



# Inventario de dispositivos de Networking.

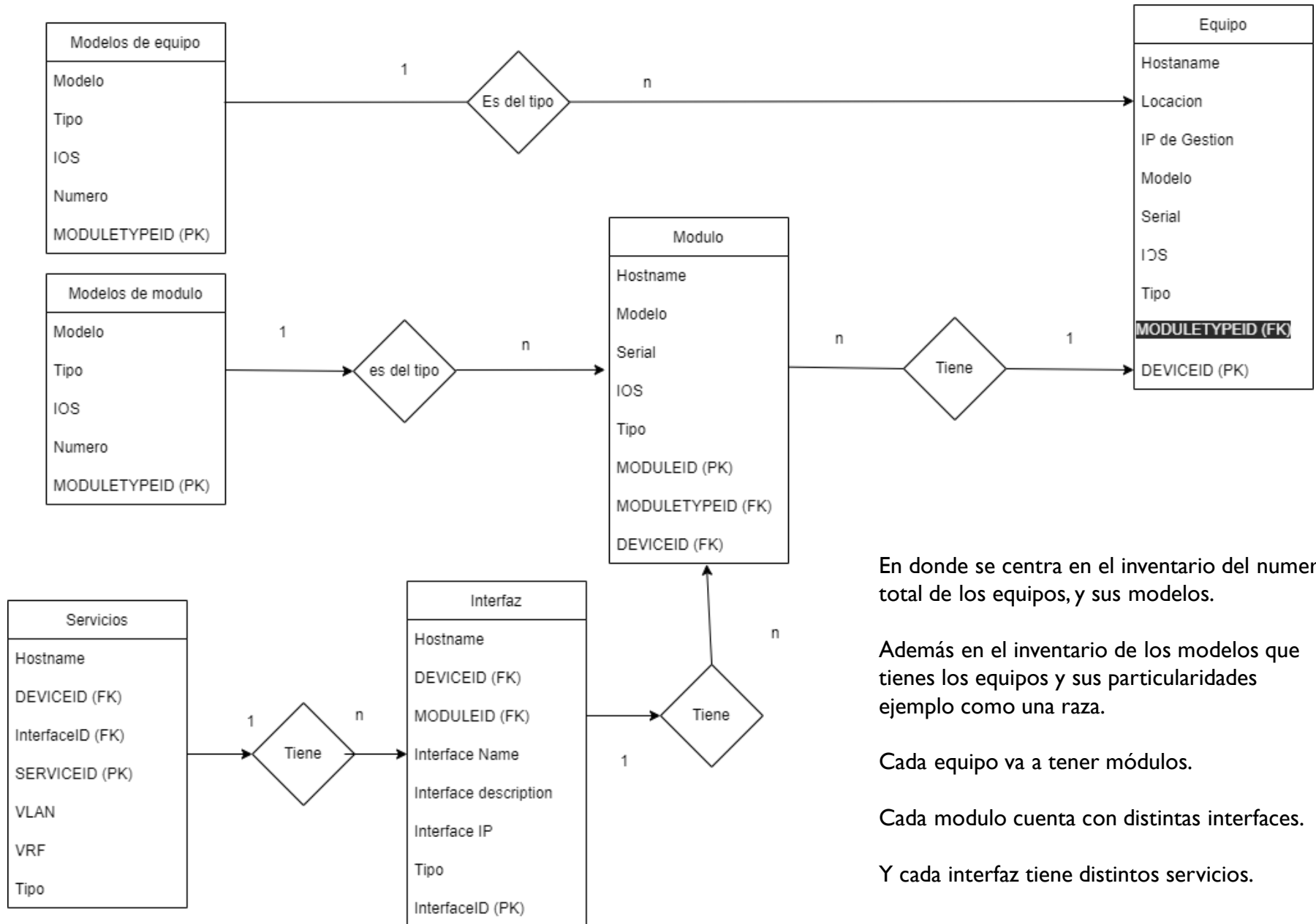
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# Propuesta

Se necesita realizar una base de datos sobre equipos de telecomunicaciones en donde se tengan datos como modelo, número de serie, ip de gestión, puertos físicos, dirección, cantidad y posiblemente datos de configuración como servicios internos, log de modificaciones y control de cambios/usuarios.



# Entidad Relación



En donde se centra en el inventario del numero total de los equipos, y sus modelos.

Además en el inventario de los modelos que tienes los equipos y sus particularidades ejemplo como una raza.

Cada equipo va a tener módulos.

Cada modulo cuenta con distintas interfaces.

Y cada interfaz tiene distintos servicios.

# Tablas:

Tabla de modelos de equipos

PK	FK	Field name	Field database name	Data type	NULL	LEN	NOTES
X		Modelo	DEV_MOD	VARCHAR	NO		30Modelo del dispositivo
		Device Type	DEV_TYPE	VARCHAR	NO		15Tipo de dispositivo
		IOS	DEV_OS_VERSION	VARCHAR	NO		30Software del dispositivo
		Part number	DEV_PART_NO	VARCHAR	NO		30Numero de parte del fabricante

Tabla de equipos

PK	FK	Field name	Field database name	Data type	NULL	LEN	NOTES
		Host name	DEV_HOST_NAME	VARCHAR	NO		30Nombre asignado al dispositivo
		Location	DEV_LOCATION	VARCHAR	YES		30Locacion del dispositivo
		IP	DEV_IP	VARCHAR	NO		16IP de gestion
	X	Modelo	DEV_MOD	VARCHAR	NO		30Modelo del dispositivo
		Serial	DEV_SERIAL_NO	VARCHAR	NO		30Numero de serie
		Part number	DEV_PART_NO	VARCHAR	NO		30Numero de parte del fabricante
		IOS	DEV_OS_VERSION	VARCHAR	NO		30Software del dispositivo
		Device Type	DEV_TYPE	VARCHAR	NO		15Tipo de dispositivo
X		ID	DEV_ID	VARCHAR	NO		50DEV_IP + DEV_HOST_NAME

Tabla de modelos de modulos

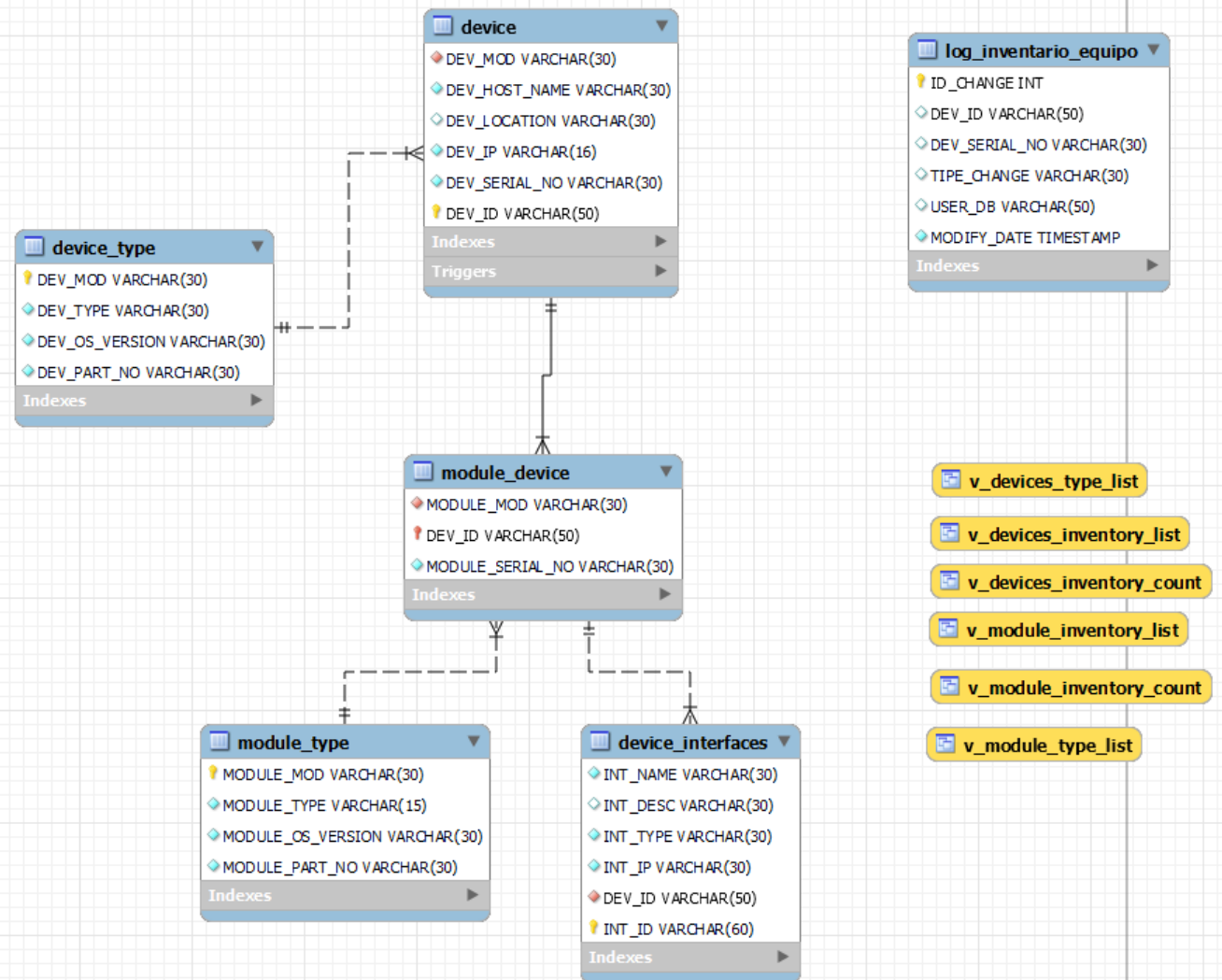
PK	FK	Field name	Field database name	Data type	NULL	LEN	NOTES
		Modelo	MODULE_MOD	VARCHAR	NO		30Modelo del modulo
		Type	MODULE_TYPE	VARCHAR	NO		15Tipo de modulo
		IOS	MODULE_OS_VERSION	VARCHAR	NO		30Software del modulo
X		Part number	MODULE_PART_NO	VARCHAR	NO		30Numero de parte del fabricante

