

ANKARA ÜNİVERSİTESİ
MÜHENDİSLİK FAKÜLTESİ
BİLGİSAYAR MÜHENDİSLİĞİ BÖLÜMÜ



BLM4522 Ağ Tabanlı Paralel Dağıtım Sistemleri Dersi Raporu

Alperen Ünlü - 21290497
Kadir Taşdemir – 21290341

25.04.2025

Github : github.com/GadirD

Bu rapor, BLM4522 Ağ Tabanlı Paralel Dağıtım Sistemleri dersi kapsamında, Microsoft SQL Server (MSSQL) kullanılarak verilen projelere yönelik geliştirdiğimiz çözümleri içermektedir. Dersin amacı doğrultusunda; veritabanı yönetimi, güvenliği, yedekleme, optimizasyon ve performans izleme gibi konular üzerinde uygulamalı çalışmalar gerçekleştirilmiştir.

2. Veritabanı Yedekleme ve Felaketten Kurtarma Planı

İnternette hazır bir veri tabanı alınmıştır.

```
USE proje2;
SELECT TOP 50 * FROM dbo.train;
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket
1	1	0	3	Braund, Mr. Owen Harris	male	22	1	0	A/5 21171
2	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Thayer)	female	38	1	0	PC 17599
3	3	1	3	Heikkinen, Miss. Laina	female	26	0	0	STON/O2. 3101282
4	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35	1	0	113803
5	5	0	3	Allen, Mr. William Henry	male	35	0	0	373450
6	6	0	3	Moran, Mr. James	male	NULL	0	0	330877
7	7	0	1	McCarthy, Mr. Timothy J	male	54	0	0	17463
8	8	0	3	Palsson, Master. Gosta Leonard	male	2	3	1	349909
9	9	1	3	Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)	female	27	0	2	347742
10	10	1	2	Nasser, Mrs. Nicholas (Adele Achem)	female	14	1	0	237736
11	11	1	3	Sandstrom, Miss. Marguerite Rut	female	4	1	1	PP 9549
12	12	1	1	Bonnell, Miss. Elizabeth	female	58	0	0	113783
13	13	0	3	Saunderscock, Mr. William Henry	male	20	0	0	A/5. 2151
14	14	0	3	Andersson, Mr. Anders Johan	male	39	1	5	347082
15	15	0	3	Vestrom, Miss. Hulda Amanda Adolfina	female	14	0	0	350406
16	16	1	2	Hewlett, Mrs. (Mary D Kingcome)	female	55	0	0	248706
17	17	0	3	Rice, Master. Eugene	male	2	4	1	382652
18	18	1	2	Williams, Mr. Charles Eugene	male	NULL	0	0	244373

Sorgu sonucu veri tabanının ilk 50 elemanı gösterilmiştir.

```
BACKUP DATABASE proje2
TO DISK = 'C:\Yedekler\TitanicTamYedek.bak'
WITH FORMAT, INIT, NAME = 'Titanic Veritabani Tam Yedekleme',
CHECKSUM;

RESTORE VERIFYONLY
FROM DISK = 'C:\Yedekler\TitanicTamYedek.bak'
WITH CHECKSUM;
```

```
WITH CHECKSUM;  
100 %  
Messages  
Processed 1440 pages for database 'proje2', file 'Proje5' on file 1.  
Processed 2 pages for database 'proje2', file 'Proje5_log' on file 1.  
BACKUP DATABASE successfully processed 1442 pages in 0.027 seconds (417.100 MB/sec).  
  
Completion time: 2025-04-23T18:42:42.6519053+03:00
```

```
100 %  
Messages  
The backup set on file 1 is valid.  
  
Completion time: 2025-04-23T18:42:48.6359548+03:00
```

```
-----  
= BACKUP DATABASE proje2  
TO DISK = 'C:\Yedekler\TitanicArtikYedek.bak'  
WITH DIFFERENTIAL, NAME = 'Titanic Artik Yedek',  
CHECKSUM;  
= RESTORE VERIFYONLY  
FROM DISK = 'C:\Yedekler\TitanicArtikYedek.bak'  
WITH CHECKSUM;  
-----
```

```
100 %  
Messages  
Processed 56 pages for database 'proje2', file 'Proje5' on file 1.  
Processed 2 pages for database 'proje2', file 'Proje5_log' on file 1.  
BACKUP DATABASE WITH DIFFERENTIAL successfully processed 58 pages in 0.010 seconds (44.921 MB/sec).  
  
Completion time: 2025-04-23T18:42:54.7099690+03:00
```

```
100 %  
Messages  
The backup set on file 1 is valid.  
  
