

# Import Data

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- Comma separated values (CSV) is a text file format that uses commas to separate values.
- A CSV file stores tabular data (numbers and text) in plain text, where each line of the file typically represents one data record.
- Each record consists of the same number of fields, and these are separated by commas in the CSV file.
- Frequently used delimiters:
  - Comma
  - Tab
  - Space
  - Semicolon
- CSV is a common data exchange format that is widely supported by consumer, business, and scientific applications.

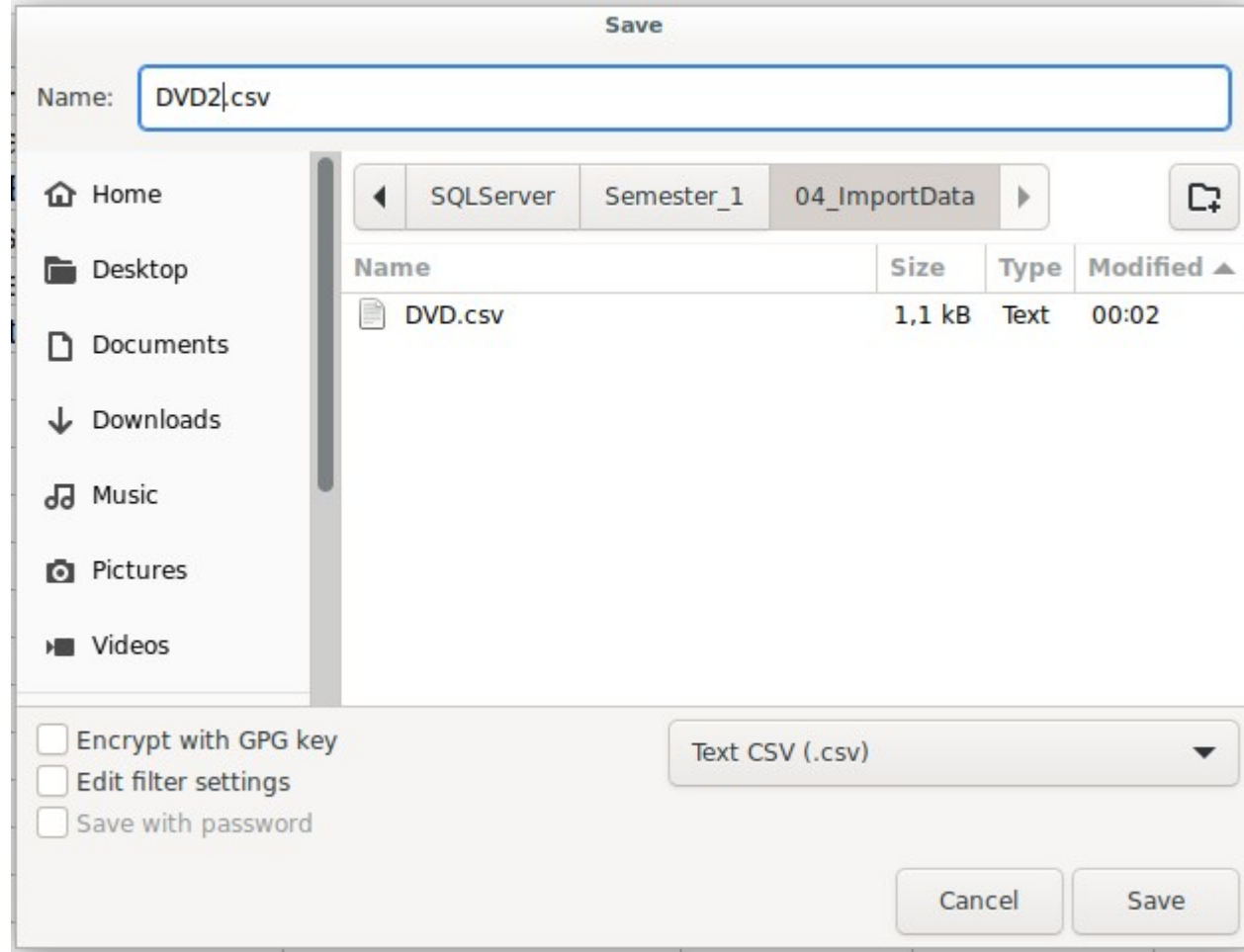
- Daten werden größtenteils in einem CSV-File zur Verfügung gestellt.
- Datengenerator: <https://www.mockaroo.com/>

