40.000 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 20.000 AND
40.000 (MB)',
@@step_id=8,
@@cmdexec_success_code=0,
@@on_success_action=3,
@@on_success_step_id=0,
@@on_fail_action=2,
@@on_fail_step_id=0,
@@retry_attempts=0,
@@retry_interval=0,
@@os_run_priority=0, @subsystem=N'TSQL',
@@command=N'DECLARE @MinDBSize INT = 20000
DECLARE @MaxDBSize INT = 40000
DECLARE @FileGrowth_MDF VARCHAR(10) = 500

```

```
DECLARE @FileGrowth_LDF VARCHAR(10) = 1000
```

```
-----
```

```
DECLARE @dbname VARCHAR(200)
```

```
DECLARE @filename VARCHAR(200)
```

```
DECLARE @SqlCmd VARCHAR(2000)
```

```
DECLARE dbfiles CURSOR FOR
```

```
SELECT sd.name AS DBName, mf.name AS LogicalName
```

```
FROM sys.master_files mf
```

```
JOIN sys.databases sd ON sd.database_id = mf.database_id
```

```
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
```

```
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
```

```
Change to correct size range
```

```
AND sd.name NOT IN (SELECT d.name
```

```
    FROM sys.databases d
```

```
    INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
```

```
    INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
```

```
    INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =  
rs.replica_id
```

```
    WHERE rs.role_desc = 'SECONDARY') -- exclude dbs in AG secondary
```

```
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
```

```
AND mf.type_desc = 'ROWS' -- ROWS or LOG
```

```
OPEN dbfiles
```

```
FETCH NEXT FROM dbfiles INTO @dbname, @filename
```

```
WHILE @@FETCH_STATUS = 0
```

```
BEGIN
```

```
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',  
FILEGROWTH = '''+@FileGrowth_MDF+'')'" --Change to correct MB preference
```

```
    EXEC (@SqlCmd)
```

```
    PRINT @SqlCmd
```

```
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
```

```
END
```

```
CLOSE dbfiles
```

```
DEALLOCATE dbfiles
```

```

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = 'SECONDARY') -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = 'LOG' -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = 'ALTER DATABASE [' + @dbname + '] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '''+@FileGrowth_LDF+'')' --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',
@database_name=N'master',
@flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 40.000 AND 100.000 (MB)] Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 40.000 AND
100.000 (MB)',
@step_id=9,
@cmdexec_success_code=0,
@on_success_action=3,

```

```

@@@on_success_step_id=0,
@@@on_fail_action=2,
@@@on_fail_step_id=0,
@@@retry_attempts=0,
@@@retry_interval=0,
@@@os_run_priority=0, @subsystem=N'TSQL',
@@@command=N'DECLARE @MinDBSize INT = 40000
DECLARE @MaxDBSize INT = 100000
DECLARE @FileGrowth_MDF VARCHAR(10) = 1000
DECLARE @FileGrowth_LDF VARCHAR(10) = 1000

-----

DECLARE @dbname VARCHAR(200)
DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
    FROM sys.databases d
    INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
    INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
    INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
    WHERE rs.role_desc = 'SECONDARY') -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = 'ROWS' -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = 'ALTER DATABASE [' + @dbname + '] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '''+@FileGrowth_MDF+'')' --Change to correct MB preference

```

```

    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '"+@FileGrowth_LDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',

```

```

@@@database_name=N'master',
@@@flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 100.000 AND 200.000 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 100.000 AND
200.000 (MB)',
@@@step_id=10,
@@@cmdexec_success_code=0,
@@@on_success_action=3,
@@@on_success_step_id=0,
@@@on_fail_action=2,
@@@on_fail_step_id=0,
@@@retry_attempts=0,
@@@retry_interval=0,
@@@os_run_priority=0, @subsystem=N'TSQL',
@@@command=N'DECLARE @MinDBSize INT = 100000
DECLARE @MaxDBSize INT = 200000
DECLARE @FileGrowth_MDF VARCHAR(10) = 2000
DECLARE @FileGrowth_LDF VARCHAR(10) = 1000

-----

DECLARE @dbname VARCHAR(200)
DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
@@@FROM sys.databases d
@@@INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
@@@INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
@@@INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
@@@WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary

```

```

AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "ROWS" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''''+@filename+''''',
FILEGROWTH = '"+@FileGrowth_MDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN

```

```

SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '"+@FileGrowth_LDF+"') --Change to correct MB preference
EXEC (@SqlCmd)
PRINT @SqlCmd
FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',
@@database_name=N'master',
@@flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 200.000 AND 300.000 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 200.000 AND
300.000 (MB)',
@@step_id=11,
@@cmdexec_success_code=0,
@@on_success_action=3,
@@on_success_step_id=0,
@@on_fail_action=2,
@@on_fail_step_id=0,
@@retry_attempts=0,
@@retry_interval=0,
@@os_run_priority=0, @subsystem=N'TSQL',
@@command=N'DECLARE @MinDBSize INT = 200000
DECLARE @MaxDBSize INT = 300000
DECLARE @FileGrowth_MDF VARCHAR(10) = 3000
DECLARE @FileGrowth_LDF VARCHAR(10) = 2000

-----

DECLARE @dbname VARCHAR(200)
DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')

```



```

AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "ROWS" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '"+@FileGrowth_MDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =

```