PK	FK	Field name	Field database name	Data type	NULL	LEN	NOTES
		Host name	DEV_HOST_NAME	VARCHAR	NOT	30	Nombre asignado al dispositivo
		Location	DEV_LOCATION	VARCHAR	YES	30	Locacion del dispositivo
		IP	DEV_IP	VARCHAR	NOT	16	IP de gestion
		Modelo	DEV_MOD	VARCHAR	NOT	30	Modelo del dispositivo
		Device Type	DEV_TYPE	VARCHAR	NOT	15	Tipo de dispositivo
X	X	ID	DEV_ID	VARCHAR	NOT	50	DEV_IP + DEV_HOST_NAME
	X	Modelo	MODULE_MOD	VARCHAR	NOT	30	Modelo del modulo
		Type	MODULE_TYPE	VARCHAR	NOT	15	Tipo de modulo
		IOS	MODULE_OS_VERSION	VARCHAR	NOT	30	Software del modulo
		Part number	MODULE_PART_NO	VARCHAR	NOT	30	Numero de parte del fabricante
		Serial number	MODULE_SERIAL_NO	VARCHAR	NOT	30	Numero de Serie

Tabla de Interfaz

PK	FK	Field name	Field database name	Data type	NULL	LEN	NOTES
		Host name	DEV_HOST_NAME	VARCHAR	NOT	30	Nombre asignado al dispositivo
		Location	DEV_LOCATION	VARCHAR	YES	30	Locacion del dispositivo
		IP	DEV_IP	VARCHAR	NOT	16	IP de gestion
		Modelo	DEV_MOD	VARCHAR	NOT	30	Modelo del dispositivo
		Device Type	DEV_TYPE	VARCHAR	NOT	15	Tipo de dispositivo
		ID	DEV_ID	VARCHAR	NOT	50	DEV_IP + DEV_HOST_NAME
	X	Modelo	MODULE_MOD	VARCHAR	NOT	30	Modelo del modulo
		Type	MODULE_TYPE	VARCHAR	NOT	15	Tipo de modulo
		Part number	MODULE_PART_NO	VARCHAR	NOT	30	Numero de parte del fabricante
		Interface name	INT_NAME	VARCHAR	NOT	30	Nombre de la interfaz
		Interface description	INT_DESC	VARCHAR	yes	30	Descipcion logica
		Interface type	INT_TYPE	VARCHAR	NOT	30	Tipo de interfaz
		Interface IP	INT_IP	VARCHAR	NOT	30	IP de la interfaz
X		ID	INT_ID	VARCHAR	NOT	60	INT_IP + INT_NAME

# Reverse Engineer



# Insert device\_type

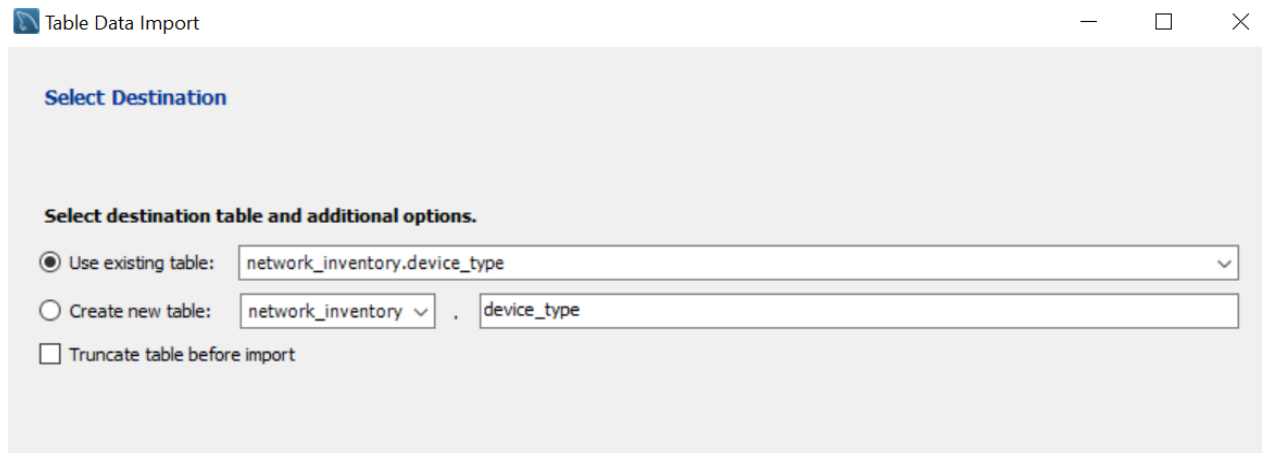
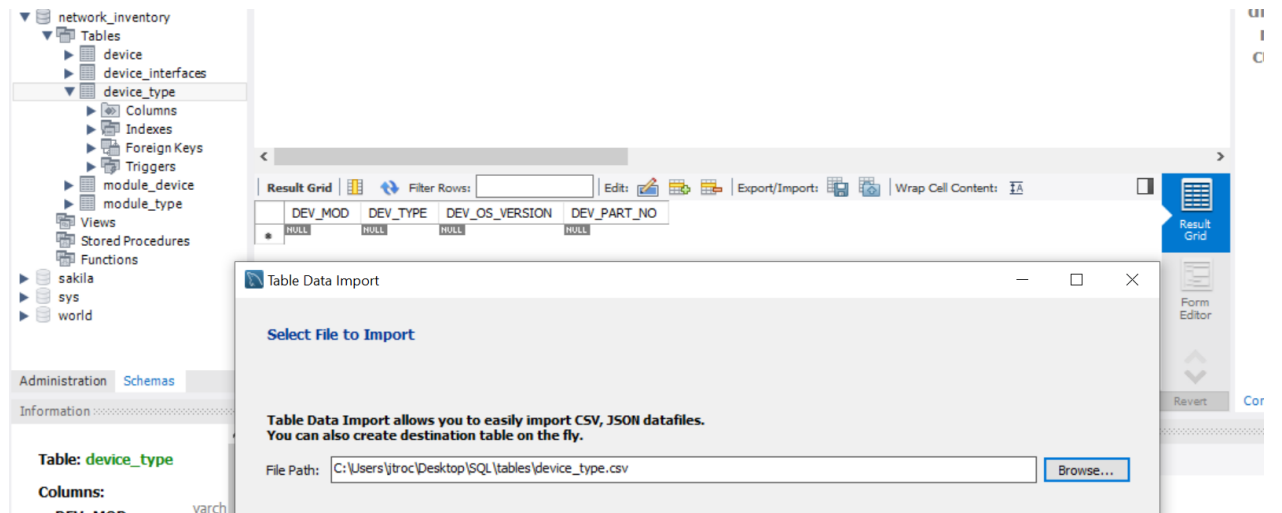


Table Data Import

### Configure Import Settings

Detected file format: csv

Encoding: utf-8

Columns:

Source Column	Dest Column
<input checked="" type="checkbox"/> DEV_MOD	DEV_MOD
<input checked="" type="checkbox"/> DEV_TYPE	DEV_TYPE
<input checked="" type="checkbox"/> DEV_OS_VERSION	DEV_OS_VERSION
<input checked="" type="checkbox"/> DEV_PART_NO	DEV_PART_NO

DEV_MOD	DEV_TYPE	DEV_OS_V...	DEV_PART...
9200	CATALYST	V23	C9200-48P-E
9300	CATALYST	V22	C9300-48P-A
9500	CATALYST	V26	C9500-40X-A
9516	NEXUS	V27	N9K-C9516

< Back Next > Cancel

## Import Results

File C:\Users\jtroc\Desktop\SQL\tables\device\_type.csv was imported in 0.361 s

Table network\_inventory.device\_type has been used

6 records imported

Table Data Import

### Import Data

The following tasks will now be performed. Please monitor the execution.

