Politechnika Warszawska
Wydział Elektryczny
Kierunek Informatyka

Sprawozdanie z zajęć laboratoryjnych numer 9-10

Wykonał: Aliaksandr Karolik

Warszawa, 25.12.2019

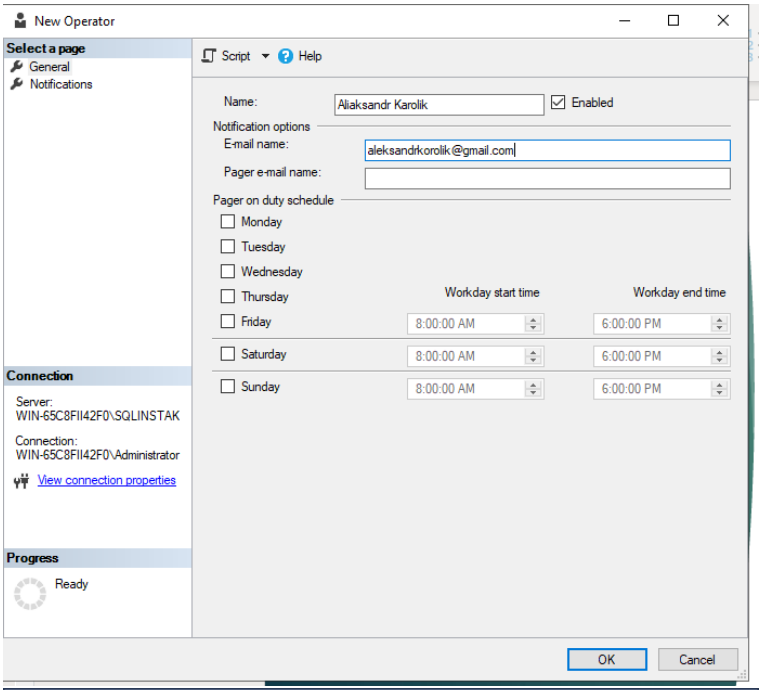
Spis treści

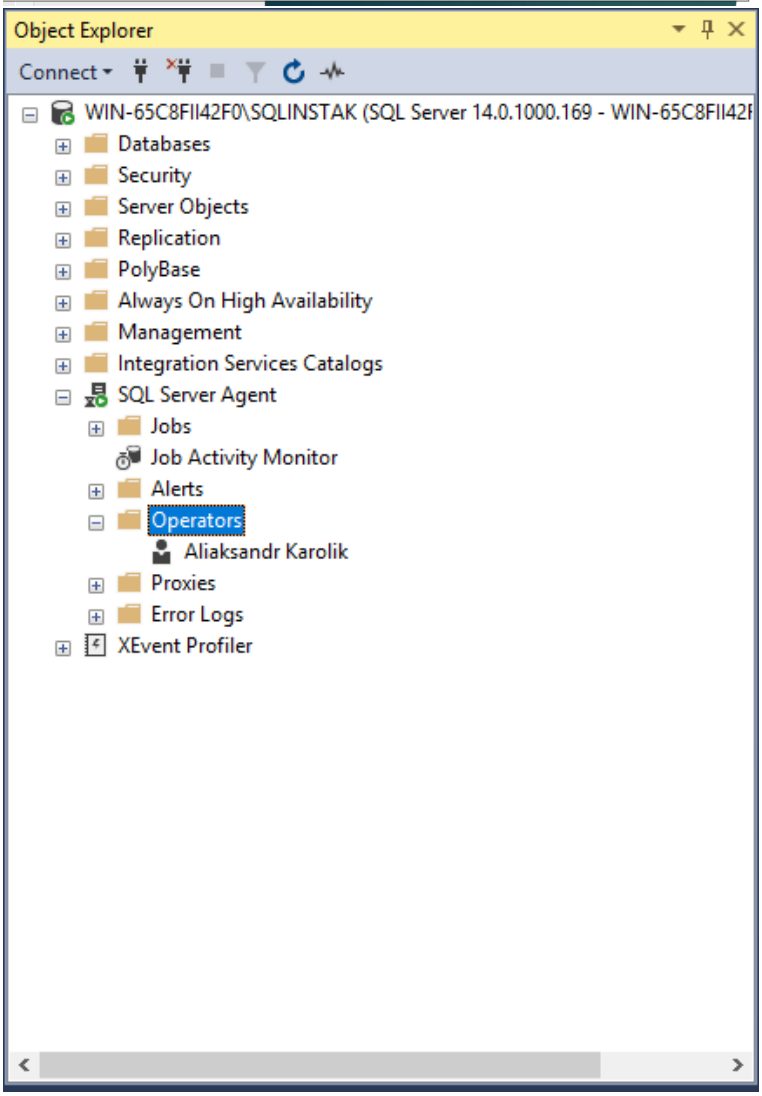
1 Praca na zajęciach **3**

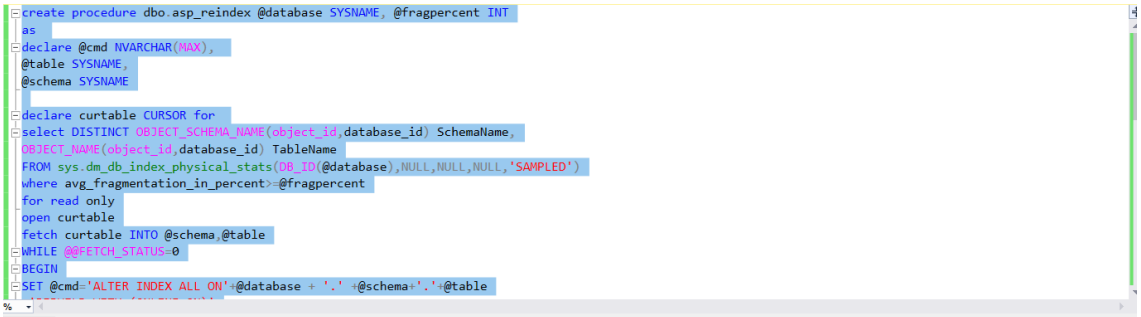
2 Praca w domu **12**

3 Odpowiedzi na pytania **17**

1 Praca na zajęciach

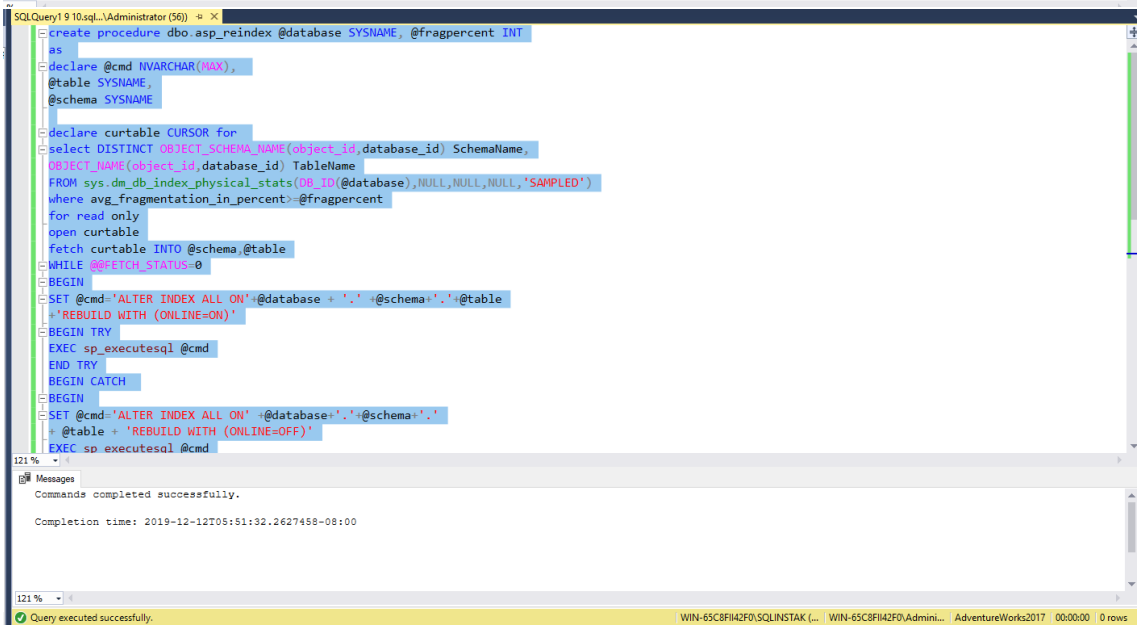






```
create procedure dbo.asp_reindex @database SYSNAME, @fragpercent INT
as
declare @cmd NVARCHAR(MAX),
@table SYSNAME,
@schema SYSNAME