DVD.csv - LibreOffice Calc

File Edit View Insert Format Styles Sheet Data Tools Window Help

Liberation Sans 10 pt B I U A % 7.4 00 00

	A	B	C	D	E	F	G	H	I	J	K
1	DVIDID	ORIGINALTITEL	UNTERTITEL	BESCHREIBUNG	REGIE	DAUERMIN	KINOSTART	GENRE	FSK	LAND	BEWERTUNG
2		Casablanca		Er schaut ihr wieder in	Michael Curtiz	102	1952-08-29	Drama	6	USA	4.8
3		James Bond 007	Octopussy	Im 13. Bond-Abenteu	John Glen	130	1983-08-05	Action	12	England	4.2
4		Der Pate		Francis Ford Coppola	Francis Ford Coppola	176	1972-08-24	Drama	16	USA	4.1
5		Taxi Driver		Die Wiederaufführung	Martin Scorsese	114	1976-10-07	Drama	16	USA	3.2
6		Stirb langsam		Gangster besetzen eir	John McTiernan	132	1988-11-10	Action	16	USA	2.9



```
Save
Name: DVD2.csv

DVD2.csv (/home/thomas/Desktop/SQLServer/Semester_1/04_ImportData) - Notepad++
File Edit Search View Encoding Language Settings Run Window ?
DVD2.csv x
1 DVDID; ORIGINALTITEL; UNTERTITEL; BESCHREIBUNG; REGIE; DAUERMIN; KINOSTART; GENRE; FSK; LAND; BEWERTUNG
2 ;Casablanca;;Er schaut ihr wieder in die Augen - im Großformat. Ein gnädiges Schicksal sorgte dafür, dass Ingrid Bergman im romantischsten aller Weltkriegsdramen von Humphrey Bogart angeschmachtet wird.;Michael Curtiz;102;1952-08-29;Drama;6;USA;4.8
3 ;James Bond 007;Octopussy;Im 13. Bond-Abenteuer zeigt Roger Moore einem übergeschnappten sowjetischen General, wo der Hammer hängt.;John Glen;130;1983-08-05;Action;12;England;4.2
```

Tables

- DVD
- External
- Views
- Indexes
- Procedures

General X

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Create


- View Table
- Filter
- View Diagram
- View Data
- Compare/Migrate
- Export Data
- Import Data**
- Tools
- Generate SQL
- Read data in SQL editor
- Copy
- Paste
- Save As Advanced Info