☐ Prepare Import  
☐ Import data file

Click [Next >] to execute.

Show Logs

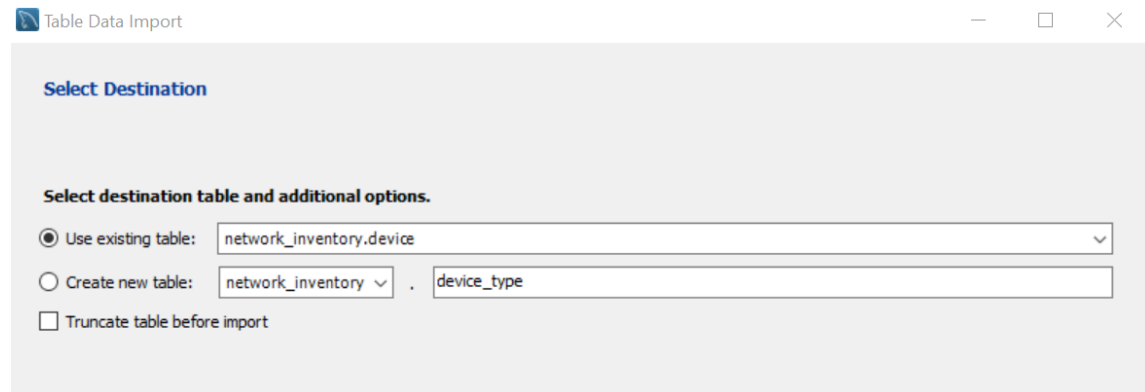
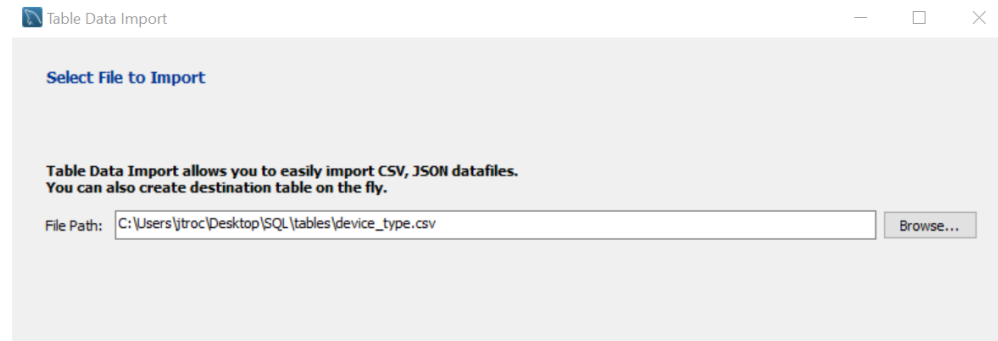
< Back Next > Cancel

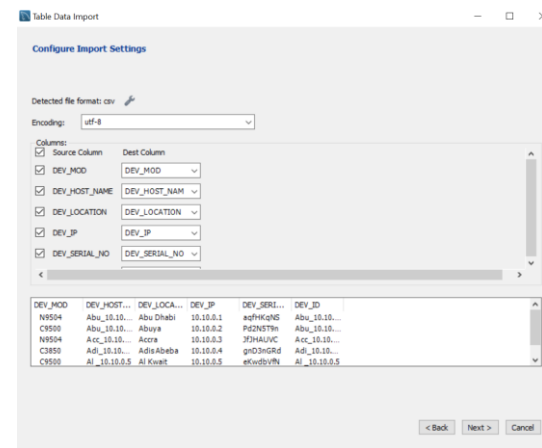
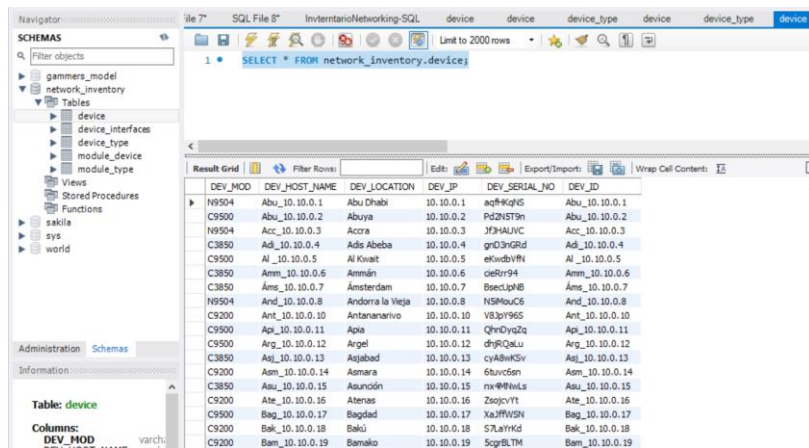
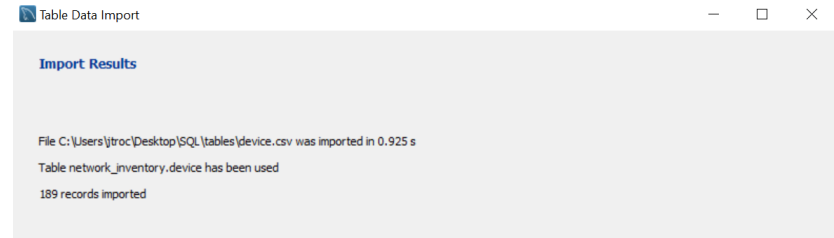
1 • `SELECT * FROM network_inventory.device_type;`

DEV_MOD	DEV_TYPE	DEV_OS_VERSION	DEV_PART_NO
C3850	CATALYST	V23	WS-C3850-48F-S
C9200	CATALYST	V23	C9200-48P-E
C9300	CATALYST	V22	C9300-48P-A
C9500	CATALYST	V26	C9500-40X-A
N9504	NEXUS	V27	N9K-C9504
N9516	NEXUS	V27	N9K-C9516



# Insert device





# Insert module\_type

Table Data Import

Select File to Import

Table Data Import allows you to easily import CSV, JSON datafiles.  
You can also create destination table on the fly.

File Path:

Table Data Import

Select Destination

Select destination table and additional options.

☒ Use existing table:

☐ Create new table:  .

☐ Truncate table before import

Table Data Import

### Import Data

The following tasks will now be performed. Please monitor the execution.

☐ Prepare Import  
☐ Import data file

Click [Next >] to execute.

Table Data Import

### Import Results

File C:\Users\jtroc\Desktop\SQL\tables\module\_type.csv was imported in 0.931 s  
Table network\_inventory.module\_type has been used  
20 records imported

Table Data Import

### Configure Import Settings

Detected file format: csv

Encoding: utf-8

Columns:

Source Column	Dest Column
<input checked="" type="checkbox"/> MODULE_MOD	<input type="text" value="MODULE_MOD"/>
<input checked="" type="checkbox"/> MODULE_TYPE	<input type="text" value="MODULE_TYPE"/>
<input checked="" type="checkbox"/> MODULE_OS_VERSION	<input type="text" value="MODULE_OS_VERSION"/>
<input checked="" type="checkbox"/> MODULE_PART_NO	<input type="text" value="MODULE_PART_NO"/>

MODULE_...	MODULE_T...	MODULE_...	MODULE_P...
T3300-NM...	Card	v23	PpSdvBQ
T6300-NM...	Card	v23	yyruk7pI
Q9300-N...	Card	v23	jNJKMh
F8300-NM...	Card	v23	HB8aPK
S8300-NM...	Card	v23	xVY9UN7V

< Back Next > Cancel

1 • SELECT \* FROM network\_inventory.module\_type;

MODULE_MOD	MODULE_TYPE	MODULE_OS_VERSION	MODULE_PART_NO
F2300-NM-H	Card	v33	hbmKqsc
F8300-NM-J	Card	v23	HB8aPK
F9300-NM-H	Card	v33	xbogJ8H
G7300-NM-M	Card	v23	qEBvyy43
G7300-NM-Q	Card	v33	3EXSoGkQ
G8300-NM-A	Card	v33	es5CedEi
H9300-NM-W	Card	v23	7wRLU7h6
J3300-NM-M	Card	v23	PpSdvBQ
K8300-NM-F	Card	v33	T2VUm4Pw
K9300-NM-N	Card	v33	DzY2LPH2
M5300-NM-B	Card	v31	z457YbQ
N3300-NM-D	Card	v23	MpMkzePz
N6300-NM-A	Card	v33	ykqW366n
Q3300-NM-C	Card	v32	fh6sqBQG
Q3300-NM-V	Card	v33	J2Wt9kx3
Q9300-NM-J	Card	v23	jNJKMh
S5300-NM-Y	Card	v23	xV9dN7V
T6300-NM-S	Card	v23	yyruk7pI

