

Quick Scan Report – Alerts

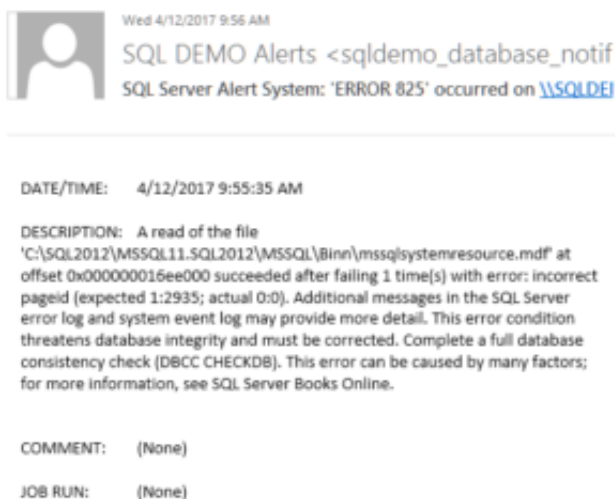
Alerts for severity levels 19 to 25 and errors 823, 824, and 825 are one of the areas that the [Quick Scan Reports](#) reports on.

If you are seeing these messages you should consider creating alerts for these severe error levels on your SQL Server databases.

019 - Fatal Error in Resource
020 - Fatal Error in Current Process
021 - Fatal Error in Database Processes
022 - Fatal Error: Table Integrity Suspect
023 - Fatal Error: Database Integrity Suspect
024 - Fatal Error: Hardware Error
025 - Fatal Error

Alert severity 19 to 25 and errors 823, 824 and 825 are all Fatal errors that you would want to know about as soon as they occur.

Errors 823, 824 and 825 usually indicate problems getting to data in the database files, and can be caused by a number of reasons. With these there is often times a retry that succeeds but the original failed. Here is an example error 825 email message.



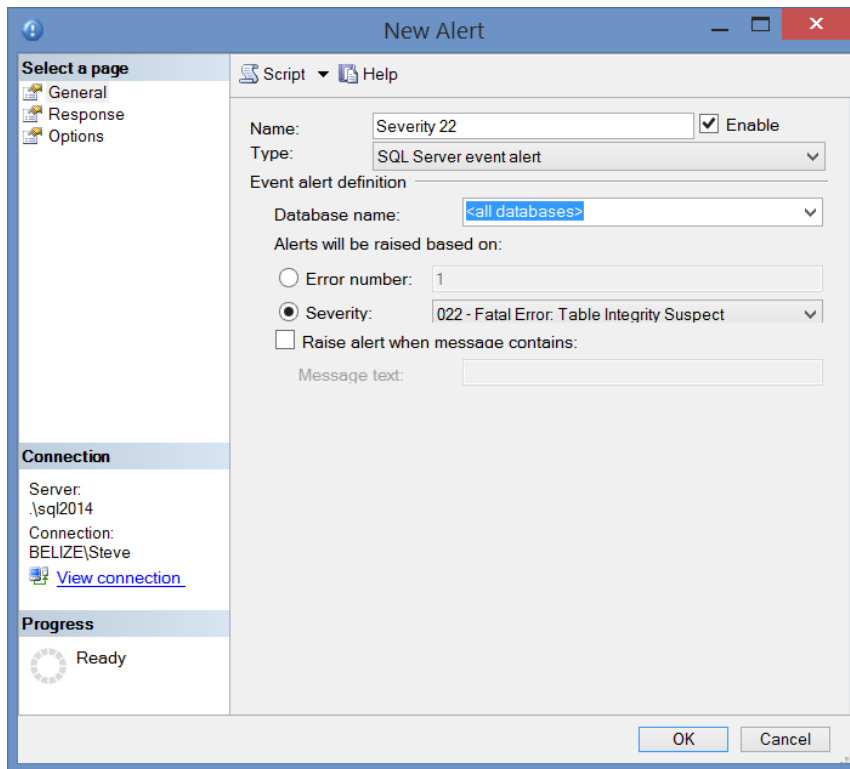
How to Set up Alerts

To set up alerts, you first need an operator configured to receive the notification. You also need to have the SQL Server Agent running for the alerts to send out notifications.