Completion time: 2025-04-23T18:43:00.9358665+03:00
```

Veriler geri yüklenmiş ve yüklenirken verilerin bütünlüğü kontrol edilmiştir

```

ALTER DATABASE proje2 SET RECOVERY FULL;
GO

BACKUP LOG proje2
TO DISK = 'C:\Yedekler\TitanicLogYedek.trn'
WITH NAME = 'Titanic Log Yedek',
CHECKSUM;

RESTORE VERIFYONLY
FROM DISK = 'C:\Yedekler\TitanicLogYedek.trn'
WITH CHECKSUM;

```

100 %

Messages

Processed 18 pages for database 'proje2', file 'Proje5_log' on file 1.
 BACKUP LOG successfully processed 18 pages in 0.002 seconds (70.312 MB/sec).

Completion time: 2025-04-23T18:43:07.3869748+03:00

100 %

Messages

The backup set on file 1 is valid.

Completion time: 2025-04-23T18:43:14.0495997+03:00

Veri tabanının log kaydı alınmış, verilerin doğruluğu kontrol edilmiştir.

Ad	Değiştirme tarihi	Tür	Boyut
TitanicArtikYedek.bak	23.04.2025 18:42	BAK Dosyası	2.168 KB
TitanicLogYedek.trn	23.04.2025 18:43	TRN Dosyası	240 KB
TitanicTamYedek.bak	23.04.2025 18:42	BAK Dosyası	13.432 KB

```

USE master;
ALTER DATABASE proje2 SET SINGLE_USER WITH ROLLBACK IMMEDIATE;
DROP DATABASE proje2;

```

--

100 %

Messages

Commands completed successfully.

Completion time: 2025-04-23T18:43:21.0776484+03:00

Yedeklerin doğruluğunun kontrolü için veri tabanını siliyoruz.

```
--  
RESTORE DATABASE proje2  
FROM DISK = 'C:\Yedekler\TitanicTamYedek.bak'  
WITH NORECOVERY, REPLACE, CHECKSUM;  
  
--  
  
RESTORE DATABASE proje2  
FROM DISK = 'C:\Yedekler\TitanicArtikYedek.bak'  
WITH RECOVERY, CHECKSUM;
```

Messages

Processed 1440 pages for database 'proje2', file 'Proje5' on file 1.
Processed 2 pages for database 'proje2', file 'Proje5_log' on file 1.
RESTORE DATABASE successfully processed 1442 pages in 0.015 seconds (750.781 MB/sec).

Completion time: 2025-04-23T18:43:42.7706331+03:00

100 %

Messages

Processed 56 pages for database 'proje2', file 'Proje5' on file 1.
Processed 2 pages for database 'proje2', file 'Proje5_log' on file 1.
RESTORE DATABASE successfully processed 58 pages in 0.026 seconds (17.277 MB/sec).

Completion time: 2025-04-23T18:43:53.6264802+03:00

Tam yedek ve artık yedek başarıyla geri yüklendi.

```
USE proje2;  
SELECT TOP 50 * FROM dbo.train;
```

	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
1	Braund, Mr. Owen Harris	male	22	1	0	A/5 21171	725	NULL	S
2	Cumings, Mrs. John Bradley (Florence Briggs Thayer)	female	38	1	0	PC 17599	712833	C85	C
3	Heikkinen, Miss. Laina	female	26	0	0	STON/O2. 3101282	7925	NULL	S
4	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35	1	0	113803	531	C123	S
5	Allen, Mr. William Henry	male	35	0	0	373450	805	NULL	S
6	Moran, Mr. James	male	NULL	0	0	330877	84583	NULL	Q
7	McCarthy, Mr. Timothy J	male	54	0	0	17463	518625	E46	S
8	Palsson, Master. Gosta Leonard	male	2	3	1	349909	21075	NULL	S
9	Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)	female	27	0	2	347742	111333	NULL	S
10	Nasser, Mrs. Nicholas (Adele Achem)	female	14	1	0	237736	300708	NULL	C
11	Sandstrom, Miss. Marguerite Rut	female	4	1	1	PP 9549	167	G6	S
12	Bonnell, Miss. Elizabeth	female	58	0	0	113783	2655	C103	S
13	Saunderscock, Mr. William Henry	male	20	0	0	A/5. 2151	805	NULL	S
14	Andersson, Mr. Anders Johan	male	39	1	5	347082	31275	NULL	S
15	Vestrom, Miss. Hulda Amanda Adolfina	female	14	0	0	350406	78542	NULL	S
16	Hewlett, Mrs. (Mary D Kingcome)	female	55	0	0	248706	16	NULL	S
17	Rice, Master. Eugene	male	2	4	1	382652	29125	NULL	Q
18	Williams, Mr. Charles Eugene	male	NULL	0	0	244373	13	NULL	S

Veri tabanının geri yüklendiğini göstermek için ilk 50 eleman incelenmiştir.

```
-----  
DELETE FROM dbo.train WHERE Embarked = 'S';  
  
SELECT * FROM dbo.train WHERE Embarked = 'S';  
  
--
```

(644 rows affected)

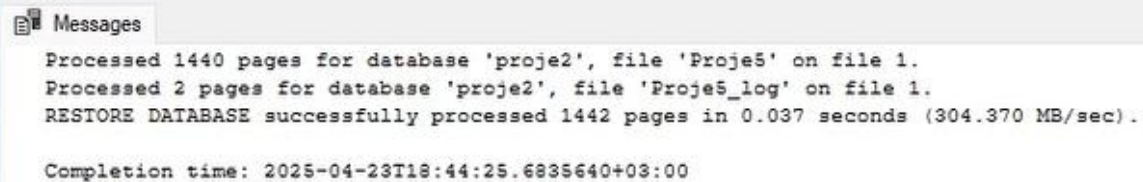
Completion time: 2025-04-23T18:44:15.5495573+03:00



PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
-------------	----------	--------	------	-----	-----	-------	-------	--------	------	-------	----------

İkinci bir senaryo olarak veri tabanındaki embarked sütununda S değeri olan satırlar silinmiştir.