# Insert module\_device

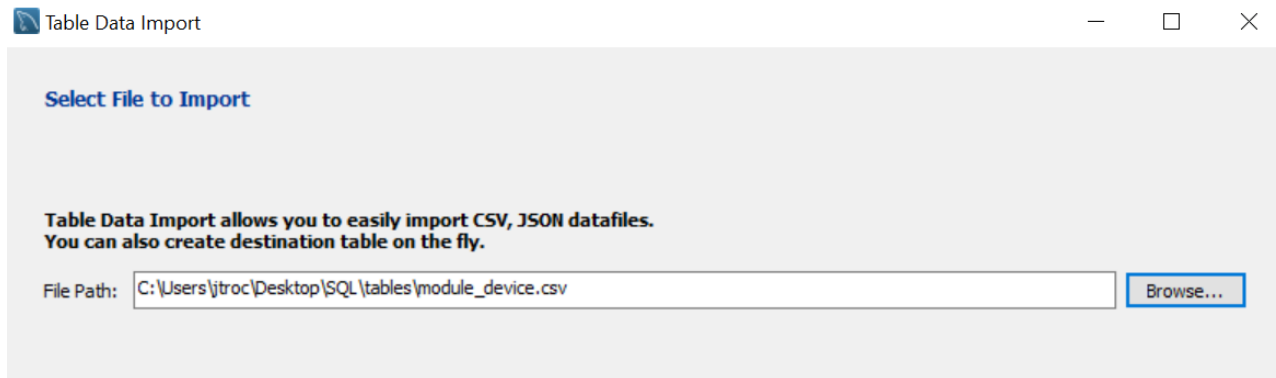


Table Data Import

**Select File to Import**

Table Data Import allows you to easily import CSV, JSON datafiles.  
You can also create destination table on the fly.

File Path:

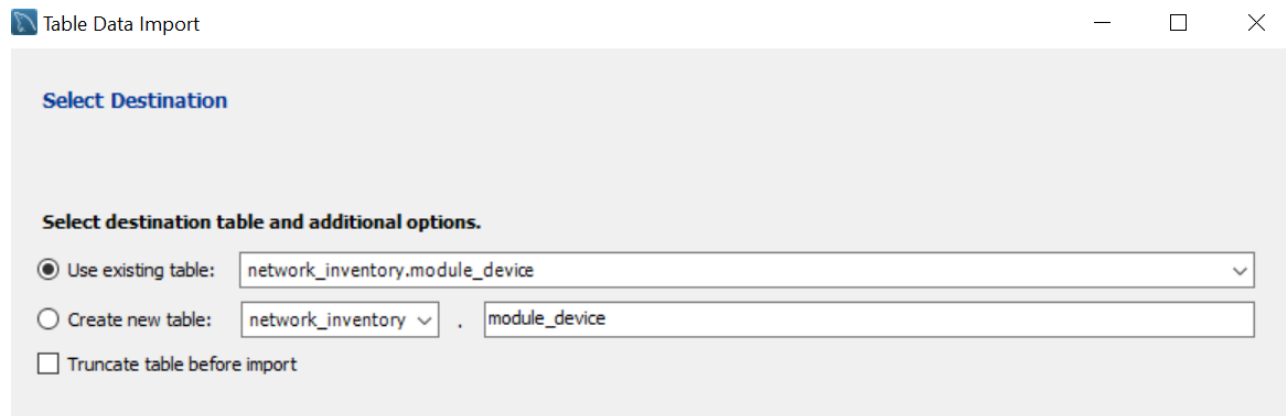


Table Data Import

**Select Destination**

Select destination table and additional options.

☒ Use existing table:

☐ Create new table:  .

☐ Truncate table before import

Navigator

Schemas

Filter objects

gammers\_model

network\_inventory

Tables

device

device\_interfaces

device\_type

module\_device

Columns

Indexes

Foreign Keys

Triggers

module\_type

Views

Stored Procedures

Functions

sakila

sys

world

Administration

Schemas

Information

Table: module\_device

Columns:

MODULE\_MOD

DEV\_ID

MODULE\_SERIAL\_NO

1 • SELECT \* FROM network\_inventory.module\_device;

Result Grid

MODULE_MOD	DEV_ID	MODULE_SERIAL_NO
J3300-NM-M	Abu_10.10.0.1	fGHeGhWnnme3LR
T6300-NM-S	Abu_10.10.0.2	ogkQ8P7mA63z5x
Q9300-NM-J	Acc_10.10.0.3	XZLE8JnnH4yQy0
F8300-NM-J	Adj_10.10.0.4	G9XLXDPdPc2Qam
S5300-NM-Y	Al_10.10.0.5	zyvPZ6g8JpZGjW
N3300-NM-D	Amm_10.10.0.6	PNHSCtWbfuomp
H9300-NM-W	Ans_10.10.0.7	stLekuvuaElmh9
G7300-NM-M	And_10.10.0.8	PmbfugZW5UpvWV
Q3300-NM-C	Ant_10.10.0.10	SKdaDg3jo8KUL
K9300-NM-N	Api_10.10.0.11	FBx4nPUsaBRMQe
P2300-NM-H	Arg_10.10.0.12	723x7DzZ8xwPv
X6300-NM-Y	Asj_10.10.0.13	V23kS4RVGanj9Q
K8300-NM-F	Asm_10.10.0.14	GEVYdpTLGvHzRL
Z3300-NM-U	Asu_10.10.0.15	evCZ3HUKVKC97
Q3300-NM-V	Ate_10.10.0.16	4TaDzu42JLLeA
P9300-NM-H	Bag_10.10.0.17	RRRIKJYfRcRC9K
G8300-NM-A	Bak_10.10.0.18	Tk6FLY2TaR4v
N6300-NM-A	Bam_10.10.0.19	9GhabJJWPbHE7b

Table Data Import

### Import Data

The following tasks will now be performed. Please monitor the execution.

☐ Prepare Import

☐ Import data file

Click [Next >] to execute.

Table Data Import

### Configure Import Settings

Detected file format: csv

Encoding: utf-8

Columns:

Source Column	Dest Column
<input checked="" type="checkbox"/> MODULE_MOD	<input type="text" value="MODULE_MOD"/>
<input checked="" type="checkbox"/> DEV_ID	<input type="text" value="DEV_ID"/>
<input checked="" type="checkbox"/> MODULE_SERIAL_NO	<input type="text" value="MODULE_SERIAL_N"/>

MODULE_...	DEV_ID	MODULE_S...
J3300-NM...	Abu_10.10....	fGHeGhWh...
T6300-NM...	Abu_10.10....	ogkQ8P7m...
Q9300-N...	Acc_10.10....	XZLE8JnnH...
F8300-NM-J	Adj_10.10....	G9XLXDPdP...
S5300-NM...	Al_10.10.0.5	zyvPZ6g8Jp...

< Back Next > Cancel

# Insert device\_interface

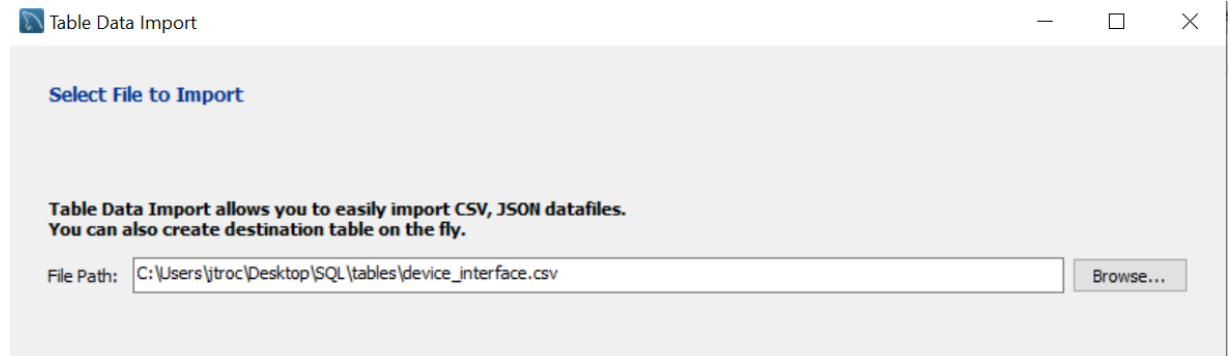


Table Data Import

Select File to Import

Table Data Import allows you to easily import CSV, JSON datafiles.  
You can also create destination table on the fly.