declare curtable CURSOR for
select DISTINCT OBJECT_SCHEMA_NAME(object_id,database_id) SchemaName,
OBJECT_NAME(object_id,database_id) TableName
FROM sys.dm_db_index_physical_stats(DB_ID(@database),NULL,NULL,NULL,'SAMPLED')
where avg_fragmentation_in_percent>=@fragpercent
for read only
open curtable
fetch curtable INTO @schema,@table
WHILE @@FETCH_STATUS=0
BEGIN
SET @cmd='ALTER INDEX ALL ON'+@database + '.' +@schema+'.'+@table
```

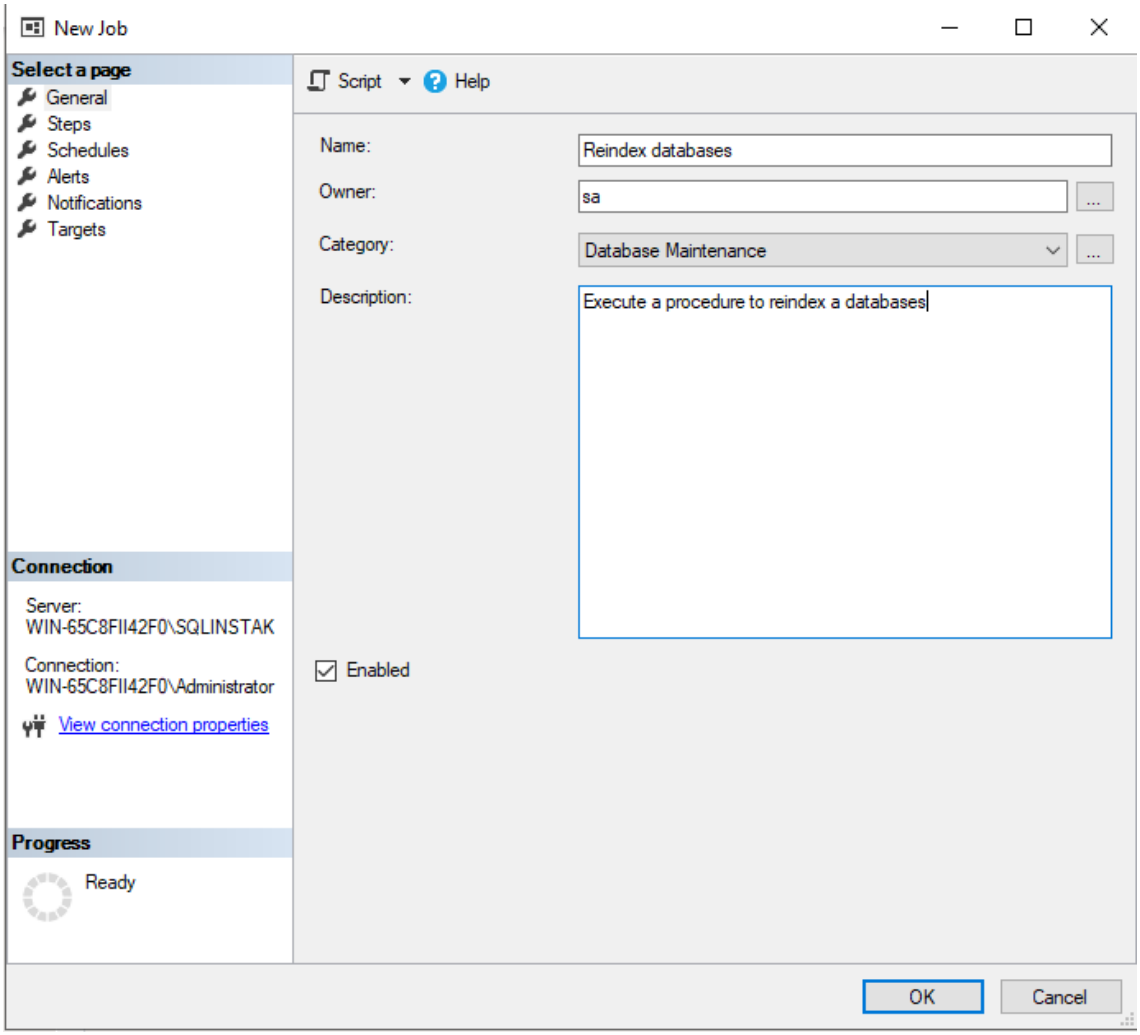
```
Messages
Commands completed successfully.

Completion time: 2019-12-12T05:51:32.2627458-08:00
```

