How to Set Up Database Mail for SQL Server Job Completion

This document describes the necessary steps to setting up Database Mail in SQL Server 2012 to send an email when a SQL Server job fails or completes. These are the steps:

- 1. Configure Database Mail.
- 2. Create a SQL Server job.
- 3. Adjust the properties within the SQL Server Agent.
- 4. Create an Operator.
- 5. Adjust the SQL Server job to send on Failure.

Configuring Database Mail

To complete this step correctly, a properly configured mail server is needed. In most cases it is ok to use localhost, but that requires the installation of Microsoft IIS/SMTP. If your administrator will not allow the install of IIS on a server running SQL Server, get the name of a mail server that can be used.

Step. 1

Open SQL Server Management Studio (SSMS), connect to the Database Engine, expand Management, right-click on Database Mail and then click **Configure Database Mail**.



Step. 2 You will then see the splash screen below. Click Next.

	Welcome to Database Mail Configuration Wizard
	Database Mail is a SQL Server component that uses the Simple Mail Transfer Protocol (SMTP) to send e-mail messages. The wizard helps you perform setup and maintenance tasks such as: • Managing Database Mail accounts and profiles • Managing Database Mail security • Configuring Database Mail system parameters Click Next to continue, or Cancel to exit the wizard.
	□ Skin this name in the fature
Нер	<back next=""> Eninh >>1 Cancel</back>

Leave the default option of "Set up Database Mail by performing the following tasks" selected. Click **Next.**

Select configuration Task Select setup or maintenance tasks.	C.
If you are installing Database Mail for the first time, select the setup option.	
Set up Database Mail by performing the following tasks:	
1. Create a new e-mail profile and specify its SMTP accounts	
2. Specify profile security	
3. Configure system parameters	
C Manage Database Mail accounts and profiles	
C Manage profile security	
C ⊻iew or change system parameters	
Help (Back Next> Enith>)	Cancel

You will get a pop-up below if mail hasn't been configured yet. Click **Yes** and then click **Next**.

Select Configuration Task Select setup or maintenance tasks.	
If you are installing Database Mail for the first time, select the setu	p option.
Set up Database Mail by performing the following tasks:	
1. Create a new e-mail profile and specify its SMTP account	
2. Specify profile security	
3. Configure system parameters	
The Database Mail feature is not available. Woul	d you like to enable this feature?
-4	Yes No
Help	<back nest=""> Einish>>1 Cancel</back>

Give the **New Profile** a name and then click **Add**.

	Email				
goription:					
profile may be	associated w	th multiple SMTP accounts	. If an account fails wi	hile sending an e-mai	, the profile uses the next
count in the p	nony ist. Spe	City the accounts associate	d with the profile, and	move the accounts t	o set the railover priority.
TP accounts nonity Acc	count Name	E-mail Address			
					Bemon Add
					Movello
					MoveDown

Fill in the correct information as show below.

- · Email address- This should be the sender email address.
- \cdot *Display name* This should be the name displayed when the email arrives.
- · *Reply email* This should be set properly too.
- · Server name- The mail server address. In this case, I am using localhost.

• *SMTP Authentication*– I leave this section set to the default, but you can specify it to your needs if it is required.

Note that the **OK** button will remain greyed out until all required fields are completed. Once all the fields are completed, click **OK**.

et 11	Account name:	Email for SQL	L Jobs		
IS .	Description:	Email for SQL	L Jobs		
	Outgoing Mail Server	(SMTP)			
	E-mail address:				
pr c	Display name:		Desired		
	Reply e-mail:				
M.	Server name:		127.0.0.1	Port number:	25
Prie	This server rec	puires a secure co	nnection (SSL)		
	C Basic authenti	entication using D cation) atabase Engine service cred	entials	
	User name:				
	Password				
	Confirm pasew	ord			

Step. 7 Click Next.