File Path:

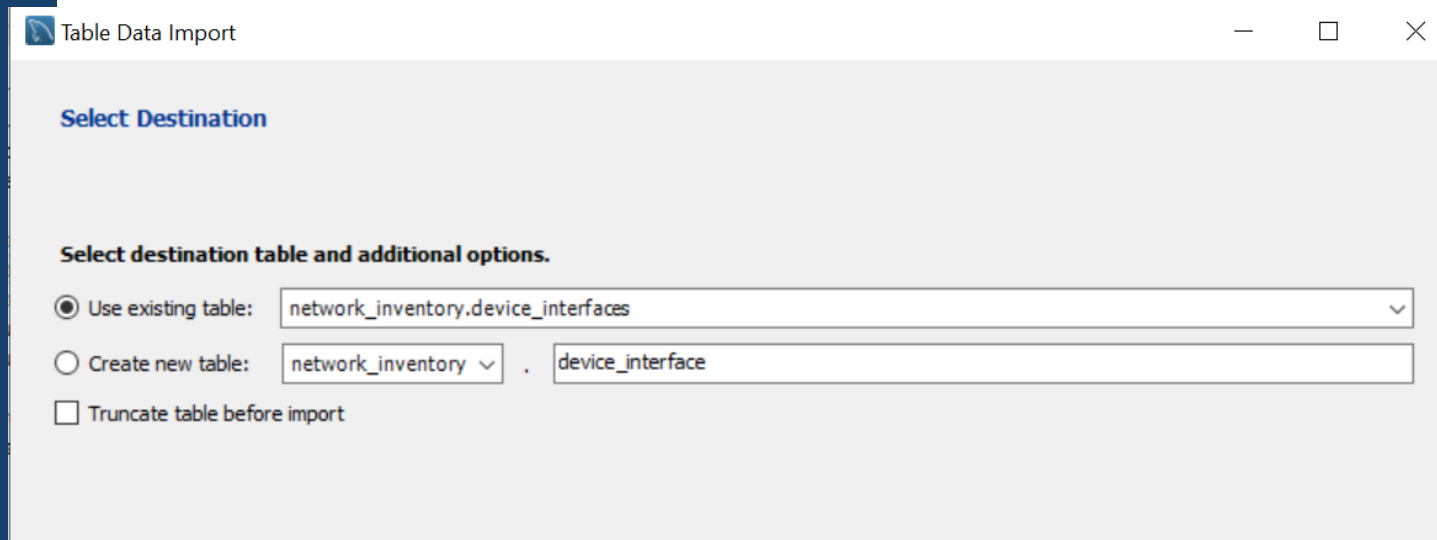


Table Data Import

Select Destination

Select destination table and additional options.

☒ Use existing table:

☐ Create new table:  .

☐ Truncate table before import

Table Data Import

### Import Data

The following tasks will now be performed. Please monitor the execution.

☐ Prepare Import

☐ Import data file

Click [Next >] to execute.

Table Data Import

### Import Results

File C:\Users\jtroc\Desktop\SQL\tables\device\_interface.csv was imported in 1.980 s

Table network\_inventory.device\_interfaces has been used

378 records imported

Filter objects

- gammers\_model
- network\_inventory
  - Tables
    - device
    - device\_interfaces
    - device\_type
    - module\_device
    - module\_type
  - Views
  - Stored Procedures
  - Functions
- sakila
- sys
- world

Administration Schemas

Information

Table: device\_interfaces

Columns: INT\_NAME varchar(20)

1 • SELECT \* FROM network\_inventory.device\_interfaces;

INT_NAME	INT_DESC	INT_TYPE	INT_IP	DEV_ID	INT_ID
ge-1/0/1	ge	10.0.1.1	Abu_10.10.0.1	ge-1/0/1_10.0.1.1	
ge-1/0/1	ge	10.0.1.10	Ant_10.10.0.10	ge-1/0/1_10.0.1.10	
ge-1/0/1	ge	10.0.1.100	Map_10.10.0.100	ge-1/0/1_10.0.1.100	
ge-1/0/1	ge	10.0.1.101	Mas_10.10.0.101	ge-1/0/1_10.0.1.101	
ge-1/0/1	ge	10.0.1.102	Mas_10.10.0.102	ge-1/0/1_10.0.1.102	
ge-1/0/1	ge	10.0.1.103	Mba_10.10.0.103	ge-1/0/1_10.0.1.103	
ge-1/0/1	ge	10.0.1.104	Mn_10.10.0.104	ge-1/0/1_10.0.1.104	
ge-1/0/1	ge	10.0.1.105	Mog_10.10.0.105	ge-1/0/1_10.0.1.105	
ge-1/0/1	ge	10.0.1.106	Mor_10.10.0.106	ge-1/0/1_10.0.1.106	
ge-1/0/1	ge	10.0.1.107	Mor_10.10.0.107	ge-1/0/1_10.0.1.107	
ge-1/0/1	ge	10.0.1.108	Mor_10.10.0.108	ge-1/0/1_10.0.1.108	
ge-1/0/1	ge	10.0.1.109	Mos_10.10.0.109	ge-1/0/1_10.0.1.109	
ge-1/0/1	ge	10.0.1.11	Api_10.10.0.11	ge-1/0/1_10.0.1.11	
ge-1/0/1	ge	10.0.1.110	Nai_10.10.0.110	ge-1/0/1_10.0.1.110	
ge-1/0/1	ge	10.0.1.111	Nai_10.10.0.111	ge-1/0/1_10.0.1.111	
ge-1/0/1	ge	10.0.1.112	Nas_10.10.0.112	ge-1/0/1_10.0.1.112	
ge-1/0/1	ge	10.0.1.113	Nge_10.10.0.113	ge-1/0/1_10.0.1.113	
ge-1/0/1	ge	10.0.1.114	Nia_10.10.0.114	ge-1/0/1_10.0.1.114	

Table Data Import

### Configure Import Settings

Detected file format: csv

Encoding: utf-8

Columns:

Source Column	Dest Column
<input checked="" type="checkbox"/> INT_NAME	<input type="text" value="INT_NAME"/>
<input checked="" type="checkbox"/> INT_DESC	<input type="text" value="INT_DESC"/>
<input checked="" type="checkbox"/> INT_TYPE	<input type="text" value="INT_TYPE"/>
<input checked="" type="checkbox"/> INT_IP	<input type="text" value="INT_IP"/>
<input checked="" type="checkbox"/> DEV_ID	<input type="text" value="DEV_ID"/>
<input checked="" type="checkbox"/> INT_ID	<input type="text" value="INT_ID"/>

INT_NAME	INT_DESC	INT_TYPE	INT_IP	DEV_ID	INT_ID
ge-1/0/1	ge	10.0.1.1	Abu_10.10...	ge-1/0/1_1...	
ge-1/0/1	ge	10.0.1.2	Abu_10.10...	ge-1/0/1_1...	
ge-1/0/1	ge	10.0.1.3	Ant_10.10...	ge-1/0/1_1...	
ge-1/0/1	ge	10.0.1.4	Ant_10.10...	ge-1/0/1_1...	
ge-1/0/1	ge	10.0.1.5	Api_10.10...	ge-1/0/1_1...	

< Back Next > Cancel



# Vistas

Navigator

SCHEMAS

Filter objects

Views

- v\_devices\_inventory\_count
- v\_devices\_inventory\_list
- v\_devices\_type\_list
- v\_module\_inventory\_count
- v\_module\_inventory\_list
- v\_module\_type\_list

Stored Procedures

Functions

sakila

sys

world

Administration Schemas

Information

View: v\_devices\_type\_list

Columns:

- Modelo varchar(30)
- Tipo varchar(30)
- Software varchar(30)
- Numero\_de\_Parte varchar(30)

v\_devices\_type\_list

1 • SELECT \* FROM network\_inventory.v\_devices\_type\_list;

Result Grid

Modelo	Tipo	Software	Numero_de_Parte
C3850	CATALYST	V23	WS-C3850-48F-S
C9200	CATALYST	V23	C9200-48P-E
C9300	CATALYST	V22	C9300-48P-A
C9500	CATALYST	V26	C9500-40X-A
N9504	NEXUS	V27	N9K-C9504
N9516	NEXUS	V27	N9K-C9516

ces\_type\_list 1 x

Read Only

Navigator

SCHEMAS

Filter objects

Views

- v\_devices\_inventory\_count
- v\_devices\_inventory\_list
- v\_devices\_type\_list
- v\_module\_inventory\_count
- v\_module\_inventory\_list
- v\_module\_type\_list

Stored Procedures

Functions

sakila

sys

world

Administration Schemas

Information

View: v\_devices\_inventory\_count

Columns:

- Modelos varchar(30)
- Numero\_de\_Modelos bigint
- Familia varchar(30)
- Numero\_de\_parte varchar(30)
- Software varchar(30)

v\_devices\_type\_list v\_devices\_inventory\_count

1 • SELECT \* FROM network\_inventory.v\_devices\_inventory\_count;

Result Grid

Modelos	Numero_de_Modelos	Familia	Numero_de_parte	Software
C9300	35	CATALYST	C9300-48P-A	V22
C3850	33	CATALYST	WS-C3850-48F-S	V23
C9200	32	CATALYST	C9200-48P-E	V23
N9516	32	NEXUS	N9K-C9516	V27
N9504	31	NEXUS	N9K-C9504	V27
C9500	26	CATALYST	C9500-40X-A	V26

entry\_count 1 x

Read Only



# Vistas

Navigator: SCHEMAS

Filter objects

- Views
  - v\_devices\_inventory\_count
  - v\_devices\_inventory\_list
  - v\_devices\_type\_list
  - v\_module\_inventory\_count
  - v\_module\_inventory\_list
  - v\_module\_type\_list
- Stored Procedures
- Functions
- sakila
- sys
- world