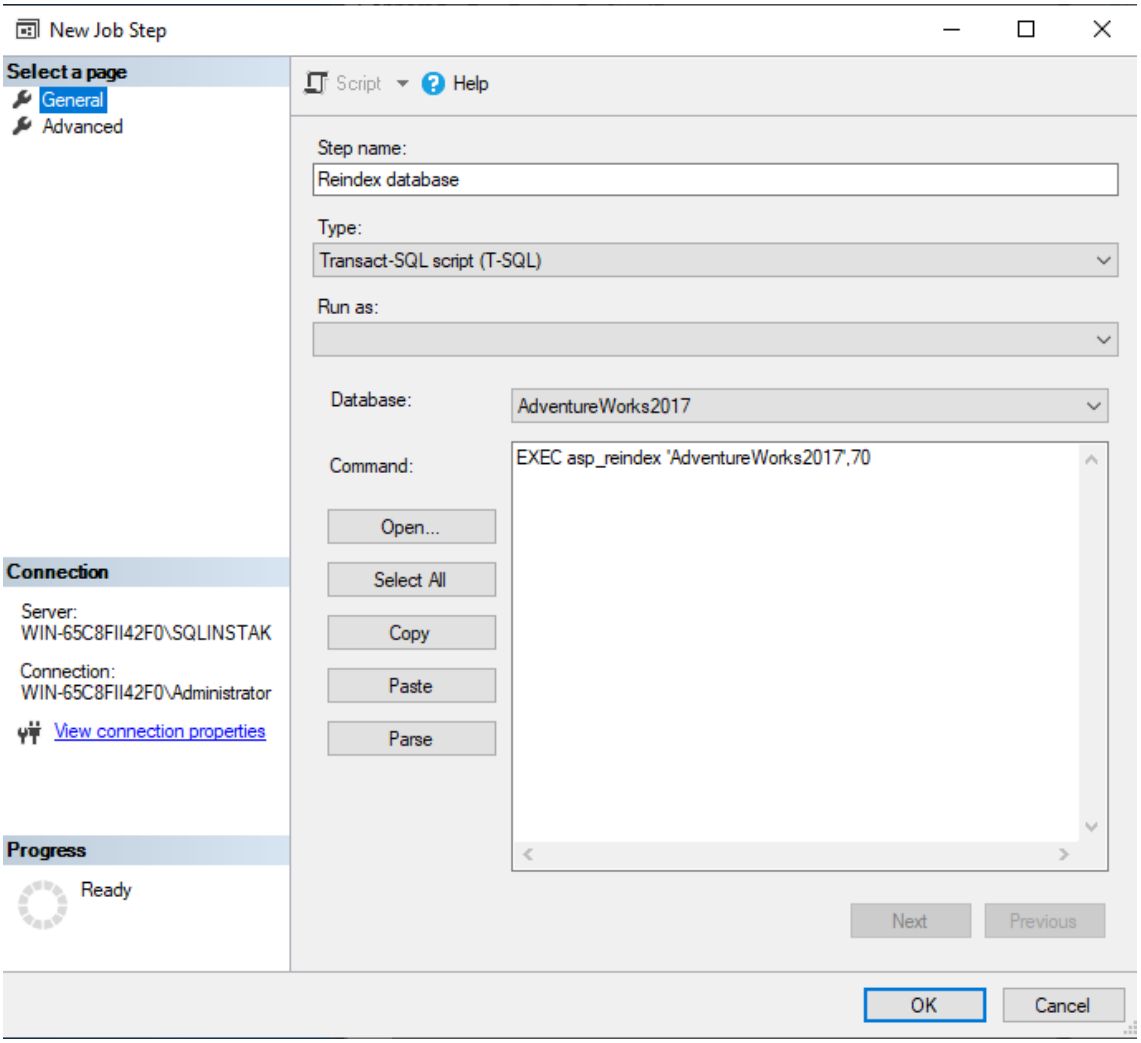


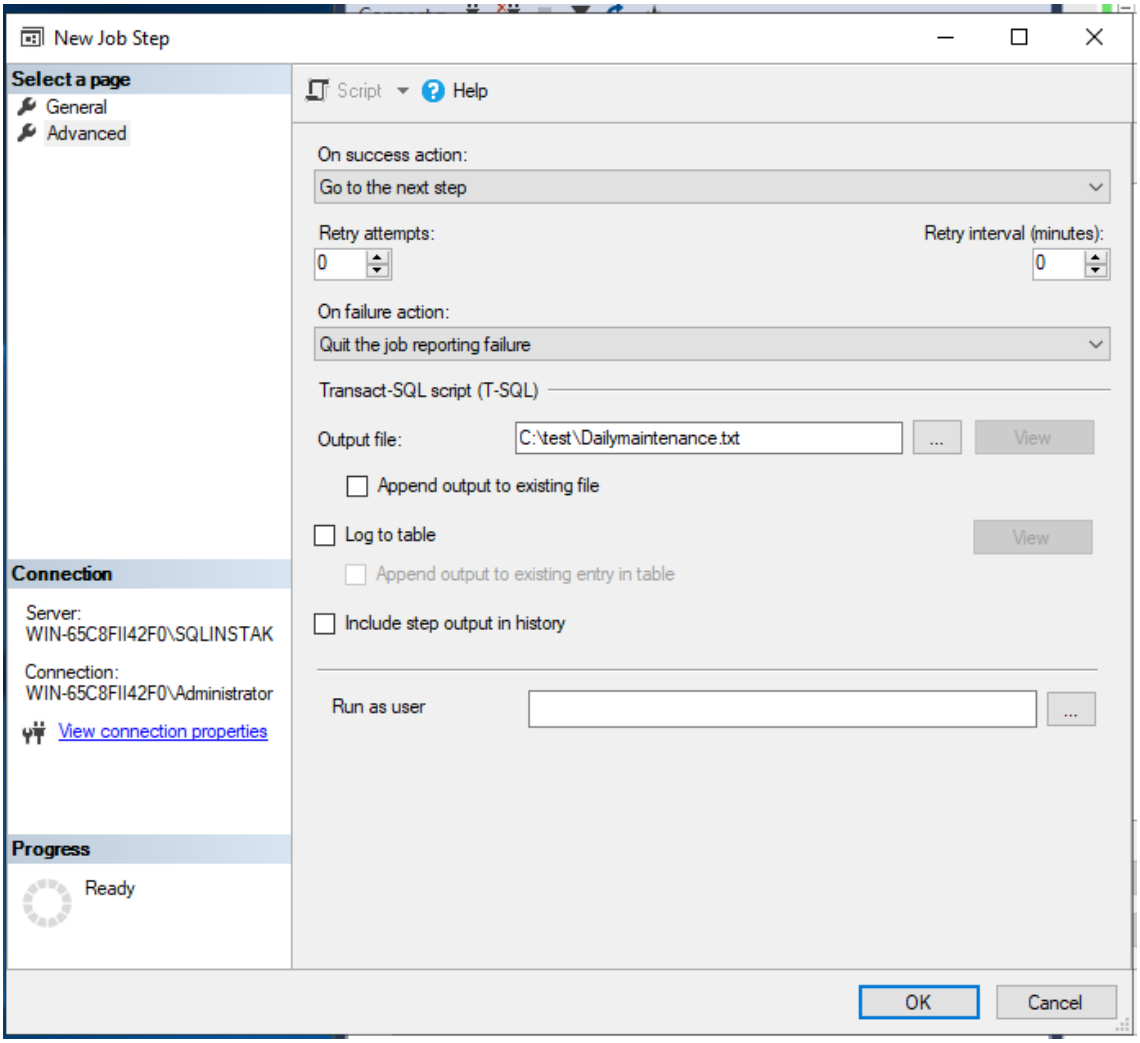
```
SQLQuery1 9 10.sql...\Administrator (56))
create procedure dbo.asp_reindex @database SYSNAME, @fragpercent INT
as
declare @cmd NVARCHAR(MAX),
@table SYSNAME,
@schema SYSNAME

declare curtable CURSOR for
select DISTINCT OBJECT_SCHEMA_NAME(object_id,database_id) SchemaName,
OBJECT_NAME(object_id,database_id) TableName
FROM sys.dm_db_index_physical_stats(DB_ID(@database),NULL,NULL,NULL,'SAMPLED')
where avg_fragmentation_in_percent>=@fragpercent
for read only
open curtable
fetch curtable INTO @schema,@table
WHILE @@FETCH_STATUS=0
BEGIN
SET @cmd='ALTER INDEX ALL ON'+@database + '.' +@schema+'.'+@table
+'REBUILD WITH (ONLINE=ON)'
BEGIN TRY
EXEC sp_executesql @cmd
END TRY
BEGIN CATCH
BEGIN
SET @cmd='ALTER INDEX ALL ON' +@database+'.'+@schema+'.'
+ @table + 'REBUILD WITH (ONLINE=OFF)'
EXEC sp_executesql @cmd
```