### Data Transfer

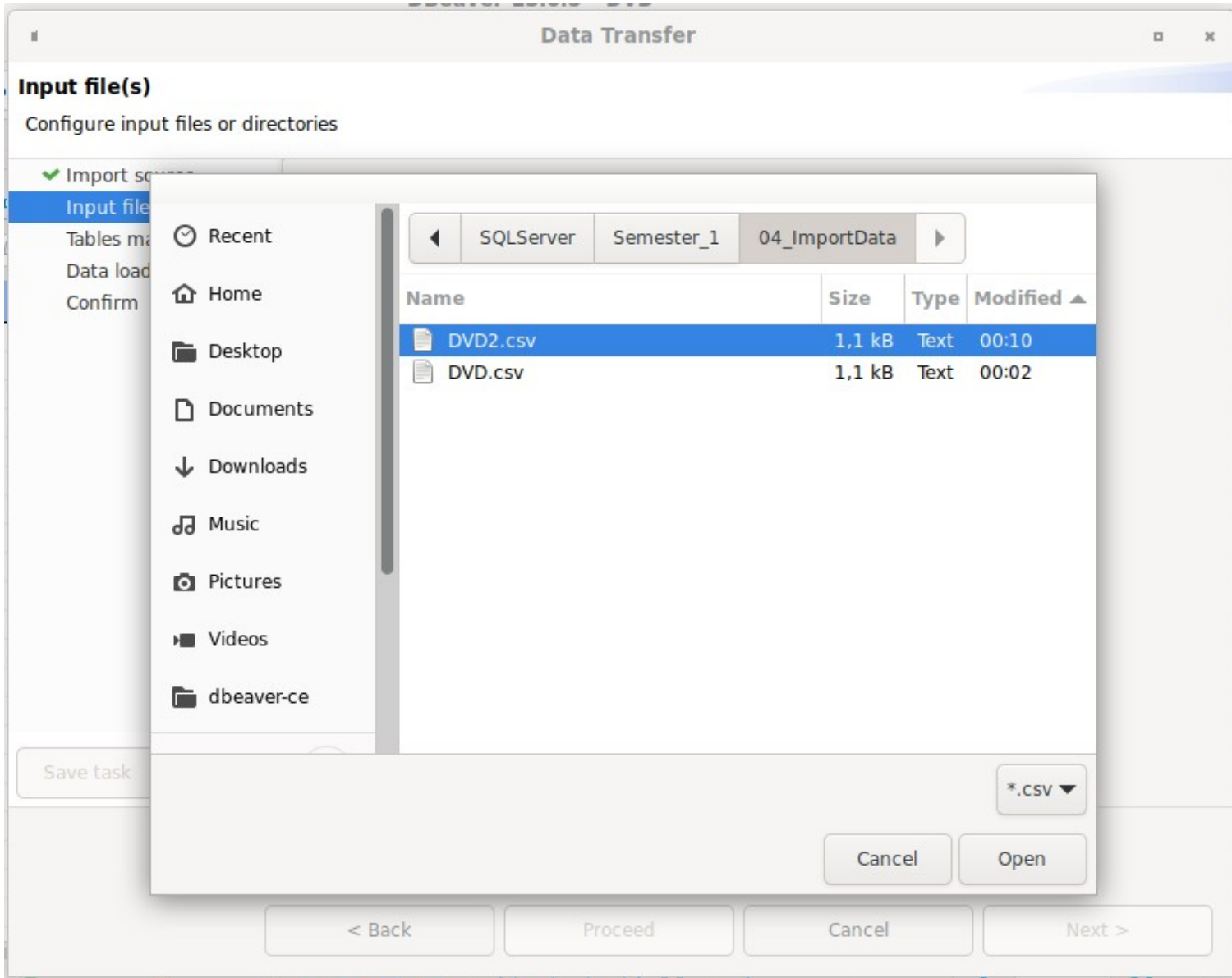
#### Transfer targets

Configure data transfer source type and format

<input checked="" type="checkbox"/> Import source	CSV	Import from CSV file(s)	Exported
Input file(s)	Table	Database table(s)	
Tables mapping			MedienBibliothek.dbo.DVD
Data load settings			
Confirm			

Save task 

< Back Proceed Cancel **Next >**



## Input file(s)

Configure input files or directories

✔ Import source



✔ Input file(s)

Tables mapping

Data load settings

Confirm

Input files:

Source	Target
 DVD2.csv	 MedienBibliothek.dbo.DVD [Existing]

Importer settings:

Name	Value
▼ Properties	
Extension	csv,tsv,txt
Encoding	utf-8
<b>Column delimiter</b>	<b>;</b>
Header position	top
Quote char	"
Escape char	\
NULL value mark	
Set empty strings to NU [ ]	
Date/time format	yyyy-MM-dd[ HH:mm:ss[.SSS]]
Trim whitespaces	[ ]
Timezone ID	
▼ Sampling	
Sample rows count	100
Minimum column length	50
Count length in bytes	[ ]

Save task



&lt; Back

Proceed

Cancel

Next &gt;

Encoding

Delimiter

Header

Quote char

Date/time format

Trim whitespaces



## Tables mapping

Map tables and columns transfer

✔ Import source

✔ Input file(s)

✔ Tables mapping

Data load settings

Confirm

Target container: MedienBibliothek.dbo [master]

Choose ...

