



**SQL SATURDAY CHARLOTTE - 2019**

# **SQL ALERTS DASHBOARD**

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[HTTPS://GITHUB.COM/GWALKEY](https://github.com/gwalkey)

# AGENDA

- SQL Alerts for all my Servers in a Glass Pane
- Build it yourself Mentality/Methodology
- Setup
  - SQL Agent Alerts - Turn on for all Monitored Servers
  - SQL Agent Job - Copies Alerts to Central Database
  - Central Database for Alert Collection and Reporting
  - SSRS Reports

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# WORKFLOW

- SQL Agent detects an Alert
- The Alert calls a SQL Agent Job in the Response, passing the Alert Details via Agent Tokens to a Powershell Script as parameters
- Powershell Script logs the Token values to the Centralized SQL database
- SSRS Reports show the Alerts for all Servers

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# THE AGENT TOKENS

- A-DBN – Database Name
- A-SVR – Server Name
- A-ERR – Error Number
- A-SEV – Severity Level
- A-MSG – Message Text

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# THE AGENT TOKENS

SQL Server Agent Properties - [Server Name] - [Instance Name]

Select a page

- General
- Advanced
- Alert System**
- Job System
- Connection
- History

Script Help

Mail session

☒ Enable mail profile

Mail system: Database Mail

Mail profile: Default Test...

☒ Save copies of the sent messages in the Sent Items folder

Pager e-mails

Address formatting for pager e-mails:

	Prefix:	Pager:	Suffix:
To line:		<input type="checkbox"/>	
Cc line:		<input type="checkbox"/>	
Subject:			

To:  
Cc:

☒ Include body of e-mail in notification message

Fail-safe operator

☒ Enable fail-safe operator

Operator: [Operator Name]

Notify using: ☒ E-mail ☐ Pager

Token replacement

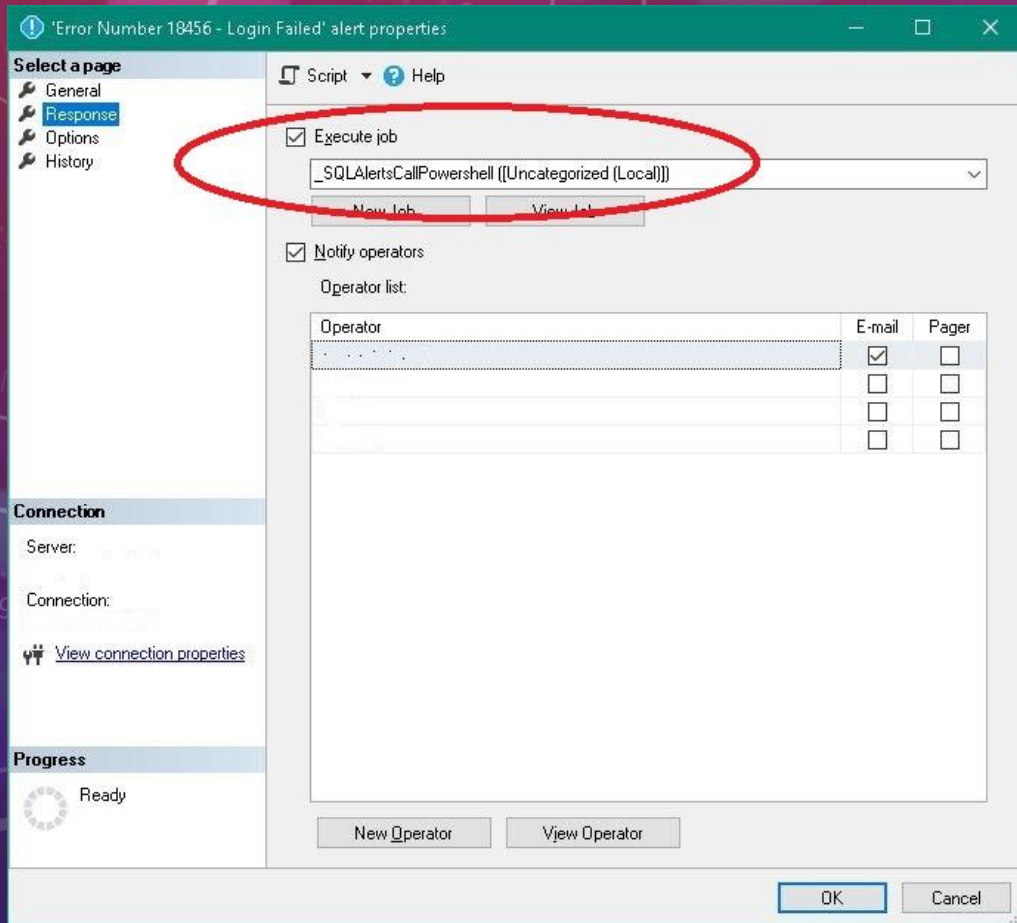
☒ Replace tokens for all job responses to alerts

OK Cancel

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# THE ALERT RESPONSE

- Calls a SQL Agent Job



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# THE SQL AGENT JOB

- No Schedule: called ad-hoc from the Alert Response
- Passes the Alert Tokens to the Powershell script
- Job Step Type is Operating System
- Command Line:  
powershell.exe c:\psscripts\logsqlalert.ps1  
'\$(ESCAPE\_SQUOTE(A-SVR))'  
'\$(ESCAPE\_SQUOTE(A-DBN))'  
'\$(ESCAPE\_SQUOTE(A-ERR))'  
'\$(ESCAPE\_SQUOTE(A-SEV))'  
'\$(ESCAPE\_SQUOTE(A-MSG))'

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# THE POWERSHELL SCRIPT

- Short and Quick
- Adds the passed-in Tokens via SQL INSERT

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# THE REPORTS

- Visual Summary with Charts
- Detail Report with Search Parameters
- Security-Only Digest Sent to Security Officer Daily

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# DEMO

The background is a gradient of purple and blue, filled with numerous out-of-focus circular light spots (bokeh). Overlaid on this are several faint, white geometric patterns. On the left side, there is a large, semi-circular scale with tick marks and numbers ranging from 140 to 260. Other smaller circular patterns, some with arrows, are scattered across the left and center of the image.

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# THE CODE AND THE THANKS

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