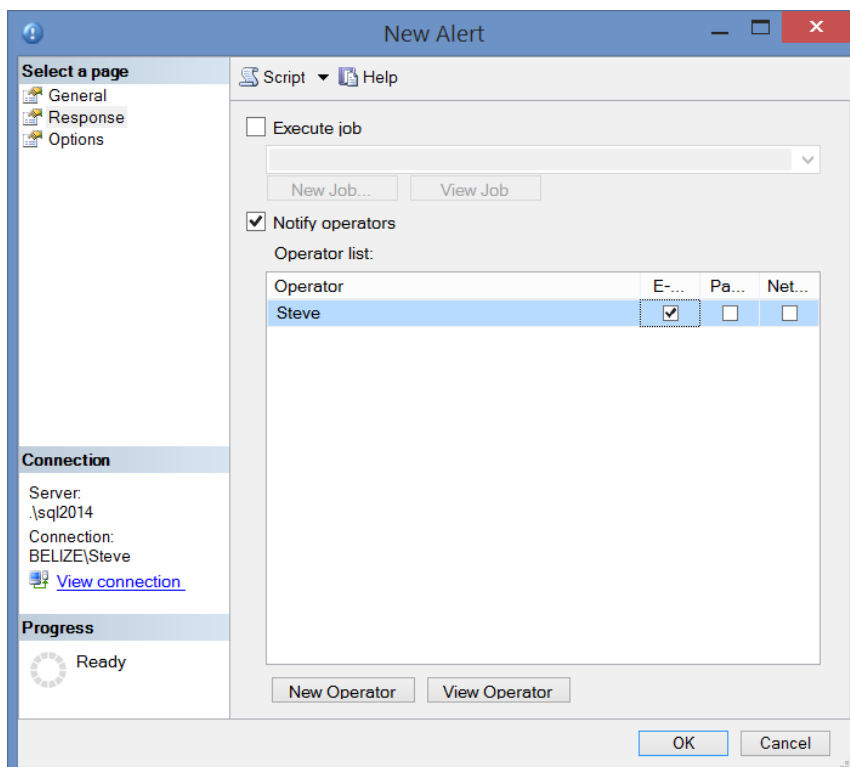
Next expand the SQL Server Agent, then expand Alerts, right click the alerts item and you can add an alert for each of the fatal errors that may occur on your SQL Server.

The new alert configuration screens look like this:

First fill out the Alert name, and select the severity.



To configure the notification to go to an operator.



Operator	E...	Pa...	Net...
Steve	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

And save the alert. Repeat this for the alerts severity 19 to 25, and you will get notified when bad things happen that need your attention.

Script to add Operators, Alerts and Notifications

```

DECLARE @operatorName as NVARCHAR(100);
DECLARE @operatorEmail as NVARCHAR(100);

SET @operatorName = N'OPERATOR NAME'; -- REPLACE THIS WITH THE OPERATOR NAME
SET @operatorEmail = N'youremail@yourdomain.com'; -- REPLACE THIS WITH THE OPERATOR EMAIL

IF NOT EXISTS(SELECT * FROM msdb..sysoperators WHERE name = @operatorName)
BEGIN
    EXEC msdb.dbo.sp_add_operator @name=@operatorName,
        @enabled=1,
        @weekday_pager_start_time=100,
        @weekday_pager_end_time=235959,
        @saturday_pager_start_time=100,
        @saturday_pager_end_time=235959,
        @sunday_pager_start_time=100,
        @sunday_pager_end_time=235959,
        @pager_days=127,
        @email_address=@operatorEmail,
        @category_name=N'[Uncategorized]';
END

EXEC msdb.dbo.sp_add_alert @name=N'ERROR 823',
    @message_id=823,
    @severity=0,
    @enabled=1,
    @delay_between_responses=0,
    @include_event_description_in=1,
    @category_name=N'[Uncategorized]',
    @job_id=N'00000000-0000-0000-0000-000000000000';

EXEC msdb.dbo.sp_add_notification @alert_name=N'ERROR 823',
    @operator_name=@operatorName,
    @notification_method= 1;

EXEC msdb.dbo.sp_add_alert @name=N'ERROR 824',
    @message_id=824,
    @severity=0,
    @enabled=1,
    @delay_between_responses=0,
    @include_event_description_in=1,
    @category_name=N'[Uncategorized]',
    @job_id=N'00000000-0000-0000-0000-000000000000';

EXEC msdb.dbo.sp_add_notification @alert_name=N'ERROR 824',
    @operator_name=@operatorName,
    @notification_method = 1;

EXEC msdb.dbo.sp_add_alert @name=N'ERROR 825',