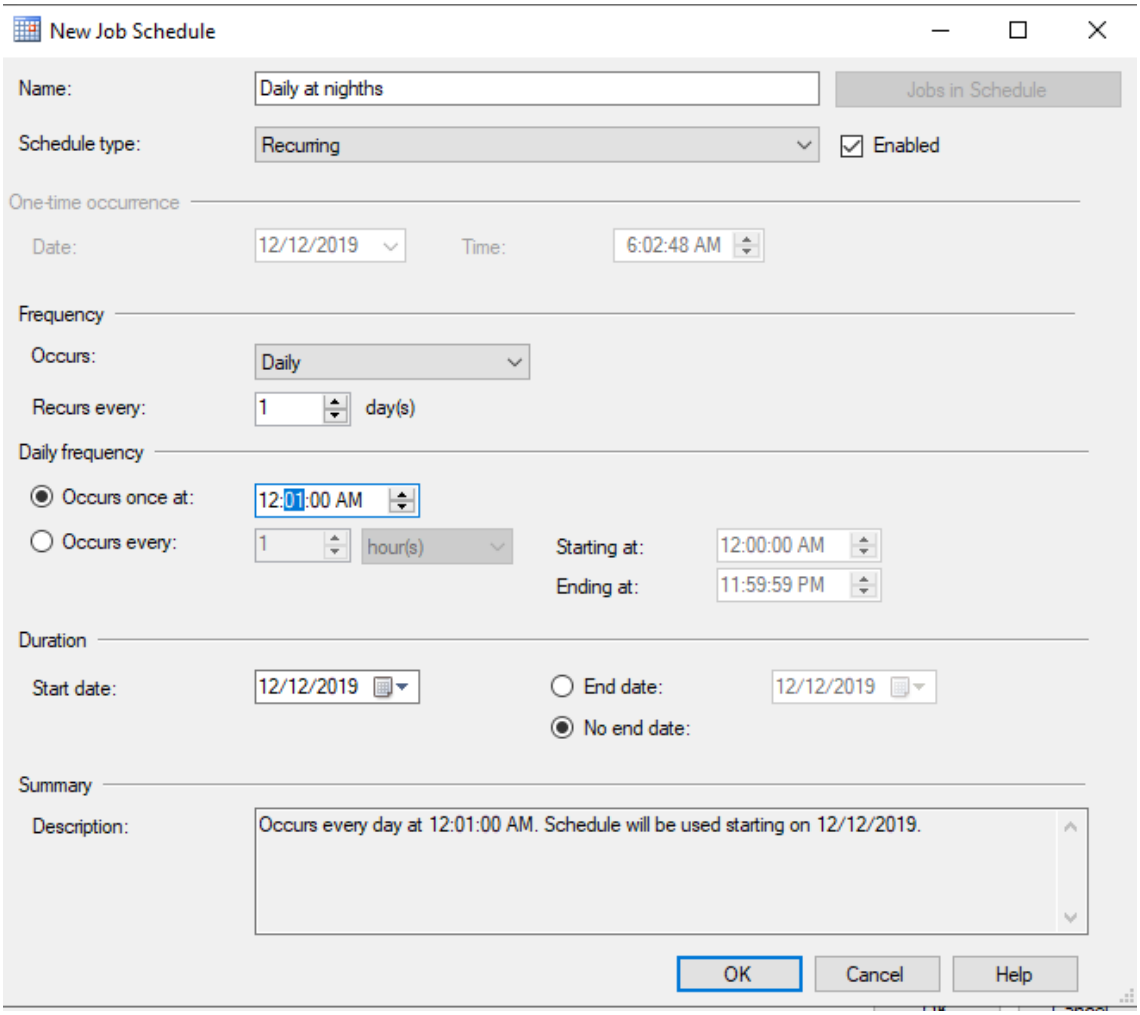
```
Messages
Commands completed successfully.

Completion time: 2019-12-12T05:51:32.2627458-08:00
```

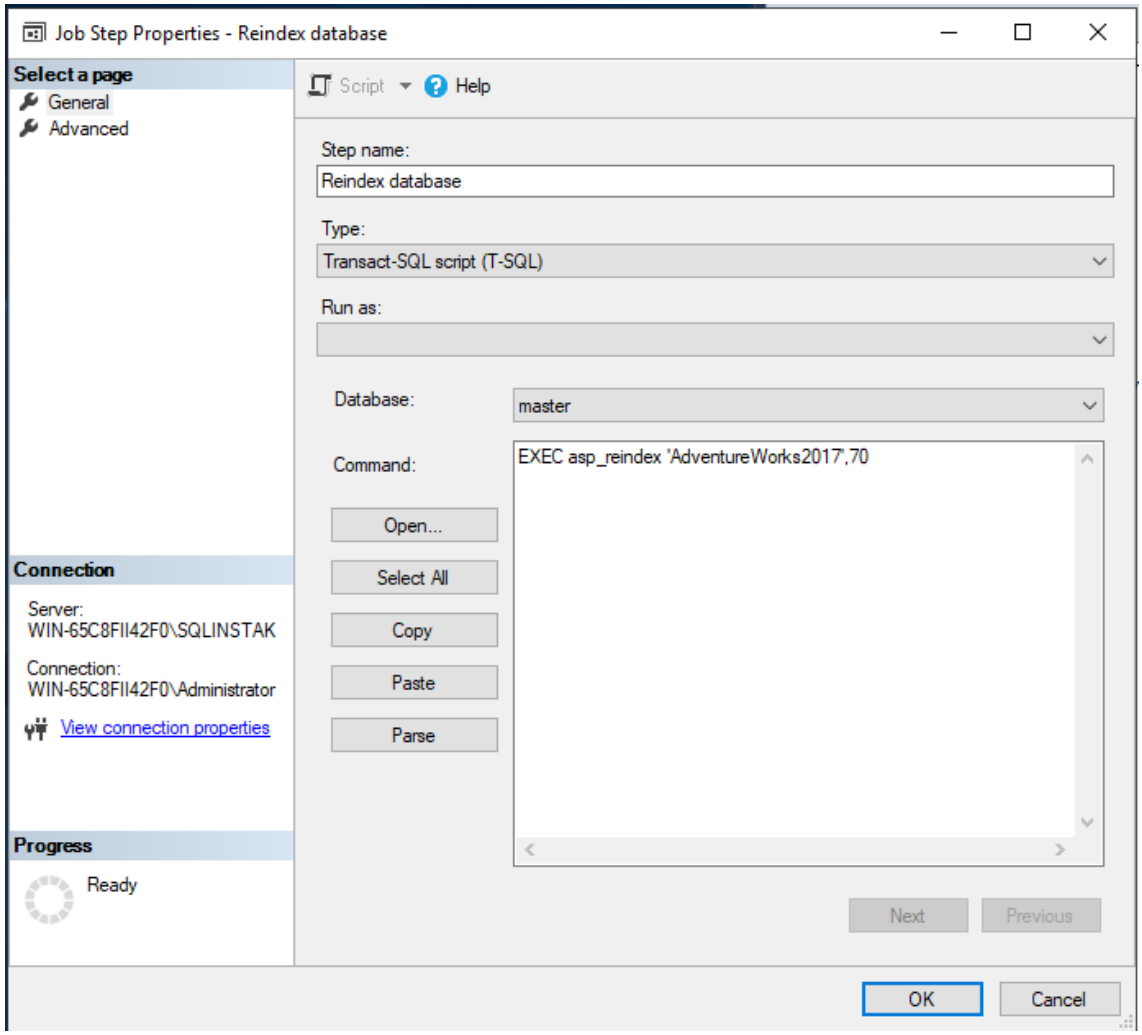
```
Query executed successfully.
WIN-65C8FII42F0\SQLINSTAK (... WIN-65C8FII42F0\Admini... AdventureWorks2017 00:00:00 0 rows
```