rofile name:	Email		
escription			
profile may	be associated wit	h multiple SMTP accounts. If an account fails while sending an e-mail,	the profile uses the next
count in the	e priority list. Spec	sity the accounts associated with the profile, and move the accounts to	set the failover priority.
MTP accour Priority A	nts: ccount Name	E-mail Address	Add
1 E	Email for SQL J		Remove
			Move Up
			a second and a second se
			Move Down

Check the option to make the new profile **Public**. Profiles are either public or private. A private profile is accessible only to specific users or roles. A public profile allows any user or role with access to the mail host database (**msdb**) to send e-mail using that profile. If the profile isn't set to **Public**, permissions will need to be assigned properly.

openty	database users or roles that have acc	sess to profiles.
Public Prof	iles Private Profiles	
A public ;	f any mail-host database.	
Select pu	default public profile.	
Public	Profile Name	Default Profile
V	Email	No

Review the System Parameters. I always use the default settings, but they can be adjusted as needed. You can review the settings in depth <u>here</u>. Click **Next**.

ystem parameters:	
Parameter	Value
Account Retry Attempts	1
Account Retry Delay (seconds)	60
4aximum File Size (Bytes)	1000000
Prohibited Attachment File Extensions	exe,dll,vbs.js
Jatabase Mail Executable Minimum Lifetime (seconds)	600
Logging Level	Extended
unber of retry attempts for a mail server to send email.	

Step. 10 Click Finish.

Complete the Wizard Verify the actions the wizard is about to perform, and then click Finish to execute these actions on the	server.
Qick Finish to perform these actions:	
New Accounts Create new account Email for SQL Jobs' for SMTP server "127.0.0.1" New Profiles Create New profile Email Adding Accounts Profiles Add account Email for SQL Jobs' to profile Email with priority "1" Manage Profile Security Set Email as public profile	
	New Accounts • Greate new account 'Email for SQL Jobs' for SMTP server '127.0.0.1' New Profiles • Greate New profile 'Email'
	Adding Accounts Profiles • Add accounts Profiles • Add account: Email for SQL Jobs' to profile 'Email' with priority 'T' Manage Profile Security • Set 'Transf or cohile

You should see that each Action was completed and has a Status of Success. Click Close.

Configuring... Click Stop to interrupt the operation.

2	Success		4 Total 4 Success	0	Warning
eta	sis:				
	Action	Status		Message	
2	Create new account 'Email for SQL Jobs' for SMTP server	Success		-	
3	Create New profile 'Email'	Success			
9	Add account 'Email for SQL Jobs' to profile 'Email' with prio	Success			
3	Grant 'guest' access to 'Email'	Success			
			St	39	Report

Test set up

Right-click **Database Mail** and select **Send Test E-Mail.** Type in an email address to use for testing and click **Send Test E-Mail**.

Database Mail Profile:	Email
To:	
Subject:	Database Mail Test
Body:	This is a test e-mail sent from Database Mail on
	Send Test E-Mail
	Close

You will then see the screen below.

Se Se	🚪 Database Mail Tes	st E-Mail	
Dat	Sent e-mail:	1	- 2
Io: Sut	Your test e-mail has be	een queued for processing. Depending o	n the network
Boc	before the e-mail is del	ivered to the recipient.	-
	If the e-mail is success If the e-mail is not rece	stully received, click OK. ived, click Troubleshoot.	
			<u>×</u>
		OK Trou	bleshoot
			111

If the email doesn't arrive, check the mail server to make sure it is properly configured and will accept mail from the SQL Server.

Create SQL Server Job

At this point we know the SQL Server can send email. Now we need to setup a SQL Job and then set SQL so it sends emails if the job fails. The easiest way to test this is to setup a Backup job and set it to notify on "Success". Once it is working properly, change the job to notify on Failure or Completed.

Adjust the properties within the SQL Server Agent Right-click SQL Server Agent and select Properties.



Click on Alert System under Select a page.

 \cdot Under *Mail session*, select the option to Enable mail profile. Ensure the correct Mail profile is selected.

· Under *Token replacement*, enable Replace tokens for all job responses to alerts.

Click **OK**. Restart the SQL Server Agent service.