Administration Schemas Information

View: v\_devices\_inventory\_list

Columns:

Host_Name	varchar(30)
Ubicacion	varchar(30)
IP	varchar(16)
Serial	varchar(30)
Modelo	varchar(30)
Familia	varchar(30)
Numero_de_parte	varchar(30)
Software	varchar(30)

v\_devices\_type\_list v\_devices\_inventory\_count v\_devices\_inventory\_list x

1 • SELECT \* FROM network\_inventory.v\_devices\_inventory\_list;

Result Grid

Host_Name	Ubicacion	IP	Serial	Modelo	Familia	Numero_de_parte	Software
Adi_10.10.0.4	Adis Abeba	10.10.0.4	gnD3nGRd	C3850	CATALYST	WS-C3850-48F-S	V23
Amm_10.10.0.6	Ammán	10.10.0.6	deRrr94	C3850	CATALYST	WS-C3850-48F-S	V23
Ams_10.10.0.7	Ámsterdam	10.10.0.7	BsecUpNB	C3850	CATALYST	WS-C3850-48F-S	V23
Asj_10.10.0.13	Asjabad	10.10.0.13	cyA8wKsv	C3850	CATALYST	WS-C3850-48F-S	V23
Asu_10.10.0.15	Asunción	10.10.0.15	nx4MNwLs	C3850	CATALYST	WS-C3850-48F-S	V23
Bas_10.10.0.24	Basseterre	10.10.0.24	5HWRCYSO	C3850	CATALYST	WS-C3850-48F-S	V23
Bra_10.10.0.36	Brazzaville	10.10.0.36	wryKoZ7Y	C3850	CATALYST	WS-C3850-48F-S	V23
Bue_10.10.0.41	Buenos Aires	10.10.0.41	mmuNbrZn	C3850	CATALYST	WS-C3850-48F-S	V23
Buy_10.10.0.66	Buyumbura	10.10.0.66	ZUUEPSYR	C3850	CATALYST	WS-C3850-48F-S	V23

Inventory\_list1 x

Output

Action Output

Navigator: SCHEMAS

Filter objects

- Views
  - v\_devices\_inventory\_count
  - v\_devices\_inventory\_list
  - v\_devices\_type\_list
  - v\_module\_inventory\_count
  - v\_module\_inventory\_list
  - v\_module\_type\_list
- Stored Procedures
- Functions
- sakila
- sys
- world

Administration Schemas Information

View: v\_module\_type\_list

Columns:

Modelo	varchar(30)
Tipo	varchar(15)
Software	varchar(30)
Numero_de_Parte	varchar(30)

v\_devices\_type\_list v\_devices\_inventory\_count v\_devices\_inventory\_list v\_module\_type\_list x

1 • SELECT \* FROM network\_inventory.v\_module\_type\_list;

Result Grid

Modelo	Tipo	Software	Numero_de_Parte
F2300-NM-H	Card	v33	hBmKLqsc
F8300-NM-J	Card	v23	HBj8sPBK
F9300-NM-H	Card	v33	xbogJ8JM
G7300-NM-M	Card	v23	qLEbyy43
G7300-NM-Q	Card	v33	3EXSoGkQ
G8300-NM-A	Card	v33	es5CcdEs
H9300-NM-W	Card	v23	7wRLU7h6
J3300-NM-M	Card	v23	PpSdvCBQ
K8300-NM-F	Card	v33	T2VUm4Pw

Module\_type\_list1 x

Output



# Vistas

Navigator

SCHEMAS

Filter objects

Views

- v\_devices\_inventory\_count
- v\_devices\_inventory\_list
- v\_devices\_type\_list
- v\_module\_inventory\_count
- v\_module\_inventory\_list
- v\_module\_type\_list

Stored Procedures

Functions

sakila

sys

world

Administration Schemas

Information

View: v\_module\_inventory\_count

Columns:

Modelos	varchar(30)
Numero_de_Modelos	bigint
Tipo	varchar(15)
Software	varchar(30)
Numero_de_Parte	varchar(30)

v\_devices\_type\_list v\_devices\_inventory\_count v\_devices\_inventory\_list v\_module\_type\_list v\_module\_inventory\_c

1 • SELECT \* FROM network\_inventory.v\_module\_inventory\_count;

Result Grid

Modelos	Numero_de_Modelos	Tipo	Software	Numero_de_Parte
F8300-NM-J	10	Card	v23	HBj8ePBK
G7300-NM-M	10	Card	v23	qLEbvy43
H9300-NM-W	10	Card	v23	7wRLU7h6
J3300-NM-M	10	Card	v23	PpSdvcBQ
M5300-NM-B	10	Card	v31	z457YkbQ
N3300-NM-D	10	Card	v23	MpMkzePz
Q9300-NM-J	10	Card	v23	jNiJKMfh
S5300-NM-Y	10	Card	v23	xNV9dN7V
T6300-NM-S	10	Card	v23	yynuk7gX

Inventory\_count 1 x

Output

Action Output

#	Time	Action	Message
---	------	--------	---------

Navigator

SCHEMAS

Filter objects

Views

- v\_devices\_inventory\_count
- v\_devices\_inventory\_list
- v\_devices\_type\_list
- v\_module\_inventory\_count
- v\_module\_inventory\_list
- v\_module\_type\_list

Stored Procedures

Functions

sakila

sys

world

Administration Schemas

Information

View: v\_module\_inventory\_list

Columns:

Modelo_del_modulo	varchar(30)
Serial_modelo	varchar(30)
Host_Name	varchar(30)
Ubicacion	varchar(30)
IP	varchar(16)
Serial_equipo	varchar(30)
Modelo_del_equipo	varchar(30)
Familia	varchar(15)
Numero_de_parte	varchar(30)
Software	varchar(30)

v\_devices\_inventory\_count v\_devices\_inventory\_list v\_module\_type\_list v\_module\_inventory\_count v\_module\_inv

1 • SELECT \* FROM network\_inventory.v\_module\_inventory\_list;

Result Grid

Modelo_del_modulo	Serial_modelo	Host_Name	Ubicacion	IP	Serial_equipo	Modelo_de
F2300-NM-H	72Jxk7DzZ8xwPv	Arg_10.10.0.12	Argel	10.10.0.12	dHjRQaLu	C9500
F2300-NM-H	CmGXmdWRkABbHd	Ciu_10.10.0.32	Ciudad del Cabo	10.10.0.32	yAbzwQ3n	C9200
F2300-NM-H	2D55wxajK7WMSj	Dak_10.10.0.52	Dakar	10.10.0.52	3gfk8Uif	C9500
F2300-NM-H	FepCwBs6QMpfh	Jar_10.10.0.72	Jartum	10.10.0.72	iGbrtwZ5	N9516
F2300-NM-H	sTJcTtTnHGsCB	Lux_10.10.0.92	Luxemburgo	10.10.0.92	ER3YzWj4	C9300
F2300-NM-H	5nShNRg9jztF2C	Nas_10.10.0.112	Nasáu	10.10.0.112	FFy8LXmn	N9504
F2300-NM-H	GgcwqLX8INyc8	Pra_10.10.0.132	Praga	10.10.0.132	ntrqoUdu	C9300
F2300-NM-H	UzVnLYsNTJw6y9	San_10.10.0.152	Santo Tomé	10.10.0.152	WnyXDNxR	N9516

Inventory\_list1 x

Output

Action Output

#	Time	Action	Message
116	15:55:42	SELECT * FROM network_invento...	6 row(s) returned



# Pruebas Funciones

Navigator

commentary SQL File 7\* SQL File 8\* backupsql\* device SQL File 31\* x SP Busqueda de equipo\* SP INSERT SP orden por Triggers device log\_inventario\_equipo

SCHEMAS

Filter objects

- gammers\_model
  - Tables
  - Views
  - Stored Procedures
  - Functions
- network\_inventory
  - Tables
  - Views
  - Stored Procedures
  - Functions
    - FUN\_BUSQUEDA\_EQUIPO
    - FUN\_CUENTA\_INTERFAZ
- sakila
- sys
- world

Administration Schemas

Information

Function: FUN\_BUSQUEDA\_EQUIPO

7 READS SQL DATA

```
8 BEGIN
9     declare CUESTA INT;
10    SELECT count(device_interfaces.INT_ID)
11    INTO CUESTA
12    from device
13    inner join device_interfaces on device_interfaces.DEV_ID = device.DEV_ID
14    where device.DEV_ID = ID;
15    RETURN CUESTA;
16 END
17 //
18 DELIMITER ;
19
20 • select FUN_CUENTA_INTERFAZ ("Abu_10.10.0.1") AS ID_EQUIPO
21
```

