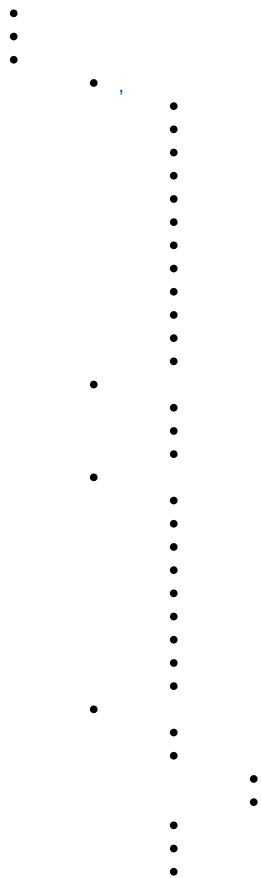


2.0–6.0

 6.2+

 This article in English: [Intermediate Schema for Data Migration](#)



 ER- : <https://dbdiagram.io/d/5fca9ba19a6c525a03b9da84>

- , CSV.
- UTF-8 BOM
 - — ;
 - " ;
 - (;"")
 - (ID) (*_ID)
 - ZIP- CSV-

"ID","USER_ID","ACC_NUM","ACC_TYPE_ID","CUR_ID","BANK_ID","BALANCE","CREDIT","CREDIT_END_DATE","
BALANCE_DATE"
"1001","101","123456","1","1","","","926,07","500","","23.09.2017 23:59:59"

 : [example_load.zip](#)

CSV- «», .

 « » :

- : **26.04.2009 13:04:55** (Oracle — **DD.MM.YYYY HH24:MI:SS**). : .
- : **26.04.2009** (Oracle — **DD.MM.YYYY**). .

«» : **26.04.2009** (Oracle — **DD.MM.YYYY**).

1. .

2. , ().

3. (,) , .

4. (, , ..) , .

 REM, . :,, ..

 ID

,

, , «» .

STATUS

ID	ID
NAME	

(,).

NS_LIST

ID	ID
NAME	

: , (RADIUS, , , ..)

UNITS_LIST

ID	ID

NAME	
------	--

:

SERVICES

ID	ID ()	
NAME	()	
TYPE	(Y, ; N,)	
UNIT_ID	ID — UNITS_LIST.ID	. 0,

: , (TYPE = "Y" , TYPE = "N" —)

CURRENCY

ID	ID
NAME	

:

EQUIP_TYPE

ID	ID
NAME	

: ,

OP_EQUIP

ID	ID	
EQUIP_TYPE_ID	ID	EQUIP_TYPE.ID
CODE		
IP	IP-	
FIRM_ID	ID	FIRMS.ID.

:

GROUPS

ID	ID

NAME	
------	--

• • • • •

BANKS

ID	ID
NAME	

$$\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

ACC_TYPES

ID	ID
NAME	

•

AUTH_DOC_TYPES

ID	ID
NAME	

• =

PAYMENT_TYPE

ID	ID
NAME	
VIRTUAL	. 'Y'

∴ (, , , Visa, Webmoney), .

;

PHONE_TYPES

ID	ID
NAME	(, , .)

2

FACT_ADDR_BIND_TYPES

ID	ID
NAME	(, , . .)

.

, FIRM_ID USERS OP_EQUIP

FIRMS

ID	ID
NAME	

.

USERS

ID	ID	
STATUS_ID	ID	STATUS.ID.
BASE_ID	ID	USERS.ID (ID).
LOGIN		,
JUR	(0 — , 1 —)	
NAME	(.) / (.)	
ADDR	<>, <>, <>, <>, <>, <>, <>, <>	- , , , ., 5,,, 78,5234 : ., ., 5. 7,,, 78,5234
ADDR_REM		
AUTH_DOC_TYPE_ID	-	AUTH_DOC_TYPES.ID
AUTH_DOC_SERIAL		
AUTH_DOC_NO		
AUTH_DOC_DATE		DD.MM.YYYY
AUTH_DOC_ISSUE	/	
D_BIRTH		DD.MM.YYYY
BIRTH_PLACE		
INN		
OPF	- , : ,	. -
W_PHONE		, , 78122128506. ,
H_PHONE		, JUR 0. ,

M_PHONE		, , 78122128506. ,
EMAIL	email	, , 78122128506. ,
FIRM_ID	ID	FIRMS.ID.

ACCOUNTS

ID	ID	
USER_ID	ID	USERS.ID
ACC_NUM		
ACC_TYPE_ID	ID (,)	ACC_TYPES.ID
CUR_ID	ID	CURRENCY.ID (,)
BANK_ID	ID	BANKS.ID (-)
BALANCE		
CREDIT		, . — .
CREDIT_END_DATE		, CREDIT ,
BALANCE_DATE		, PAYMENTS, , , ACCOUNTS.BALANCE.

GROUPLINK

ID	ID	
USER_ID	ID	USERS.ID
GROUP_ID	ID	GROUPS.ID
MAIN	- 'Y'	. .

GROUPS ().