```

```

@message_id=825,
@severity=0,
@enabled=1,
@delay_between_responses=0,
@include_event_description_in=1,
@category_name=N'[Uncategorized]',
@job_id=N'00000000-0000-0000-0000-000000000000';

EXEC msdb.dbo.sp_add_notification @alert_name=N'ERROR 825',
    @operator_name=@operatorName ,
    @notification_method = 1;

IF NOT EXISTS (SELECT * FROM [msdb].[dbo].[sysalerts] WITH ( NOLOCK ) WHERE [severity] = 19 )
BEGIN

    EXEC msdb.dbo.sp_add_alert @name=N'Severity 19 - Fatal Error In Resource',
        @message_id=0,
        @severity=19,
        @enabled=1,
        @delay_between_responses=900, -- 15 minutes
        @include_event_description_in=1,
        @job_id=N'00000000-0000-0000-0000-000000000000';

    EXEC msdb.dbo.sp_add_notification @alert_name=N'Severity 19 - Fatal Error In Resource',
        @operator_name=@operatorName ,
        @notification_method = 1;

END

IF NOT EXISTS (SELECT * FROM [msdb].[dbo].[sysalerts] WITH ( NOLOCK ) WHERE [severity] = 20 )
BEGIN
    EXEC msdb.dbo.sp_add_alert @name=N'Severity 20 - Fatal Error In Current Process'
    ,
        @message_id=0,
        @severity=20,
        @enabled=1,
        @delay_between_responses=900, -- 15 minutes
        @include_event_description_in=1,
        @job_id=N'00000000-0000-0000-0000-000000000000';

    EXEC msdb.dbo.sp_add_notification @alert_name=N'Severity 20 - Fatal Error In Current Process',
        @operator_name=@operatorName,
        @notification_method = 1;

END

IF NOT EXISTS (SELECT * FROM [msdb].[dbo].[sysalerts] WITH ( NOLOCK ) WHERE [severity] = 21 )
BEGIN
    EXEC msdb.dbo.sp_add_alert @name=N'Severity 21 - Fatal Error In Database Process

```

```
,
    @message_id=0,
    @severity=21,
    @enabled=1,
    @delay_between_responses=900, -- 15 minutes
    @include_event_description_in=1,
    @job_id=N'00000000-0000-0000-0000-000000000000';

EXEC msdb.dbo.sp_add_notification @alert_name=N'Severity 21 - Fatal Error In Database Process',
    @operator_name=@operatorName,
    @notification_method = 1;
END

IF NOT EXISTS (SELECT * FROM [msdb].[dbo].[sysalerts] WITH ( NOLOCK ) WHERE [severity] = 22 )
BEGIN
    EXEC msdb.dbo.sp_add_alert @name=N'Severity 22 - Fatal Error Table Integrity Suspect',
        @message_id=0,
        @severity=22,
        @enabled=1,
        @delay_between_responses=900, -- 15 minutes
        @include_event_description_in=1,
        @job_id=N'00000000-0000-0000-0000-000000000000';

    EXEC msdb.dbo.sp_add_notification @alert_name=N'Severity 22 - Fatal Error Table Integrity Suspect',
        @operator_name=@operatorName,
        @notification_method = 1;
END

IF NOT EXISTS (SELECT * FROM [msdb].[dbo].[sysalerts] WITH ( NOLOCK ) WHERE [severity] = 23 )
BEGIN
    EXEC msdb.dbo.sp_add_alert @name=N'Severity 23 - Fatal Error Database Integrity Suspect',
        @message_id=0,
        @severity=23,
        @enabled=1,
        @delay_between_responses=900, -- 15 minutes
        @include_event_description_in=1,
        @job_id=N'00000000-0000-0000-0000-000000000000';

    EXEC msdb.dbo.sp_add_notification @alert_name=N'Severity 23 - Fatal Error Database Integrity Suspect',
        @operator_name=@operatorName,
        @notification_method = 1;
END

IF NOT EXISTS (SELECT * FROM [msdb].[dbo].[sysalerts] WITH ( NOLOCK ) WHERE [severity] = 24 )
BEGIN
    EXEC msdb.dbo.sp_add_alert @name=N'Severity 24 - Hardware Error',
```

```
@message_id=0,
@severity=24,
@enabled=1,
@delay_between_responses=900, -- 15 minutes
@include_event_description_in=1,
@job_id=N'00000000-0000-0000-0000-000000000000';

EXEC msdb.dbo.sp_add_notification @alert_name=N'Severity 24 - Hardware Error',
    @operator_name=@operatorName,
    @notification_method = 1;

END

IF NOT EXISTS (SELECT * FROM [msdb].[dbo].[sysalerts] WITH ( NOLOCK ) WHERE [severity] = 25 )
BEGIN
    EXEC msdb.dbo.sp_add_alert @name=N'Severity 25 - System Error',
        @message_id=0,
        @severity=25,
        @enabled=1,
        @delay_between_responses=900, -- 15 minutes
        @include_event_description_in=1,
        @job_id=N'00000000-0000-0000-0000-000000000000';

    EXEC msdb.dbo.sp_add_notification @alert_name=N'Severity 25 - System Error',
        @operator_name=@operatorName,
        @notification_method = 1;

END
```

Need help?

If you need help configuring alerts or anything else with your SQL Server, you can contact me (Steve Stedman) through my SQL Server consulting business [Stedman Solutions, LLC](http://StedmanSolutions.com).

<http://StedmanSolutions.com>