Limit to 400 rows

Result Grid

ID_EQUIPO
2

Filter Rows: Export: Wrap Cell Content: A

Result Grid Form Editor



# Pruebas Funciones

Navigator

commentary SQL File 7\* SQL File 8\* backupsql\* device SQL File 31\* SP Busqueda de equipo\* x SP INSERT SP orden por Triggers device log\_inventario\_equipo

Limit to 400 rows

1 DELIMITER //

2 • CREATE PROCEDURE SP\_NETWORK\_INVENTORY\_BY\_IP (IN IP VARCHAR(60))

3 BEGIN

4 -- procedure de busqueda de equipos

5 SELECT \* FROM network\_inventory.device

6 WHERE DEV\_IP = IP;

7 END

8 //

9 Delimiter ;

10

11 • call SP\_NETWORK\_INVENTORY\_BY\_IP ("10.10.0.1");

12

13 • SELECT \* FROM network\_inventory.log\_inventario\_equipo;

Administration Schemas

Information

Function: FUN\_BUSQUEDA\_EQUIPO

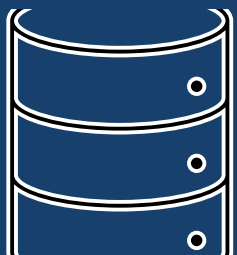
Result Grid

DEV_MOD	DEV_HOST_NAME	DEV_LOCATION	DEV_IP	DEV_SERIAL_NO	DEV_ID
N9504	Abu_10.10.0.1	Abu Dhabi	10.10.0.1	aqftKqNS	Abu_10.10.0.1

Result Grid

Form Editor

# Muestra de SP funcionando



MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- device\_type
- module\_device
- module\_type
- Views
- Stored Procedures
  - SP\_NETWORK\_INVENTORY\_BY\_IP
- Functions
  - FUN\_BUSQUEDA\_EQUIPO
  - FUN\_CUENTA\_INTERFAZ
- sakila
- sys
- world

Administration Schemas

Information

No object selected

```
-- SELECT query_orden;
-- ejecutar la consulta

PREPARE ejecutar FROM @query_orden;

EXECUTE ejecutar;

DEALLOCATE PREPARE ejecutar;

END
//
DELIMITER ;

call SP_NETWORK_INVENTORY_ORDER ('DEV_HOST_NAME')
call SP_NETWORK_INVENTORY_ORDER ('DEV_MOD')
```

Result Grid

	DEV_MOD	DEV_HOST_NAME	DEV_LOCATION	DEV_IP	DEV_SERIAL_NO	DEV_ID
▶	C3850	Vil_10.10.0.177	Vilna	10.10.0.177	rD32czf4	Vil_10.10.0.177
	C3850	Vad_10.10.0.172	Vaduz	10.10.0.172	CerxuFaM	Vad_10.10.0.172
	C3850	Ula_10.10.0.171	Ulan Bator	10.10.0.171	ARmmWvdJ	Ula_10.10.0.171
	C3850	Adi_10.10.0.4	Adis Abeba	10.10.0.4	gnD3nGRd	Adi_10.10.0.4
	C3850	Win_10.10.0.180	Windhoek	10.10.0.180	kurJKMXn	Win_10.10.0.180
	C3850	Amm_10.10.0.6	Ammán	10.10.0.6	cieRrr94	Amm_10.10.0.6
	C3850	Áms_10.10.0.7	Ámsterdam	10.10.0.7	BsecUpNB	Áms_10.10.0.7
	C3850	Pue_10.10.0.134	Puerto España	10.10.0.134	PixAcYND	Pue_10.10.0.134
	C3850	Gab_10.10.0.64	Gaborone	10.10.0.64	CgrQRcEi	Gab_10.10.0.64
	C3850	Nge_10.10.0.113	Ngerulmud	10.10.0.113	mUaLCLYT	Nge_10.10.0.113
	C3850	Nuk_10.10.0.118	Nukualofa	10.10.0.118	yqEFGuLg	Nuk_10.10.0.118
	C3850	Asj_10.10.0.13	Asjabad	10.10.0.13	cyA8wKSv	Asj_10.10.0.13
	C3850	Lon_10.10.0.89	Londres	10.10.0.89	coAxYtix	Lon_10.10.0.89
	C3850	Asu_10.10.0.15	Asunción	10.10.0.15	nx4MNwLs	Asu_10.10.0.15
	C3850	Bas_10.10.0.24	Basseterre	10.10.0.24	SHWRCYSO	Bas_10.10.0.24
	C3850	Tim_10.10.0.166	Timbú	10.10.0.166	DyDdZdFf	Tim_10.10.0.166
	C3850	Yar_10.10.0.184	Yaren	10.10.0.184	M3jfxr8M	Yar_10.10.0.184
	C3850	Bra_10.10.0.36	Brazzaville	10.10.0.36	wryKoZ7Y	Bra_10.10.0.36
	C3850	Kin_10.10.0.79	Kinsasa	10.10.0.79	6Gte55JJ	Kin_10.10.0.79

Result 46 x

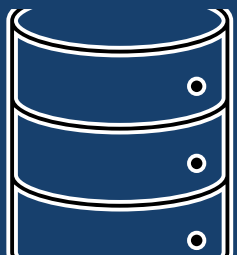
Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 140	23:55:28	call SP_NETWORK_INVENTORY_ORDER (DEV_HOST_NAME)	189 row(s) returned	0.000 sec / 0.000 sec
✓ 141	23:55:55	call SP_NETWORK_INVENTORY_ORDER (DEV_MOD)	189 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

# Muestra de SP funcionando



MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

Filter objects

- device\_type
- module\_device
- module\_type
- Views
- Stored Procedures
  - SP\_NETWORK\_INVENTORY\_BY\_IP
- Functions
  - f() FUN\_BUSQUEDA\_EQUIPO
  - f() FUN\_CUENTA\_INTERFAZ
- sakila
- sys
- world

Administration Schemas

Information

Procedure:  
SP\_NETWORK\_INVENTORY\_BY\_IP

```
1 DELIMITER //
2 CREATE PROCEDURE SP_NETWORK_INVENTORY_BY_IP (IN IP VARCHAR(60))
3 BEGIN
4 -- procedure de busqueda de equipos
5 SELECT * FROM network_inventory.device
6 WHERE DEV_IP = IP;
7 END
8 //
9 Delimiter ;
10
11 call SP_NETWORK_INVENTORY_BY_IP ("10.10.0.1");
```

Result Grid

	DEV_MOD	DEV_HOST_NAME	DEV_LOCATION	DEV_IP	DEV_SERIAL_NO	DEV_ID
▶	N9504	Abu_10.10.0.1	Abu Dhabi	10.10.0.1	aqftKqNS	Abu_10.10.0.1

Result 1 x

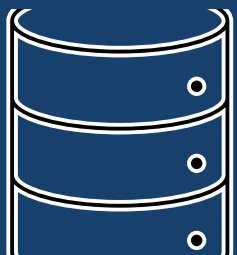
Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 140	23:55:28	call SP_NETWORK_INVENTORY_ORDER ('DEV_HOST_NAME')	189 row(s) returned	0.000 sec / 0.000 sec
✓ 141	23:55:55	call SP_NETWORK_INVENTORY_ORDER ('DEV_MOD')	189 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

# Muestra de SP funcionando



MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

Filter objects

- Indexes
- Foreign Keys
- Triggers
- device\_interfaces
- device\_type
- module\_device
- module\_type
- Views
- Stored Procedures
  - SP\_NETWORK\_INVENTORY\_BY\_IP
  - SP\_NETWORK\_INVENTORY\_ORDER
- Functions

Administration Schemas

Information

No object selected

SQL File 31\* SP Busqueda de equipo SP INSERT\* SP orden por network\_inventory.device

Limit to 500 rows

```
6      IN DEV_SERIAL_NO varchar(30),
7      IN DEV_ID varchar(50))
8  BEGIN
9      INSERT INTO device VALUES
10     (DEV_MOD, DEV_HOST_NAME, DEV_LOCATION, DEV_IP, DEV_SERIAL_NO, DEV_ID);
11
12  END
13  //
14  DELIMITER ;
15
16  CALL SP_insert_device("N9504", "Caracas_192.168.1.1", "caracas", "192.168.1.1", "xckdlep", "Caracas_192.168.1.1");
17
18
19
20  call SP_NETWORK_INVENTORY_ORDER ('DEV_HOST_NAME')
```