```

rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
    FILEGROWTH = '"+@FileGrowth_LDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',
@database_name=N'master',
@flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
/***** Object: Step [BETWEEN 300.000 AND 900.000 (MB)]   Script Date: 28-5-2025 13:42:25 *****/
EXEC @ReturnCode = msdb.dbo.sp_add_jobstep @job_id=@jobId, @step_name=N'BETWEEN 300.000 AND
900.000 (MB)',
@step_id=12,
@cmdexec_success_code=0,
@on_success_action=1,
@on_success_step_id=0,
@on_fail_action=2,
@on_fail_step_id=0,
@retry_attempts=0,
@retry_interval=0,
@os_run_priority=0, @subsystem=N'TSQL',
@command=N'DECLARE @MinDBSize INT = 300000
DECLARE @MaxDBSize INT = 900000
DECLARE @FileGrowth_MDF VARCHAR(10) = 3000
DECLARE @FileGrowth_LDF VARCHAR(10) = 2000

```

---

```

DECLARE @dbname VARCHAR(200)
DECLARE @filename VARCHAR(200)
DECLARE @SqlCmd VARCHAR(2000)

DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf
JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ('master','model','msdb','tempdb')
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = 'SECONDARY') -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = 'ROWS' -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = 'ALTER DATABASE [' + @dbname + '] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '''+@FileGrowth_MDF+'')' --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles

--LOG files
DECLARE dbfiles CURSOR FOR
SELECT sd.name AS DBName, mf.name AS LogicalName
FROM sys.master_files mf

```

```

JOIN sys.databases sd ON sd.database_id = mf.database_id
WHERE DB_NAME(mf.database_id) NOT IN ("master","model","msdb","tempdb")
AND CONVERT(DECIMAL(20,2), (CONVERT(DECIMAL,size)/128)) BETWEEN @MinDBSize AND @MaxDBSize --(MB)
Change to correct size range
AND sd.name NOT IN (SELECT d.name
FROM sys.databases d
INNER JOIN sys.availability_databases_cluster adc ON d.group_database_id = adc.group_database_id
INNER JOIN sys.availability_groups ag ON adc.group_id = ag.group_id
INNER JOIN sys.dm_hadr_availability_replica_states rs ON ag.group_id = rs.group_id AND d.replica_id =
rs.replica_id
WHERE rs.role_desc = "SECONDARY") -- exclude dbs in AG secondary
AND sd.is_read_only = 0 AND sd.state = 0 -- exclude dbs that are read only or offline
AND mf.type_desc = "LOG" -- ROWS or LOG
OPEN dbfiles
FETCH NEXT FROM dbfiles INTO @dbname, @filename

WHILE @@FETCH_STATUS = 0
BEGIN
    SET @SqlCmd = "ALTER DATABASE [" + @dbname + "] MODIFY FILE (NAME = N'''+@filename+''',
FILEGROWTH = '"+@FileGrowth_LDF+"') --Change to correct MB preference
    EXEC (@SqlCmd)
    PRINT @SqlCmd
    FETCH NEXT FROM dbfiles INTO @dbname, @filename
END

CLOSE dbfiles
DEALLOCATE dbfiles',
@database_name=N'master',
@flags=0
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
EXEC @ReturnCode = msdb.dbo.sp_update_job @job_id = @jobId, @start_step_id = 1
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
EXEC @ReturnCode = msdb.dbo.sp_add_jobschedule @job_id=@jobId, @name=N'Monthly 1st day',
@enabled=1,
@freq_type=16,
@freq_interval=1,
@freq_subday_type=1,
@freq_subday_interval=0,
@freq_relative_interval=0,
@freq_recurrence_factor=1,

```

```

--@active_start_date=20180801,
--@active_end_date=99991231,
--@active_start_time=90000,
--@active_end_time=235959,
--@schedule_uid=N'1eeecd0b-8d76-44c9-bea0-740bbe5a1328'
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
EXEC @ReturnCode = msdb.dbo.sp_add_jobserver @job_id = @jobId, @server_name = N'(local)'
IF (@@ERROR <> 0 OR @ReturnCode <> 0) GOTO QuitWithRollback
COMMIT TRANSACTION
GOTO EndSave
QuitWithRollback:
    IF (@@TRANCOUNT > 0) ROLLBACK TRANSACTION
EndSave:
GO
```

# Change the target recovery time

This article describes how to set or change the target recovery time of a database in SQL Server by using SQL Server Management Studio or Transact-SQL. By default, the target recovery time is 0 or 60 seconds, and the database uses *indirect checkpoints*. The target recovery time establishes an upper bound on recovery time for this database.

This setting takes effect immediately and doesn't require a restart of SQL Server.

```
ALTER DATABASE MXSuite  
SET TARGET_RECOVERY_TIME = 60 SECONDS;
```

See also [Microsoft Learn](#)

# Enable query store

Since SQL Server 2016, there has been an option to enable a query store. The query store stores details about unique queries: their execution plans, the time they took, the logical reads they required, etc. This would help greatly in identifying performance issues.

```
ALTER DATABASE [MXSuite] SET QUERY_STORE = ON
(
    OPERATION_MODE = READ_WRITE,
    CLEANUP_POLICY = (STALE_QUERY_THRESHOLD_DAYS = 30), -- keeps 30 days of info, up to limit of storage
    though
    DATA_FLUSH_INTERVAL_SECONDS = 900, -- how often the data for the query store gets moved from ram to
    disk, recommended is 900 seconds. higher means more memory usage and less disk i/o, lower means the
    opposite, although it shouldn't have any significant performance impact.
    MAX_STORAGE_SIZE_MB = 1024, -- occupies max 1gb, i'd suggest 2gb on bigger databases but I don't know
    how much 1gb can handle
    INTERVAL_LENGTH_MINUTES = 60,
    SIZE_BASED_CLEANUP_MODE = AUTO,
    QUERY_CAPTURE_MODE = AUTO, -- filters out insignificant queries, which there are a lot of
    MAX_PLANS_PER_QUERY = 200
);
```