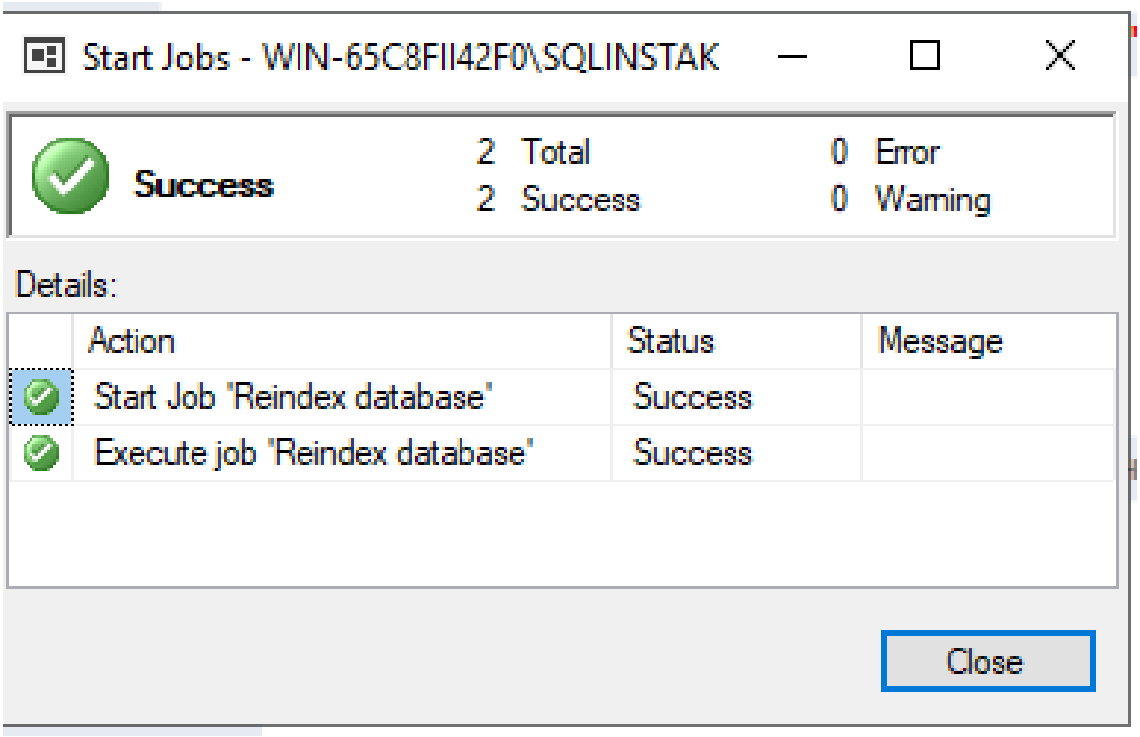

New Job
Select a page
General
Steps
Schedules
Alerts
Notifications
Targets
Script
Help
Name:
Reindex databases
Owner:
sa
Category:
Database Maintenance
Description:
Execute a procedure to reindex a databases
Enabled
Connection
Server:
WIN-65C8FII42F0\SQLINSTAK
Connection:
WIN-65C8FII42F0\Administrator
View connection properties
Progress
Ready
OK
Cancel

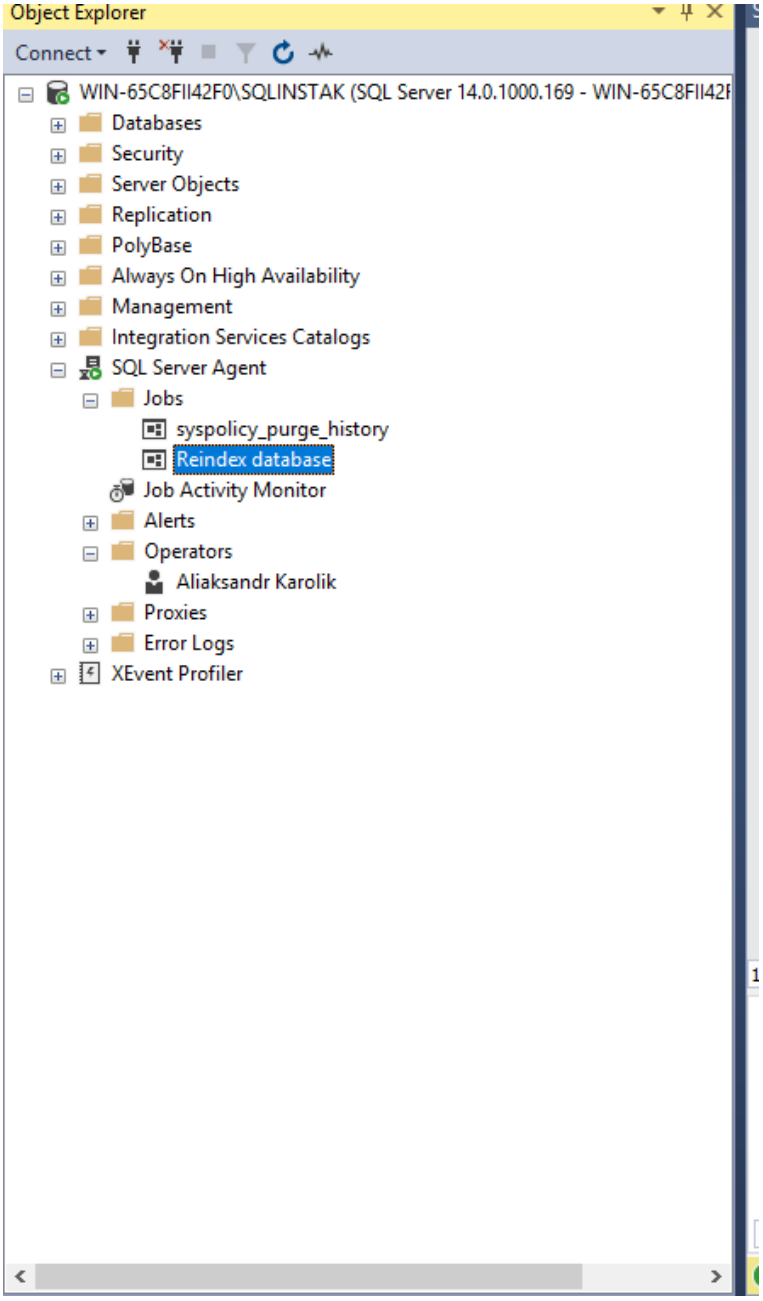

New Job Step
Select a page
General
Advanced
Script
Help
Step name:
Reindex database
Type:
Transact-SQL script (T-SQL)
Run as:
Database:
AdventureWorks2017
Command:
EXEC asp_reindex 'AdventureWorks2017',70
Open...
Select All
Copy
Paste
Parse
Connection
Server:
WIN-65C8FII42F0\SQLINSTAK
Connection:
WIN-65C8FII42F0\Administrator
View connection properties
Progress
Ready
Next
Previous
OK
Cancel


New Job Step
Select a page
General
Advanced
Script
Help
On success action:
Go to the next step
Retry attempts:
0
Retry interval (minutes):
0
On failure action:
Quit the job reporting failure
Transact-SQL script (T-SQL)
Output file:
C:\test\Dailymaintenance.txt
...
View
Append output to existing file
Log to table
View
Append output to existing entry in table
Include step output in history
Run as user
...
Connection
Server:
WIN-65C8FII42F0\SQLINSTAK
Connection:
WIN-65C8FII42F0\Administrator
View connection properties
Progress
Ready
OK
Cancel