```
--  
  
USE master;  
ALTER DATABASE proje2 SET SINGLE_USER WITH ROLLBACK IMMEDIATE;  
RESTORE DATABASE proje2  
FROM DISK = 'C:\Yedekler\TitanicTamYedek.bak'  
WITH REPLACE, CHECKSUM;  
  
USE proje2;  
SELECT * FROM dbo.train WHERE Embarked = 'S';  
-----
```



Processed 1440 pages for database 'proje2', file 'Proje5' on file 1.
Processed 2 pages for database 'proje2', file 'Proje5_log' on file 1.
RESTORE DATABASE successfully processed 1442 pages in 0.037 seconds (304.370 MB/sec).

Completion time: 2025-04-23T18:44:25.6835640+03:00

	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
1	Braund, Mr. Owen Harris	male	22	1	0	A/5 21171	725	NULL	S
2	Heikkinen, Miss. Laina	female	26	0	0	STON/O2. 3101282	7925	NULL	S
3	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35	1	0	113803	531	C123	S
4	Allen, Mr. William Henry	male	35	0	0	373450	805	NULL	S
5	McCarthy, Mr. Timothy J	male	54	0	0	17463	518625	E46	S
6	Palsson, Master. Gosta Leonard	male	2	3	1	349909	21075	NULL	S
7	Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg)	female	27	0	2	347742	111333	NULL	S
8	Sandstrom, Miss. Marguerite Rut	female	4	1	1	PP 9549	167	G6	S
9	Bonnell, Miss. Elizabeth	female	58	0	0	113783	2655	C103	S
10	Saunderscock, Mr. William Henry	male	20	0	0	A/5. 2151	805	NULL	S
11	Andersson, Mr. Anders Johan	male	39	1	5	347082	31275	NULL	S
12	Vestrom, Miss. Hulda Amanda Adolfina	female	14	0	0	350406	78542	NULL	S
13	Hewlett, Mrs. (Mary D Kingcome)	female	55	0	0	248706	16	NULL	S
14	Williams, Mr. Charles Eugene	male	NULL	0	0	244373	13	NULL	S
15	Vander Planke, Mrs. Julius (Emelia Maria Vandemo...	female	31	1	0	345763	18	NULL	S
16	Fynney, Mr. Joseph J	male	35	0	0	239865	26	NULL	S
17	Beesley, Mr. Lawrence	male	34	0	0	248698	13	D56	S
18	Sloper, Mr. William Thompson	male	28	0	0	113788	355	A6	S

Tam yedek geri yüklenerek veri tabanında yapılan hatalı işlem geri alınmış oldu.

3. Veritabanı Güvenliği ve Erişim Kontrolü

```
--DATABASE Creation

CREATE DATABASE secDB;
GO

USE secDB;
GO

CREATE TABLE Users (
    userID INT PRIMARY KEY IDENTITY(1,1),
    userName NVARCHAR(50),
    pass NVARCHAR(100),
    email NVARCHAR(100)
);

INSERT INTO Users (userName, pass, email)
VALUES ('admin', 'admin123', 'admin@example.com'),
('kullanici1', '12345', 'kullanici1@example.com');
```

Messages

(2 rows affected)

Completion time: 2025-04-23T18:12:19.4868453+03:00

100 %

Results		Messages		
	UserID	userName	pass	email
1	1	admin	admin123	admin@example.com
2	2	kullanici1	12345	kullanici1@example.com

2 satırdan oluşan bir veri tabanı oluşturuyoruz.

```
--Access Management

CREATE LOGIN testUser WITH PASSWORD = 'test123';
CREATE USER testUser FOR LOGIN testUser;

USE secDB;
GO

GRANT SELECT ON Users TO testUser;
DENY DELETE ON Users TO testUser;
```

Messages

Commands completed successfully.

Completion time: 2025-04-23T18:12:50.7527123+03:00

Security

- Logins
 - ##MS_PolicyEventProcessingLogin##
 - ##MS_PolicyTsqlExecutionLogin##
 - DESKTOP-KLMLQ2A\Kadir
 - NT AUTHORITY\SYSTEM
 - NT SERVICE\SQLSERVERAGENT
 - NT SERVICE\SQLTELEMETRY
 - NT SERVICE\SQLWriter
 - NT SERVICE\Winmgmt
 - NT Service\MSSQLSERVER
 - sa
 - testUser
- Server Roles

Okuma yetkisine sahip ama silme yetkisi bulunmayan bir kullanıcı oluşturuyoruz.


```
--testUser
EXECUTE AS USER = 'testUser';
USE secDB;
DELETE FROM Users
WHERE userName = 'admin';
REVERT;
--
```

100 %

Messages

Msg 229, Level 14, State 5, Line 39
The DELETE permission was denied on the object 'Users', database 'secDB', schema 'dbo'.

Completion time: 2025-04-23T18:13:04.9947844+03:00

Yeni oluşturduğumuz testUser ile veri tabanında silme işlemi yapmaya çalışıyoruz sonuç olarak da yetkisinin olmadığını görüyoruz.

```
--Data Encyrption

USE master;
GO

CREATE MASTER KEY ENCRYPTION BY PASSWORD = 'master123';
CREATE CERTIFICATE secCert
WITH SUBJECT = 'secDB Certification';

USE secDB;
GO

CREATE DATABASE ENCRYPTION KEY
WITH ALGORITHM = AES_256
ENCRYPTION BY SERVER CERTIFICATE secCert;

ALTER DATABASE secDB
SET ENCRYPTION ON;
```

Messages

Warning: The certificate used for encrypting the database encryption key has not been backed up. You should immediately back up the certificate and the private key associated with the certificate. If the certificate ev

Completion time: 2025-04-23T18:13:16.2957825+03:00

Veri şifreleme işlemi yapıldı.