Select a page	Script - In Help				
General Advanced Alert System	Mail session				
Connection	Mail system: Database Mail		•		
History	Mail profile:	Email		-	Lest
	Save copies of the sent messages in the Sent Items folder				
	Pager e-mails				
	Address formattin	g for pager e-mails:			
	0055	Prefix	Pager:		Suffix
	To line:				
	<u>C</u> c line:				
	Subject				
	To: Co: Subject: <subject< td=""><td>,</td><td></td><td></td><td></td></subject<>	,			
Connection	*				2
Server. 10.11.109.10	Include body	of e-mail in notification met	isage		_
Connection: OW\s-desiree	Fail-sale operator				
View connection properties	Operator.				Ŧ
Piogress	Notily using	F E-mail	E Pager	Net send	
Ready	Token replacement				
101	Replace token	for all job responses to al	erts		
				ОК	Cancel

Create an Operator

Under the SQL Server Agent, right-click **Operators** and select **New Operator.**



Type in the recipient email address in the E-mail name and click OK. Separate multiple recipient addresses with semi colon if applicable.

General	Script • D Help					
P Notifications	Ngme: SQL Job Failure			F Enable	Enabled	
	Notification options E-mail name: [test@orcsweb.com Net send address:					
	Pager e-mail name: Pager on duty schedule					
	□ <u>W</u> ednesday □ Thugsday □ Enday	Workday begin	-	Workday end	-	
	🗂 Satyrday	8:00:00 AM	-	6 00 00 PM	=	
Connection Server 10.11.109.10 Connection: OWAs-desiree View connection properties Programs Ready	☐ Sugday	R:00:00 AM	-	6.00.00 PM	Ŧ	
				ОК Са	ncel	

Adjust the SQL Server job to send the email on Success (for testing purposes only).

Expand SQL Server Agent and click on Jobs. Find the job you created above, right click it and select **Properties**.

Under Select a page, select Notifications. Enable the first option, E-mail. Then select the Operator we just created and change the job to email when the job succeeds (for testing purposes only). Click OK.

Select a page	Script - 💽 Help			
General Skeps Schedules Akets Notifications Targets	Actions to perform when the job completes: E mail: SQL Job Failure E Bage: Net send:	When the job succeeds When the job tails When the job fails		
	✓ Write to the Windows Application event log ✓ Automatically delete job:	When the job fails		

Test by doing the following: Run the test backup job created. You should receive an email similar to the one below once it completes:

Reply Reply Forward to All Respond Act	Ins Create Other Rule Actions* bons Link E-mail	Categorize Follow Mark as	A Find Related *	En) Send to
		Options	Find	OneNote
roec	-	Options 0	Find	OneNote
To: ODesirée Harris Co Coloiste COI Server Job Surteen 'DB Ba	duna fadadan V canalatad an Mana sira			
10B RUN: 'DB Backups.Subpl DURATION: 0 hours, 0 minutes STATUS: Succeeded MESSAGES: The job succeeded	an_1' was run on 11/21/2012 at 6: , 45 seconds . The Job was invoked by User	08:55 PM	ep to run was	step 1 (Subplan_1).

If an email isn't received, restart the SQL Server Agent once more and then test again.

Adjust the SQL Server job to send on failure

After the test succeeded go back and change the SQL Server job.

Expand SQL Server Agent and click on Jobs. Find the job you created above, right click it and select Properties.

Go to the first option, E-mail. Change the job to email When the job fails Click **OK**

📑 Job Properties - MAILTEST	LOAD DIM ACCOUNT	
Select a page	🔄 Script 👻 🎼 Help	
General Steps Schedules	Actions to perform when the job completes:	
Alerts	E-mail: SQL Job Notification	When the job fails
Targets	Page:	When the job fails
	Net send:	Vhen the job fails
	Write to the Windows Application event log:	When the job fails
	Automatically delete job:	When the job succeeds
Connection		
Server: localhost		
Connection: CORPNET\goflse		
View connection properties		
Progress		
C Ready		
		OK Cancel