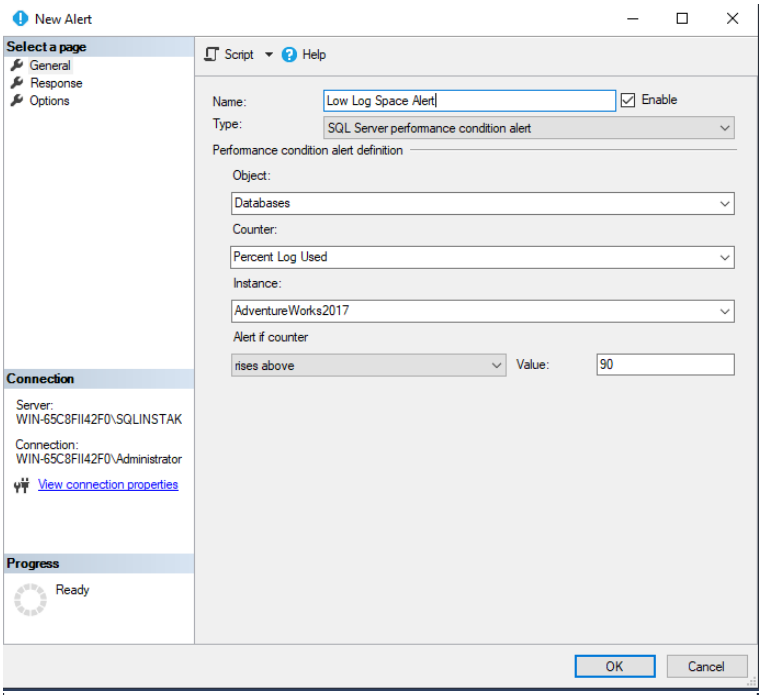

New Job Schedule
Name:
Daily at nighths
Jobs in Schedule
Schedule type:
Recurring
Enabled
One-time occurrence
Date:
12/12/2019
Time:
6:02:48 AM
Frequency
Occurs:
Daily
Recurs every:
1
day(s)
Daily frequency
Occurs once at:
12:01:00 AM
Occurs every:
1
hour(s)
Starting at:
12:00:00 AM
Ending at:
11:59:59 PM
Duration
Start date:
12/12/2019
End date:
12/12/2019
No end date:
Summary
Description:
Occurs every day at 12:01:00 AM. Schedule will be used starting on 12/12/2019.
OK
Cancel
Help

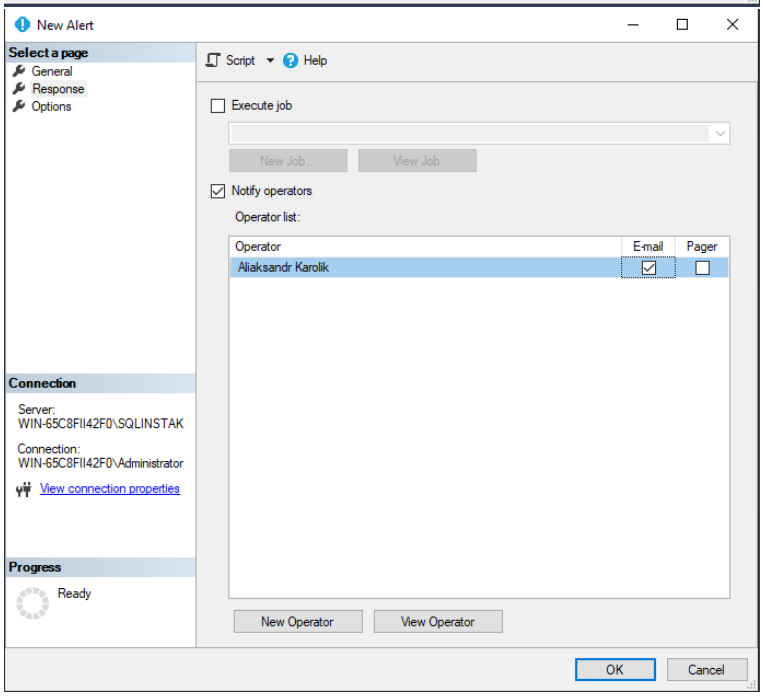

Job Step Properties - Reindex database
Select a page
General
Advanced
Script
Help
Step name:
Reindex database
Type:
Transact-SQL script (T-SQL)
Run as:
Database:
master
Command:
EXEC asp_reindex 'AdventureWorks2017',70
Open...
Select All
Copy
Paste
Parse
Connection
Server:
WIN-65C8FII42F0\SQLINSTAK
Connection:
WIN-65C8FII42F0\Administrator
View connection properties
Progress
Ready
Next
Previous
OK
Cancel

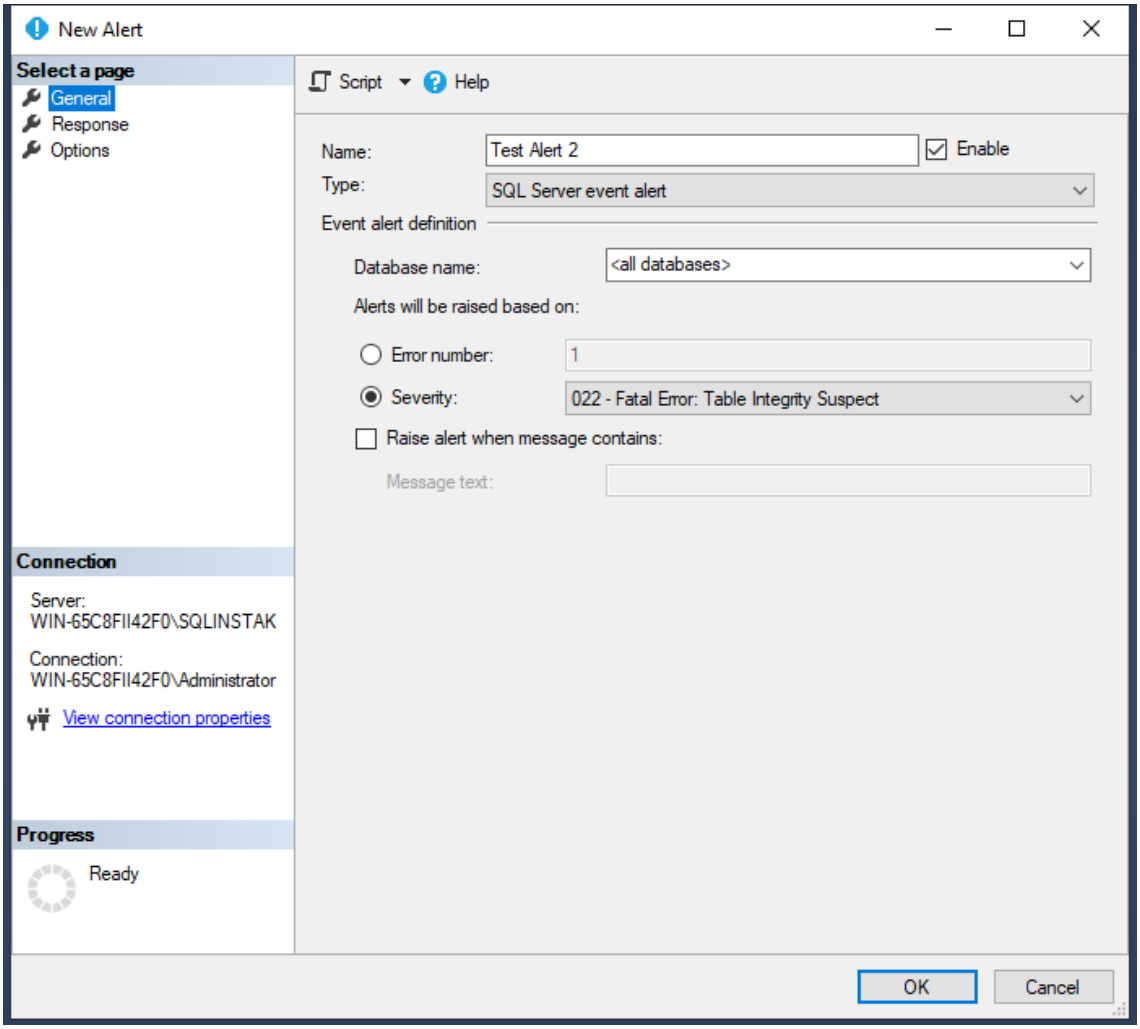

Start Jobs - WIN-65C8FII42F0\SQLINSTAK
Success
2 Total
2 Success
0 Error
0 Warning
Details:
Action
Status
Message
Start Job 'Reindex database'
Success
Execute job 'Reindex database'
Success
Close