```
--Show
SELECT
    db.name AS DatabaseName,
    db.is_encrypted AS IsEncrypted,
    dek.encryption_state AS EncryptionState,
    dek.percent_complete AS PercentComplete,
    dek.key_algorithm AS Algorithm,
    dek.key_length AS KeyLength
FROM sys.databases db
LEFT JOIN sys.dm_database_encryption_keys dek
    ON db.database_id = dek.database_id
WHERE db.name = 'secDB'
```

	DatabaseName	IsEncrypted	EncryptionState	PercentComplete	Algorithm	KeyLength
1	secDB	1	3	0	AES	256

Verilerin şifrelendiğinin kontrolünü yapıyoruz.

```
--SQL Injection
EXECUTE AS USER = 'testUser';

DECLARE @sql NVARCHAR(MAX);
SET @sql = 'SELECT * FROM Users WHERE userName = '' + 'admin' OR 1=1--' + ''';
EXEC(@sql);
REVERT;
```

	userID	userName	pass	email
1	1	admin	admin123	admin@example.com
2	2	kullanici1	12345	kullanici1@example.com

Bu örnekte, kullanıcı girdisi doğrudan SQL sorgusuna eklenerek çalıştırıldığından sistem SQL injection saldırılarına açıktır.

```
EXECUTE AS USER = 'testUser';
DECLARE @sql NVARCHAR(MAX);
DECLARE @KullaniciAdi NVARCHAR(50) = 'admin' OR 1=1--;

SET @sql = N'SELECT * FROM Users WHERE userName = @Adi';
EXEC sp_executesql @sql, N'@Adi NVARCHAR(50)', @Adi = @KullaniciAdi;
REVERT;
```

Results		Messages	
userID	userName	pass	email

Bu örnekte ise parametrik sorgu kullanılarak kullanıcı girdisi izole edilmiştir ve SQL injection saldırılarına karşı güvenlik sağlanmıştır.

```
--Creating an AUDIT
use master;
CREATE SERVER AUDIT loginLogs
TO FILE (FILEPATH = 'C:\AuditLogs\')
WITH (ON_FAILURE = CONTINUE);
ALTER SERVER AUDIT loginLogs WITH (STATE = ON);