Source	Target	Mapping	Transform
▼ DVD2.csv	DVD	existing	
123 DVDID	[skip]	skip	
ABC ORIGINALTITEL	ORIGINALTITEL	existing	
ABC UNTERTITEL	UNTERTITEL	existing	
ABC BESCHREIBUNG	BESCHREIBUNG	existing	
ABC REGIE	REGIE	existing	
123 DAUERMIN	DAUERMIN	existing	
🕒 KINOSTART	KINOSTART	existing	
ABC GENRE	GENRE	existing	
123 FSK	FSK	existing	
ABC LAND	LAND	existing	
123 BEWERTUNG	BEWERTUNG	existing	

Browse ...

Configure ...

Preview data

\* Auto assign

Save task



\* DEL - skip column(s) SPACE - map existing(s) INSERT - edit name

&lt; Back

Proceed

Cancel

Next &gt;

**Data load settings**

Configuration of table data load

- ✓ Import source
- ✓ Input file(s)
- ✓ Tables mapping
- ✓ Data load settings

Confirm

Save task



## Data load

- Transfer auto-generated columns
- Truncate target table(s) before load
- Disable referential integrity checks during the transfer

Replace method: &lt;None&gt;

[Replace/Ignore method documentation](#)

## Performance

- Open new connection(s)
- Use transactions

Do Commit after row insert: 10000

- Use multi-row value insert 500
- Skip bind values during insert
- Disable batches
- Ignore duplicate rows errors
- Use bulk load

## General

- Open table editor on finish
- Show finish message

&lt; Back

Proceed

Cancel

Next &gt;

## Data Transfer

### Confirm

Check results

- ✓ Import source
- ✓ Input file(s)
- ✓ Tables mapping
- ✓ Data load settings
- ✓ Confirm

#### Objects

Source Container	Source	Target Container	Target
/home/thomas/Deskt	DVD2.csv	master	MedienBibliothek.dbo

#### Source settings

##### CSV settings:

Extension: csv,tsv,txt  
Encoding: utf-8  
Column delimiter: ;  
Header position: top  
Quote char: "  
Escape char: \  
Date/time format: yyyy-MM-dd[ HH:mm:ss[.SS]  
Trim whitespaces: false  
Sample rows count: 100  
Minimum column length: 50

#### Target settings

##### Database settings:

Open new connection(s): Yes  
Use transactions: Yes  
Do Commit after row insert: 10000  
Use multi-row Insert: No  
Multi-row insert batch size: 500  
Skip bind values: No  
Disable batches: No  
Ignore duplicate rows: No  
Method for duplicate key case:  
Transfer auto-generated columns:  
Disable referential integrity: No  
Use bulk load: No  
Truncate before load: No

Save task



< Back

Proceed

Cancel

Next >

Database Project

Enter a part of object name

- griesmayer - localhost:1521
- master - localhost:1433
  - Databases
    - master
    - kunden
  - MedienBibliothek
    - Schemas
      - dbo
        - Tables
          - DVD
          - External Tables
          - Views
          - Indexes

\*<master> Script-5 DVD

Properties Data ER Diagram

master Databases MedienBibliothek Schemas dbo Tables DVD

DVD Enter a SQL expression to filter results (use Ctrl+Space)

Grid	123 DVDID	ABC ORIGINALTITEL	ABC UNTERTITEL	ABC BESCHREIBUNG	ABC REGIE
1	0	Casablanca		Er schaut ihr wieder in die Augen - im Großfor	Michael C
2	1	James Bond 007	Octopussy	Im 13. Bond-Abenteuer zeigt Roger Moore ein	John Glen
3	2	Der Pate		Francis Ford Coppolas legendäres Mafiaepos er	Francis Fo
4	3	Taxi Driver		Die Wiederaufführung dieses Meisterwerks vor	Martin Sc
5	4	Stirb langsam		Gangster besetzen ein Hochhaus aber sie hab	John McTi