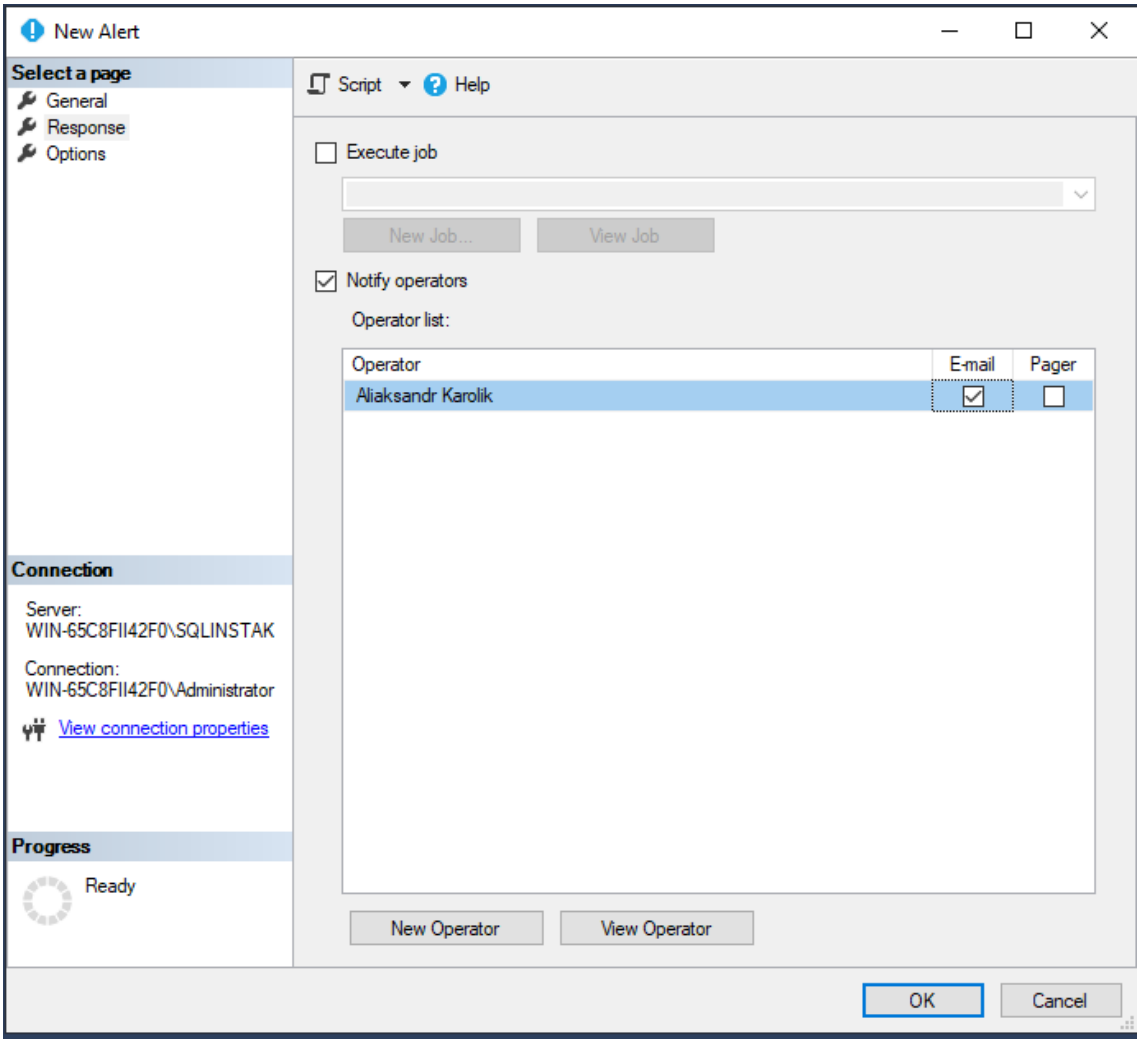

Object Explorer
Connect
WIN-65C8FII42F0\SQLINSTAK (SQL Server 14.0.1000.169 - WIN-65C8FII42F
Databases
Security
Server Objects
Replication
PolyBase
Always On High Availability
Management
Integration Services Catalogs
SQL Server Agent
Jobs
syspolicy_purge_history
Reindex database
Job Activity Monitor
Alerts
Operators
Aliaksandr Karolik
Proxies
Error Logs
XEvent Profiler