USE secDB;
GO

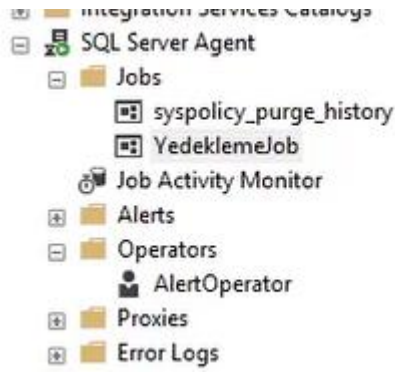
CREATE DATABASE AUDIT SPECIFICATION loginLogsSpec
FOR SERVER AUDIT loginLogs
ADD (SELECT ON OBJECT::Users BY testUser)
WITH (STATE = ON);
```

Messages	
Commands completed successfully.	
Completion time: 2025-04-23T18:14:10.3358336+03:00	

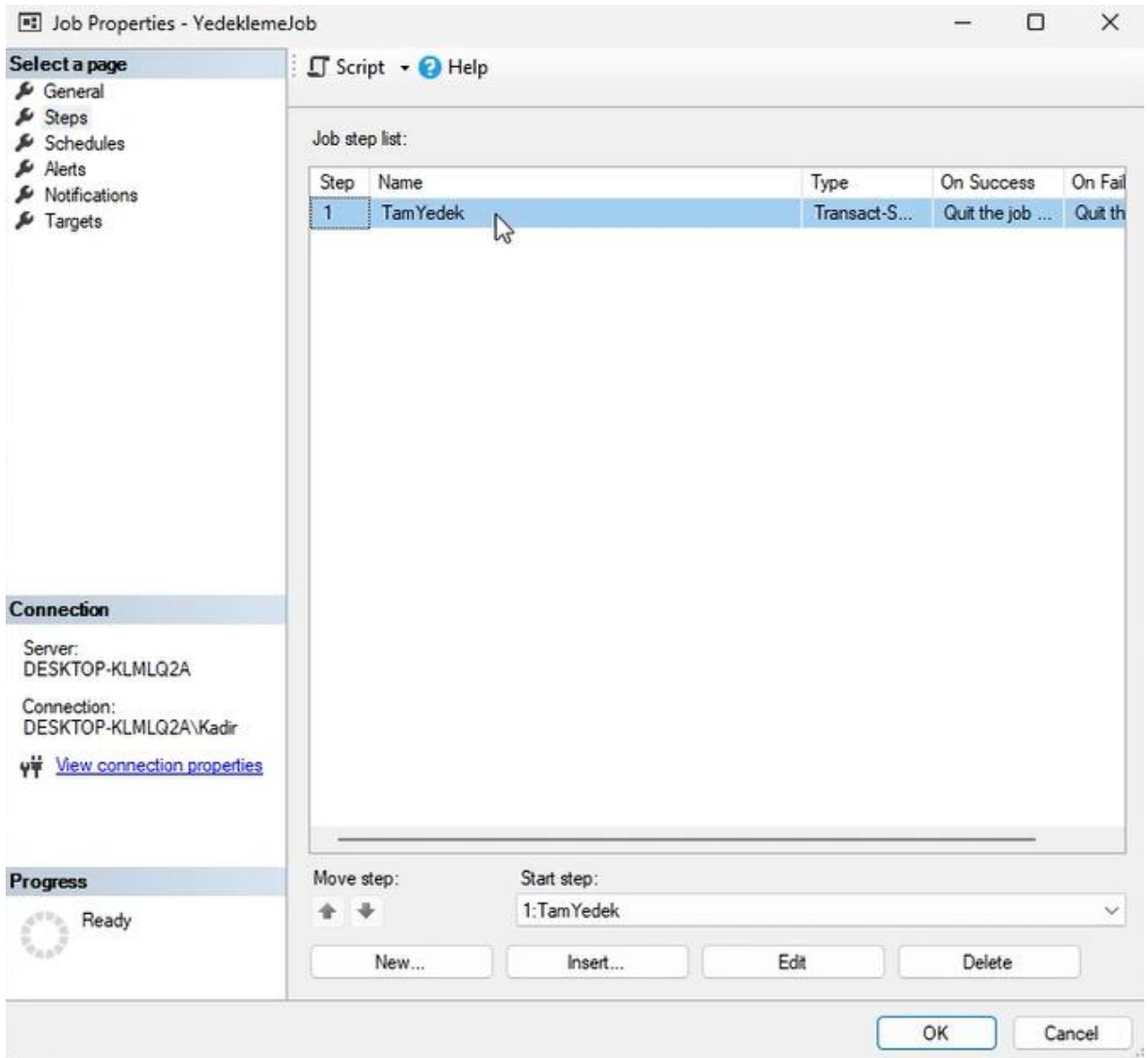
Ad	Değiştirme tarihi	Tür	Boyut
loginLogs_231B0AC3-45C7-40A6-926B-5B404C2D6BD6_0_13389894...	23.04.2025 18:14	SQLAUDIT Dosyası	0 KB

Kullanıcı aktiviteleri, SQL Server Audit özelliği kullanılarak izlenip kaydedildi.

7. Veritabanı Yedekleme ve Otomasyon Çalışması



SQL Server Agent altında "YedeklemeJob" adlı bir iş oluşturularak yedekleme süreci tanımlandı.



"YedeklemeJob" işi içerisinde "TamYedek" adında bir adım oluşturularak işlem detaylandırıldı.

Job Step Properties - TamYedek

Select a page

- General
- Advanced

Script Help

Step name: TamYedek

Type: Transact-SQL script (T-SQL)

Run as:

Database: Proje7

Command:

```
BACKUP DATABASE Proje7  
TO DISK = 'C:\Yedekler\Proje7_TamYedek.bak'  
WITH FORMAT, INIT, NAME = 'Tam Veritabanı Yedegi'
```

Open... Select All Copy Paste Parse

Connection

Server: DESKTOP-KLMLQ2A

Connection: DESKTOP-KLMLQ2A\Kadir

[View connection properties](#)

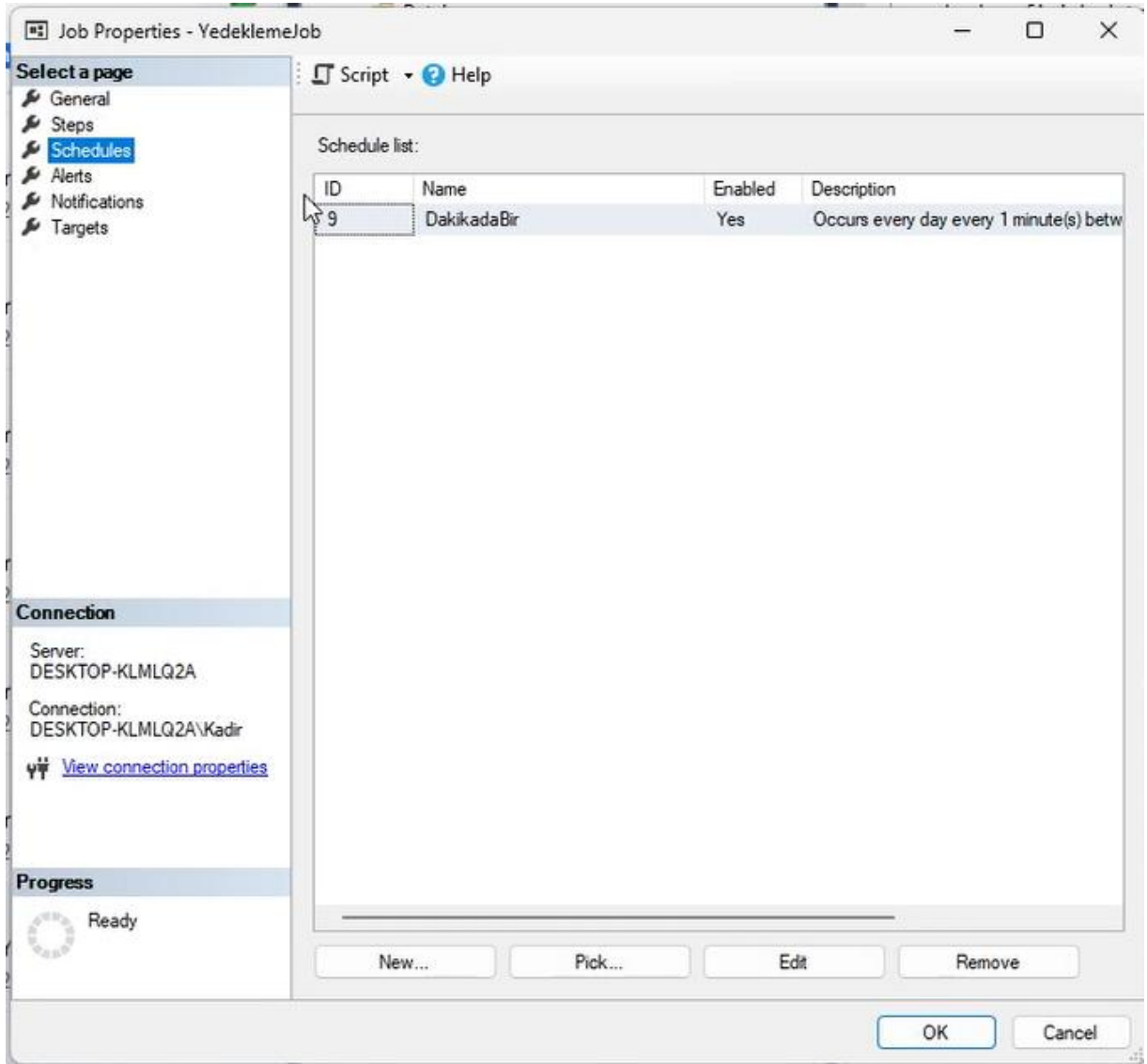
Progress

Ready

Previous Next

OK Cancel

"TamYedek" adımımda Proje7 veritabanının belirli bir dizine yedeklenmesi için T-SQL komutu tanımlandı.



"DakikadaBir" adlı zamanlama tanımlanarak yedekleme işinin her dakika çalışması sağlandı.

Job Schedule Properties - DakikadaBir

Name:

Schedule type: ☒ Enabled

One-time occurrence

Date: Time:

Frequency

Occurs:

Recurs every: day(s)

Daily frequency

☐ Occurs once at:

☒ Occurs every: minute(s) Starting at: Ending at:

Duration

Start date: End date: ☒ ☐ No end date:

Summary

Description:

Zamanlama detayları girilerek işin her gün 1 dakikada bir kez çalışması ayarlandı.

Proje7.sql - localh...KLMLQ2A\Kadir (65))

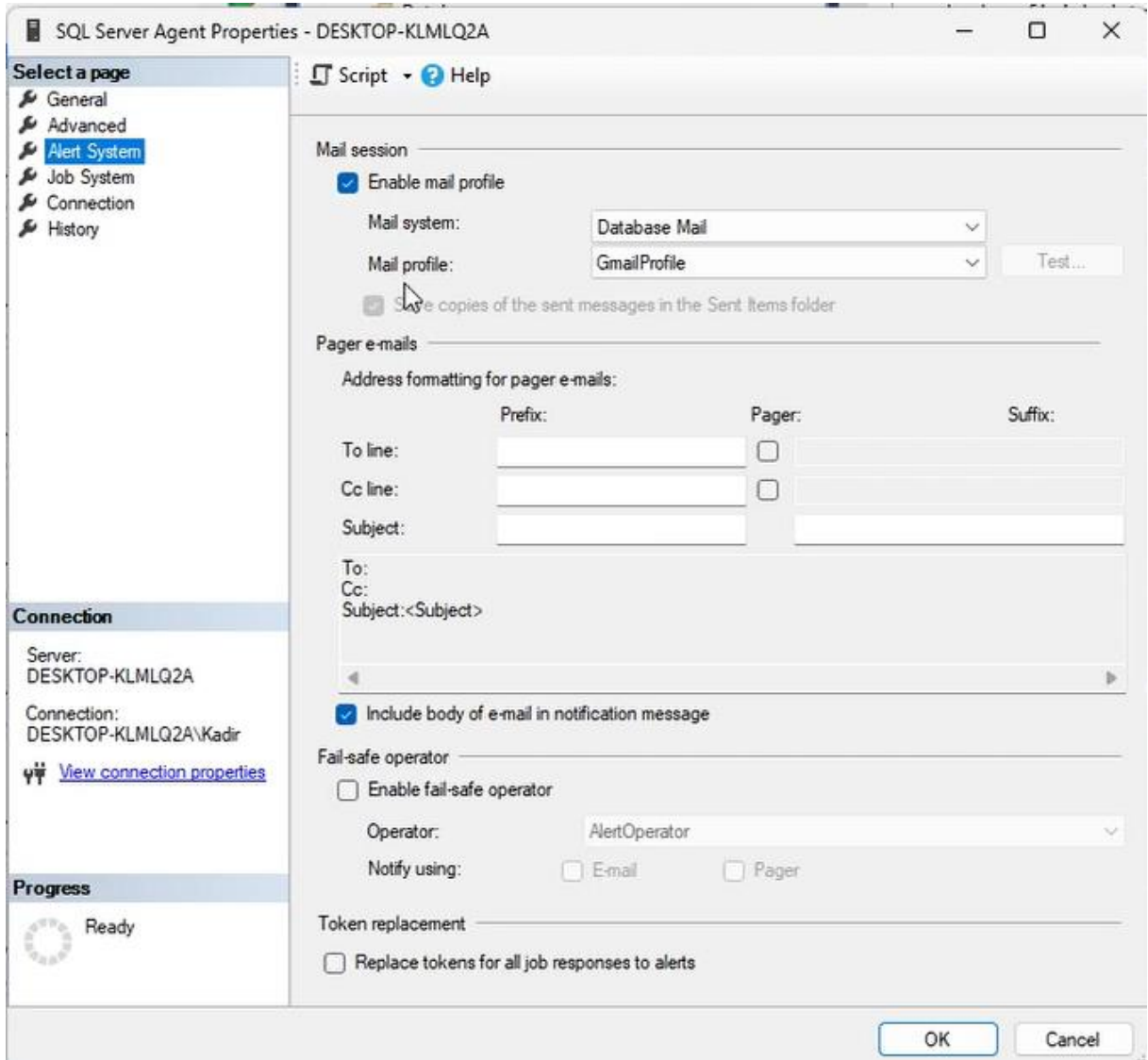
```
SELECT
    database_name,
    backup_start_date,
    backup_finish_date,
    backup_size/1024/1024 AS backup_size_MB,
    physical_device_name
FROM msdb.dbo.backupset bs
JOIN msdb.dbo.backupmediafamily bmf ON bs.media_set_id = bmf.media_set_id
WHERE backup_start_date > DATEADD(day, -7, GETDATE())
ORDER BY backup_start_date DESC;
```

100 %

Results Messages

	database_name	backup_start_date	backup_finish_date	backup_size_MB	physical_device_name
1	Proje7	2025-04-23 19:21:00.000	2025-04-23 19:21:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
2	Proje7	2025-04-23 19:20:01.000	2025-04-23 19:20:01.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
3	Proje7	2025-04-23 19:19:00.000	2025-04-23 19:19:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
4	Proje7	2025-04-23 19:18:01.000	2025-04-23 19:18:01.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
5	Proje7	2025-04-23 19:17:00.000	2025-04-23 19:17:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
6	Proje7	2025-04-23 19:16:00.000	2025-04-23 19:16:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