EQUIP

ID	ID	
USER_ID	ID	USERS.ID
EQUIP_TYPE_ID	ID	EQUIP_TYPE.ID
		,
OP_EQUIP_ID	ID	OP_EQUIP.ID
OP_EQUIP_PORT	()	
OP_EQUIP_PORT_TYPE		,
NS_ID	ID	NS_LIST.ID. -

CODE		,
MAC	(MAC) 01-23-45-67-89-AB	,
IP	IPv4 (CIDR-)	,
IP6	IPv6	,
PHONE		, , 78122128506. ,
ADDR		, USERS.ADDR
ADDR_REM		

: OP_EQUIP_ID, OP_EQUIP_PORT, OP_EQUIP_PORT_TYPE .

NETSERV

ID	ID	
USER_ID	ID	USERS.ID
NS_ID	ID	NS_LIST.ID
EQUIP_ID	ID	EQUIP.ID , . () .
LOGIN		
PASSWORD		
PASS_TYPE		, . . « » : SSHA1, MD5 ..

: VPN, , SIP- , . . , .

CONTRACTS

ID	ID	
USER_ID	ID	USERS.ID
NUM		
D_DOC		
D_BEGIN		
D_END		

SUBSCR

ID	ID	
ACC_ID	ID	ACCOUNTS.ID
CONTRACT_ID	ID	CONTRACTS.ID
TARIFF_ID	ID ()	SERVICES.ID

EQUIP_ID	ID	EQUIP.ID
D_BEGIN		,
D_END		,
QUANT		, TARIFF_ID SERVICES.UNIT_ID SERVICES.UNIT_ID ,
PAY_DAY		

1, PAY_DAY = 1 ().

PAYMENTS

ID	ID	
ACC_ID	ID	ACCOUNTS.ID
BANK_ID	ID	BANKS.ID.
D_OPER	()	
PAYMENT_SUM	, 100 ()	
PAYMENT_TYPE_ID		PAYMENT_TYPE.ID. -

WRITEOFFS

ID	ID	
ACC_ID	ID	ACCOUNTS.ID
CONTRACT_ID	ID	CONTRACTS.ID
D_OPER	()	, D_BEGIN D_END
TARIFF_ID	ID ()	SERVICES.ID
EQUIP_ID	ID	EQUIP.ID
SUM	, 100	,
D_BEGIN		
D_END		
USED	, 100	, TARIFF_ID SERVICES.UNIT_ID SERVICES.UNIT_ID ,

WRITEOFFS : 0. (), ().

COMMENT_TYPES

ID	ID

NAME	
------	--

” ”

USER_COMMENTS

ID	
USER_ID	USERS.ID
COMMENT_TYPE_ID	COMMENT_TYPES.ID
CL_COMMENT	
D_OPER	
D_SIGNAL	
D_EXEC	

EQUIP_COMMENTS

ID	
EQUIP_ID	EQUIP.ID
COMMENT_TYPE_ID	COMMENT_TYPES.ID
CL_COMMENT	
D_OPER	
D_SIGNAL	
D_EXEC	

， ， ， USERS.ADDR PARSED_USER_ADDRESSES. ， ， ， ， — 。

CUSTOMER_STREET_ADDRESSES

USER_ID	ID USERS	USERS.ID
ADDR_BIND_TYPE_ID		FACT_ADDR_BIND_TYPES.ID ， —
VC_ORIGINAL	USERS.ADDR.	-
VC_DISTRICT	()	— REGION_TYPE_District
VC_CITY		
VC_CITY_TYPE		: «.», «.»...
VC_STREET		
VC_STREET_TYPE		: «.», «->, «.»...
VC_HOUSE		
VC_BUILDING		
VC_CONSTRUCT		
VC_OWNERSHIP		
VC_ENTRANCE_NO		

VC_FLOOR		
VC_FLAT		
VC_DIS_CODE		
VC_CUSTOM_ADDRESS		
VC_REM		

EQUIPMENT_STREET_ADDRESSES

EQUIP_ID	ID EQUIP	EQUIP.ID
ADDR_BIND_TYPE_ID		FACT_ADDR_BIND_TYPES.ID. -
VC_ORIGINAL	EQUIP.ADDR.	-
VC_DISTRICT	()	— REGION_TYPE_District
VC_CITY		
VC_CITY_TYPE		: «.», «.»...
VC_STREET		
VC_STREET_TYPE		: «.», «-», «.»...
VC_HOUSE		
VC_BUILDING		
VC_CONSTRUCT		
VC_OWNERSHIP		
VC_ENTRANCE_NO		
VC_FLOOR		
VC_FLAT		
VC_DIS_CODE		
VC_CUSTOM_ADDRESS		
VC_REM		

USER_PHONES

USER_ID	ID USERS
PHONE_TYPE_ID	ID PHONE_TYPES
PHONE	
REM	

. USER_MAPPINGS

USER_MAPPINGS

USER_ID	ID USERS
USER_DST_CODE	

 USERS, NETSERV () .

DEPARTMENTS ()

ID	
FIRM_ID	FIRMS.ID
NAME	

EMPLOYEE_TYPES ()

ID	
NAME	

EMPLOYEES ()

ID		
USER_ID		USERS.ID
FIRM_ID	,	FIRMS.ID
DEPARTMENT_ID	()	DEPARTMENTS.ID
EMPLOYEE_TYPE_ID	()	EMPLOYEE_TYPES.ID
NAME_GENITIVE		
APPOINTMENT		
APPOINTMENT_GENITIVE		
ACT_AUTHORITY		
TAB_NO		
D_BEGIN		
D_FIRE		
REM		