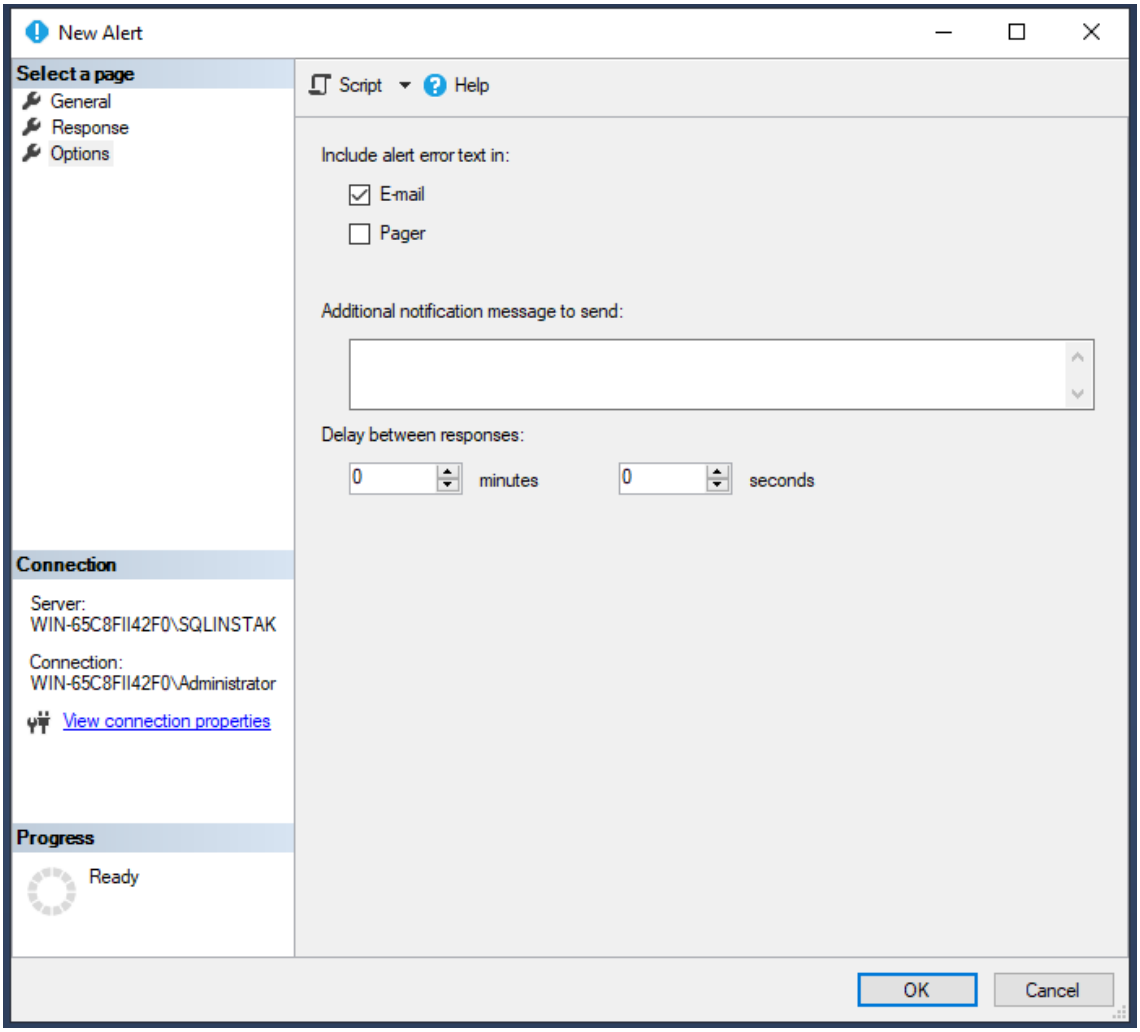
2 Praca w domu

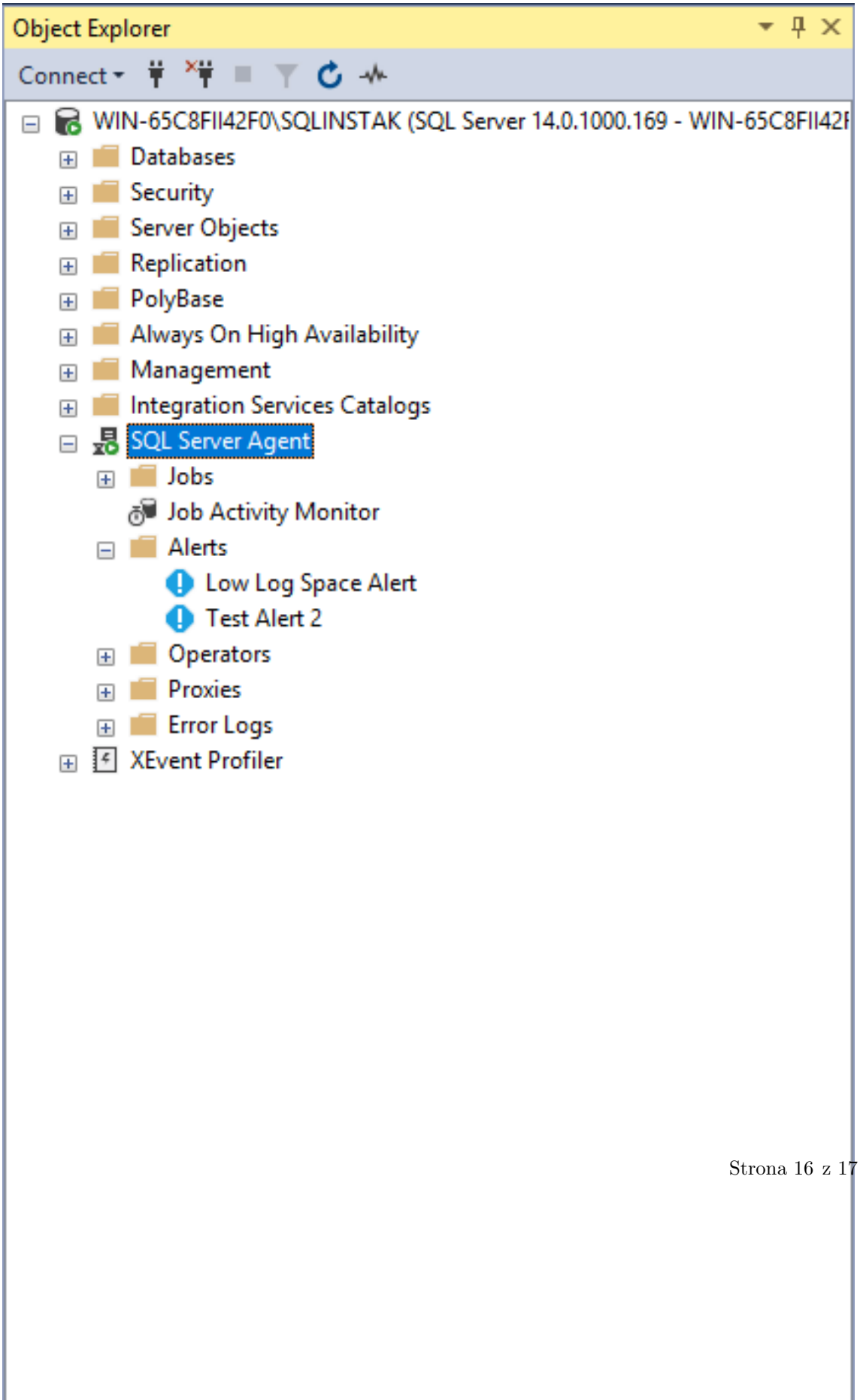





New Alert
Select a page
General
Response
Options
Script
Help
Name:
Test Alert 2
Enable
Type:
SQL Server event alert
Event alert definition
Database name:
<all databases>
Alerts will be raised based on:
Error number:
1
Severity:
022 - Fatal Error: Table Integrity Suspect
Raise alert when message contains:
Message text:
Connection
Server:
WIN-65C8FII42F0\SQLINSTAK
Connection:
WIN-65C8FII42F0\Administrator
View connection properties
Progress
Ready
OK
Cancel


New Alert
Select a page
General
Response
Options
Script
Help
Execute job
New Job...
View Job
Notify operators
Operator list:
Operator
E-mail
Pager
Aliaksandr Karolik
Connection
Server:
WIN-65C8FII42F0\SQLINSTAK
Connection:
WIN-65C8FII42F0\Administrator
View connection properties
Progress
Ready
New Operator
View Operator
OK
Cancel


New Alert
Select a page
General
Response
Options
Script
Help
Include alert error text in:
E-mail
Pager
Additional notification message to send:
Delay between responses:
0
minutes
0
seconds
Connection
Server:
WIN-65C8FII42F0\SQLINSTAK
Connection:
WIN-65C8FII42F0\Administrator
View connection properties
Progress
Ready
OK
Cancel


Object Explorer
Connect
WIN-65C8FII42F0\SQLINSTAK (SQL Server 14.0.1000.169 - WIN-65C8FII42F
Databases
Security
Server Objects
Replication
PolyBase
Always On High Availability
Management
Integration Services Catalogs
SQL Server Agent
Jobs
Job Activity Monitor
Alerts
Low Log Space Alert
Test Alert 2
Operators
Proxies
Error Logs
XEvent Profiler

3 Odpowiedzi na pytania

If a job fails, where can you look to diagnose the problem?

1. Job history
2. Logging files
3. Microsoft Windows event logs

What types of job steps can be executed?

1. T-SQL
2. ActiveX scripts
3. Operating system commands
4. Executable files

Where would you look to retrieve a list of jobs that have failed?
Odpowiedź: B

What are the three types of alerts that can be created?

1. Performance counters
2. SQL server errors
3. WMI queries

What are the two response actions that can be configured for an alert?

1. Send a notification
2. Execute a job in response to the alert condition

Your Orders database crashed last night, and you have determined that the crash was caused by a data file running out of space. What tool do you use to send a notification to an administrator as well as expand the data file before it runs out of space?

Odpowiedź: A