7	Proje7	2025-04-23 19:15:47.000	2025-04-23 19:15:47.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
8	Proje7	2025-04-23 19:15:23.000	2025-04-23 19:15:23.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
9	Proje7	2025-04-23 19:15:01.000	2025-04-23 19:15:01.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
10	Proje7	2025-04-23 19:14:00.000	2025-04-23 19:14:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
11	Proje7	2025-04-23 19:13:28.000	2025-04-23 19:13:28.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
12	Proje7	2025-04-23 19:13:00.000	2025-04-23 19:13:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
13	Proje7	2025-04-23 19:12:01.000	2025-04-23 19:12:01.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
14	Proje7	2025-04-23 19:11:01.000	2025-04-23 19:11:01.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
15	Proje7	2025-04-23 19:10:00.000	2025-04-23 19:10:01.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
16	Proje7	2025-04-23 19:09:00.000	2025-04-23 19:09:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
17	Proje7	2025-04-23 19:08:00.000	2025-04-23 19:08:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak
18	Proje7	2025-04-23 19:07:00.000	2025-04-23 19:07:00.000	3.33593750000	C:\Yedekler\Proje7_TamYedek.bak

Son 7 güne ait veri tabanı yedeklemeleri sorgulanarak başarılı şekilde alınan yedekler raporlandı.



SQL Server Agent için e-posta bildirimi amacıyla Database Mail sistemi "GmailProfile" profiliyle etkinleştirilmiştir.

AlertOperator Properties

Select a page

- General
- Notifications
- History

Script Help

Name: AlertOperator ☒ Enabled

Notification options

E-mail name: kdr.tasdemir2002@gmail.com

Pager e-mail name:

Pager on duty schedule

<input type="checkbox"/> Monday		
<input type="checkbox"/> Tuesday		
<input type="checkbox"/> Wednesday		
<input type="checkbox"/> Thursday	Workday start time	Workday end time
<input type="checkbox"/> Friday	09:00:00	18:00:00
<input type="checkbox"/> Saturday	09:00:00	18:00:00
<input type="checkbox"/> Sunday	09:00:00	18:00:00


Connection

Server: DESKTOP-KLMLQ2A

Connection: DESKTOP-KLMLQ2A\Kadir

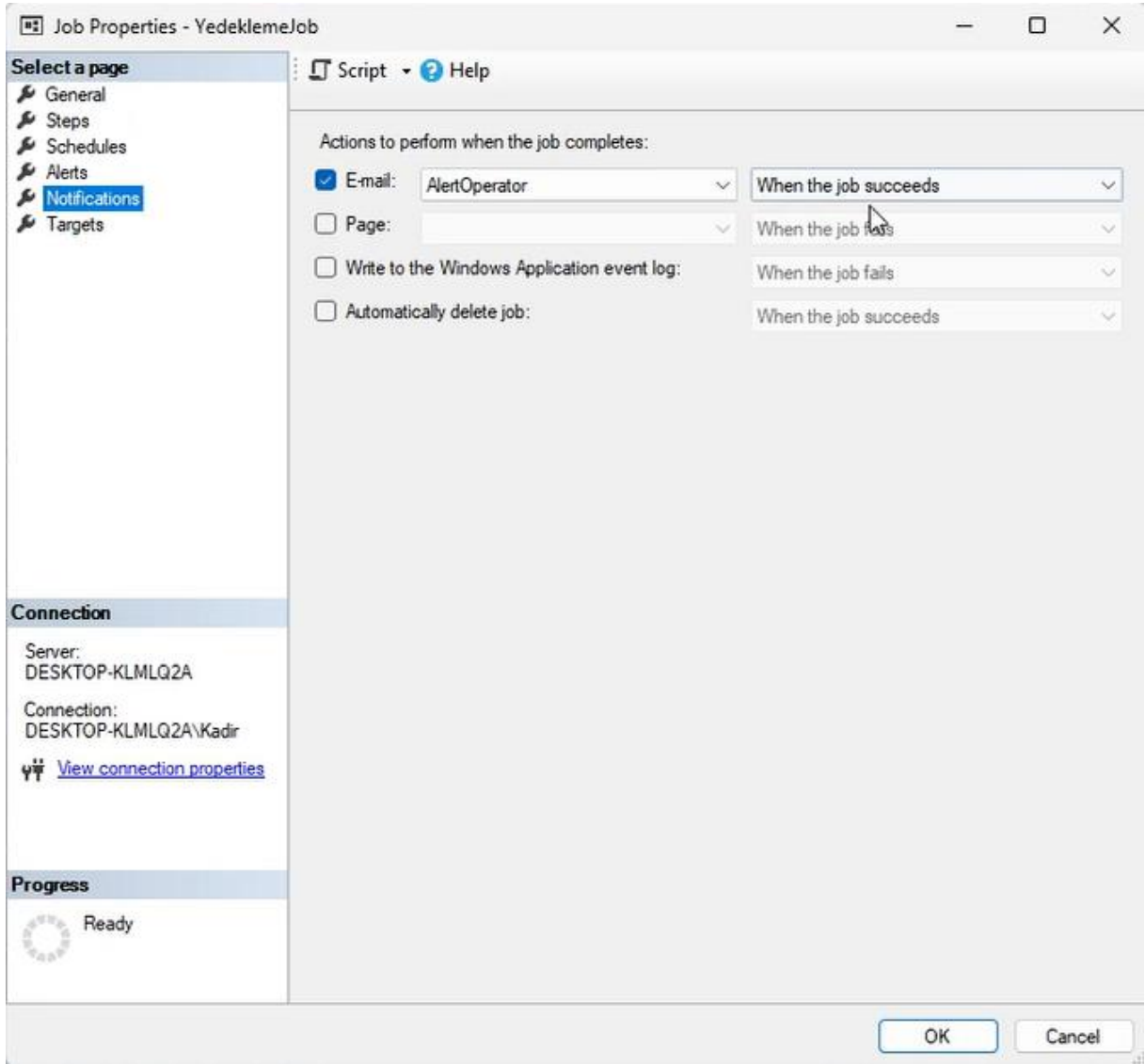
[View connection properties](#)

