

usergroup	
email	VARCHAR2 (50)
Name	VARCHAR2 (50)
Users	
Roles	

device_profit	
profit	NUMBER
device_id	NUMBER (8)
Prices	
Ports	
Circuits	
Service_Instances	
Service_Orders	

Tasks	
P * id	NUMBER (12)
F * User_id	NUMBER (8)
type	VARCHAR2 (30)
Status	VARCHAR2 (30)
F * Role_id	NUMBER (3)
F * Service_Orders_id	NUMBER (8)
Task_PK (id)	

Roles	
P * id	NUMBER (3)
* Name	VARCHAR2 (50)
Roles_PK (id)	

Users	
P * id	NUMBER (8)
Name	VARCHAR2 (50)
U email	VARCHAR2 (50)
* password	VARCHAR2 (20)
blocked	CHAR (1)
F * Role_id	NUMBER (3)
User_PK (id)	
usr_unq_email (email)	
usr_indx_email (email)	

Service_Orders	
P * id	NUMBER (8)
enterDate	DATE
procesDate	DATE
completeDate	DATE
F * User_id	NUMBER (8)
F * Service_id	NUMBER (5)
F * Provider_Location_id	NUMBER (8)
F * Service_Location_id	NUMBER (12)
Status	VARCHAR2 (30)
* Scenario	VARCHAR2 (30)
F Service_Instance_id	NUMBER (8)
Service_Order_PK (id)	
so_indx_user (User_id)	

Service_Instances	
P * id	NUMBER (8)
F * User_id	NUMBER (8)
UF * Service_Order_id	NUMBER (8)
Status	VARCHAR2 (30)
F * Service_id	NUMBER (5)
Service_Instances_PK (id)	
srv_ins_unq_srv_ord (Service_Order_id)	
si_indx_user (User_id)	

Circuits	
P * id	NUMBER (8)
UF * Service_Instance_id	NUMBER (8)
UF * Port_id	NUMBER (12)
Circuit_PK (id)	
crc_unq_si (Service_Instance_id)	
crc_unq_prt_id (Port_id)	
crc_indx_port_id (Port_id)	

Cables	
P * id	NUMBER (8)
UF * Port_id	NUMBER (12)
UF * Service_Location_id	NUMBER (12)
Cable_PK (id)	
cbl_unq_prt_id (Port_id)	
cbl_unq_sl_id (Service_Location_id)	

Ports	
P * id	NUMBER (12)
F * Device_id	NUMBER (8)
free	CHAR (1)
Ports_PK (id)	

Devices	
P * id	NUMBER (8)
name	VARCHAR2 (200)
Device_PK (id)	

Services	
P * id	NUMBER (5)
* Name	VARCHAR2 (50)
Description	VARCHAR2 (300)
Service_PK (id)	

Service_Locations	
P * id	NUMBER (12)
* pos_x	NUMBER
* pos_y	NUMBER
address	VARCHAR2 (200)
Service_Locations_PK (id)	

Provider_Locations	
P * id	NUMBER (8)
* pos_x	NUMBER
* pos_y	NUMBER
address	VARCHAR2 (200)
name	VARCHAR2 (200)
Provider_Locations_PK (id)	

Prices	
P * id	NUMBER (20)
UF * Provider_Location_id	NUMBER (8)
UF * Service_id	NUMBER (5)
* price	NUMBER
Price_PK (id)	
prc_unq_srv_and_pl (Provider_Location_id, Service_id)	
prc_indx_pl_s (Provider_Location_id, Service_id)	