Result Grid

DEV_MOD	DEV_HOST_NAME	DEV_LOCATION	DEV_IP	DEV_SERIAL_NO	DEV_ID
N9504	Caracas_192.168.1.1	caracas	192.168.1.1	xckdlep	Caracas_192.168.1.1
N9504	Man_10.10.0.99	Manila	10.10.0.99	gbjyf2Nc	Man_10.10.0.99
C9300	Man_10.10.0.98	Manama	10.10.0.98	f3iaArDf	Man_10.10.0.98
C9300	Man_10.10.0.97	Managua	10.10.0.97	NfKrDbzq	Man_10.10.0.97
C9200	Mal_10.10.0.96	Malé	10.10.0.96	q9zyKQy8	Mal_10.10.0.96
C9300	Mal_10.10.0.95	Malabo	10.10.0.95	YQL2AQX8	Mal_10.10.0.95
C9200	Maj_10.10.0.94	Majuro	10.10.0.94	b4qEqhrP	Maj_10.10.0.94
C9500	Mad_10.10.0.93	Madrid	10.10.0.93	SBaBrGa5	Mad_10.10.0.93
C9300	Lux_10.10.0.92	Luxemburgo	10.10.0.92	ER3YzWj4	Lux_10.10.0.92
C3850	Lus_10.10.0.91	Lusaka	10.10.0.91	5gXwho59	Lus_10.10.0.91
C3850	Lua_10.10.0.90	Luanda	10.10.0.90	c8HBRadC	Lua_10.10.0.90
C9200	Est_10.10.0.9	Estambul	10.10.0.9	8Z2ao7Nx	Est_10.10.0.9
C3850	Lon_10.10.0.89	Londres	10.10.0.89	coAxYtix	Lon_10.10.0.89
C9300	Lom_10.10.0.88	Lomé	10.10.0.88	9Wj3PzKV	Lom_10.10.0.88
N9516	Liu_10.10.0.87	Liubliana	10.10.0.87	6khhEgCf	Liu_10.10.0.87
N9504	Lis_10.10.0.86	Lisboa	10.10.0.86	YzdWPEQm	Lis_10.10.0.86
N9516	Lim_10.10.0.85	Lima	10.10.0.85	vS3H5FGN	Lim_10.10.0.85
C3850	Lil_10.10.0.84	Lilongwe	10.10.0.84	rPjw3KGB	Lil_10.10.0.84
C9300	Lib_10.10.0.83	Libreville	10.10.0.83	gKPgyy8G	Lib_10.10.0.83

Result 55 Result 56 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 199	00:24:53	call SP_NETWORK_INVENTORY_ORDER ('DEV_HOST_NAME')	1 row(s) returned	0.000 sec / 0.000 sec
✓ 200	00:24:53	call SP_NETWORK_INVENTORY_ORDER ('DEV_HOST_NAME')	190 row(s) returned	- / 0.000 sec

Object Info Session



# Creación de Tabla log mas 2 triggers



Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- Tables
  - device
    - Columns
    - Indexes
    - Foreign Keys
    - Triggers
      - TR\_LOG\_EQUIPOS\_IN
      - TR\_LOG\_EQUIPOS\_DELETE
  - device\_interfaces
  - device\_type
  - log\_inventario\_equipo
    - Columns
      - ID\_CHANGE
      - DEV\_ID
      - DEV\_SERIAL\_NO
      - TIPE\_CHANGE
      - USER\_DB
      - MODIFY\_DATE
    - Indexes
    - Foreign Keys

Administration Schemas

Information: No object selected

```
1 use network_inventory;
2 -- Crear tabla para el control de modificaciones del inventario de dispositivos
3 CREATE TABLE LOG_INVENTARIO_EQUIPO (
4     ID_CHANGE INT UNSIGNED AUTO_INCREMENT PRIMARY KEY,
5     DEV_ID VARCHAR(50),
6     DEV_SERIAL_NO VARCHAR(30),
7     TIPE_CHANGE VARCHAR(30),
8     USER_DB VARCHAR(50),
9     MODIFY_DATE TIMESTAMP NOT NULL
10 );
11
12 -- Registro de log de nuevos dispositivos
13 DELIMITER //
14 CREATE TRIGGER TR_LOG_EQUIPOS_IN
15 AFTER INSERT ON DEVICE
16 FOR EACH ROW
17 BEGIN
18     INSERT INTO LOG_INVENTARIO_EQUIPO (ID_CHANGE, DEV_ID, DEV_SERIAL_NO, TIPE_CHANGE, USER_DB, MODIFY_DATE)
19     VALUES (
20         NULL, NEW.DEV_ID, NEW.DEV_SERIAL_NO, "Insert", SYSTEM_USER(), current_timestamp()
21     );
22 END //
23 DELIMITER ;
24
25 -- Registro de log de eliminacion de dispositivos
26 DELIMITER //
27 CREATE TRIGGER TR_LOG_EQUIPOS_DELETE
28 BEFORE DELETE ON DEVICE
29 FOR EACH ROW
30 BEGIN
31     INSERT INTO LOG_INVENTARIO_EQUIPO (DEV_ID, DEV_SERIAL_NO, TIPE_CHANGE, USER_DB, MODIFY_DATE)
32     VALUES (
33         OLD.DEV_ID, OLD.DEV_SERIAL_NO, "DELETED", SYSTEM_USER(), current_timestamp()
34     );
35 END //
36 DELIMITER ;
37
38
```

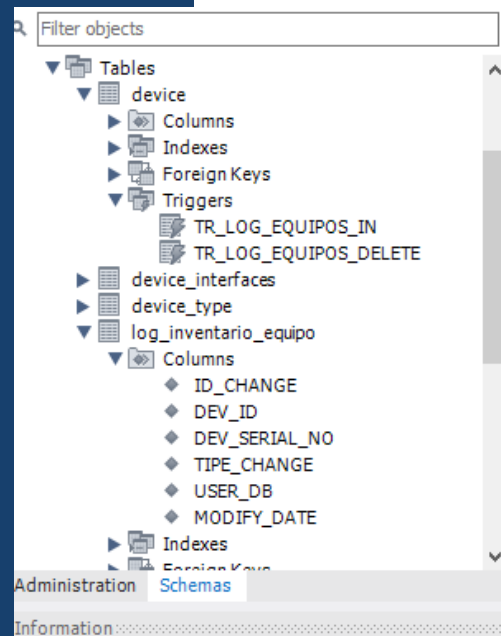
Output

Action Output

#	Time	Action	Message
70	22:06:39	INSERT INTO device ('DEV_MOD','DEV_HOST_NAME','DEV_LOCATION','DEV_IP','DEV_SERIAL_NO','DEV_ID') V...	1 row(s) affected
71	22:06:42	SELECT * FROM network_inventory.log_inventario_equipo LIMIT 0, 400	9 row(s) returned

Object Info Session

## Pruebas realizadas triggers



1 • `SELECT * FROM network_inventory.log_inventario_equipo;`

	ID_CHANGE	DEV_ID	DEV_SERIAL_NO	TIPE_CHANGE	USER_DB	MODIFY_DATE
1		test_192.168.20.1	v5mjo2YS	Insert	root@localhost	2023-01-16 22:02:14
2		test_192.168.20.2	v5Pjo2YS	Insert	root@localhost	2023-01-16 22:02:14
3		test_192.168.20.3	v5PLo2YS	Insert	root@localhost	2023-01-16 22:02:14
4		test_192.168.20.3	v5PLo2YS	DELETED	root@localhost	2023-01-16 22:02:14
5		test_192.168.20.1	v5mjo2YS	DELETED	root@localhost	2023-01-16 22:06:35
6		test_192.168.20.2	v5Pjo2YS	DELETED	root@localhost	2023-01-16 22:06:35
7		test_192.168.20.1	v5mjo2YS	Insert	root@localhost	2023-01-16 22:06:39
8		test_192.168.20.2	v5Pjo2YS	Insert	root@localhost	2023-01-16 22:06:39
9		test_192.168.20.3	v5PLo2YS	Insert	root@localhost	2023-01-16 22:06:39
*	NULL	NULL	NULL	NULL	NULL	NULL

-- Prueba de nuevo registro

```
INSERT INTO device (`DEV_MOD`,`DEV_HOST_NAME`,`DEV_LOCATION`,`DEV_IP`,`DEV_SERIAL_NO`,`DEV_ID`) VALUES ('C9300','test_192.168.20.1','test','192.168.20.1','v5mjo2YS','test_192.168.20.1');
INSERT INTO device (`DEV_MOD`,`DEV_HOST_NAME`,`DEV_LOCATION`,`DEV_IP`,`DEV_SERIAL_NO`,`DEV_ID`) VALUES ('C9300','test_192.168.20.2','test','192.168.20.2','v5Pjo2YS','test_192.168.20.2');
INSERT INTO device (`DEV_MOD`,`DEV_HOST_NAME`,`DEV_LOCATION`,`DEV_IP`,`DEV_SERIAL_NO`,`DEV_ID`) VALUES ('C9300','test_192.168.20.3','test','192.168.20.3','v5PLo2YS','test_192.168.20.3');
```

-- prueba de eliminacion de registro

```
DELETE FROM device where DEV_ID = "test_192.168.20.1" ;
DELETE FROM device where DEV_ID = "test_192.168.20.2" ;
DELETE FROM device where DEV_ID = "test_192.168.20.3" ;
```



Data Base File



<https://github.com/jtroconiz/SQL/tree/main/entrega2>