Progress














 Ready

OK Cancel

"AlertOperator" adlı operatör tanımlanarak bildirimlerin gönderileceği e-posta adresi belirlenmiştir.



"YedeklemeJob" adlı iş başarıyla tamamlandığında "AlertOperator"a e-posta gönderilecek şekilde yapılandırılmıştır.

<input type="checkbox"/>	 ben	19:22
[The job succeeded.] SQL Server Job System: 'Yede...		
JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:... ☆		
<input type="checkbox"/>	 ben	19:21
[The job succeeded.] SQL Server Job System: 'Yede...		
JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:... ☆		
<input type="checkbox"/>	 ben	19:20
[The job succeeded.] SQL Server Job System: 'Yede...		
JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:... ☆		
<input type="checkbox"/>	 ben	19:19
[The job succeeded.] SQL Server Job System: 'Yede...		
JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:... ☆		
<input type="checkbox"/>	 ben	19:18
[The job succeeded.] SQL Server Job System: 'Yede...		
JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:... ☆		
<input type="checkbox"/>	 ben	19:17
[The job succeeded.] SQL Server Job System: 'Yede...		
JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:... ☆		
	<input type="checkbox"/>  ben	   
[The job succeeded.] SQL Server Job System: 'Yede...		
JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:... ☆		
<input type="checkbox"/>	 ben	19:15
[The job succeeded.] SQL Server Job System: 'Yedekle...		
JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:... ☆		

Yedekleme işinin her çalıştırılmasında gönderilen başarı bildirimi e-postaları gelen kutusunda görülmektedir.

[The job succeeded.] SQL Server
Job System: 'YedeklemeJob'
completed on \\DESKTOP-
KLMLQ2A. 📄 Gelen Kutusu x

SQL Server Agent <k... 19:22 (0 dakika önce) ☆ 😊 ↩️ ⋮

Alici: ben ▼

JOB RUN: 'YedeklemeJob' was run on 23.04.2025 at 19:22:00

DURATION: 0 hours, 0 minutes, 0 seconds

STATUS: Succeeded

MESSAGES: The job succeeded. The Job was invoked by Schedule
9 (DakikadaBir). The last step to run was step 1 (TamYedek).

Yedekleme işi başarıyla tamamlandığında gönderilen e-posta detayında işin çalışma zamanı, süresi, durumu ve kullanılan adımlar yer almaktadır.