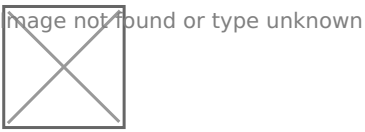


# Exercice Data Warehouse

Le but de cette exercice est de construire un data warehouse pour une micro société d'informatique. Cette société se compose ainsi:

- Les personnes ont un nom, prenom et nom d'usage
- Les personnes ont aussi une adresse ainsi que des contacts a prevenir en cas d'urgence.
- Principalement, ils utilisent du matériel informatique qui peuvent être des PC.

Le schéma est le suivant :



## Solution

```
SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;

SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;

SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE=' TRADITIONAL' ;

DROP SCHEMA IF EXISTS orsysformation ;

CREATE SCHEMA IF NOT EXISTS orsysformation DEFAULT CHARACTER SET latin1 ;

USE orsysformation ;

-- -----

-- Table orsysformation.ville

-- -----

DROP TABLE IF EXISTS orsysformation.ville ;
```

```
CREATE TABLE IF NOT EXISTS orsysformation.ville (
```

```
    departement VARCHAR(3) NOT NULL ,  
    INSEE VARCHAR(5) NOT NULL DEFAULT ,  
    commune VARCHAR(100) NOT NULL ,  
    idville INT(11) NOT NULL AUTO_INCREMENT ,  
    PRIMARY KEY (idville) ,  
    INDEX IDX_DEPARTEMENT (departement ASC) )  
ENGINE = InnoDB
```

```
AUTO_INCREMENT = 201
```

```
DEFAULT CHARACTER SET = latin1;
```

```
-----  
-- Table orsysformation.adresse  
-----
```

```
DROP TABLE IF EXISTS orsysformation.adresse ;
```

```
CREATE TABLE IF NOT EXISTS orsysformation.adresse (
```

```
    idadresse INT(11) NOT NULL AUTO_INCREMENT ,  
    rue VARCHAR(50) NOT NULL COMMENT 'le nom de la rue avec le numéro' ,  
    ville INT(11) NOT NULL DEFAULT '1' COMMENT 'Reference la table ville' ,  
    PRIMARY KEY (idadresse) ,  
    INDEX in_ville (ville ASC) ,  
    CONSTRAINT fk_ville  
        FOREIGN KEY (ville )  
        REFERENCES orsysformation.ville (idville )  
ENGINE = InnoDB
```

```
AUTO_INCREMENT = 201
```

```
DEFAULT CHARACTER SET = latin1
```

```
COMMENT = 'Contient les informations sur les adresses des contact et du' /* comment truncated */;
```

```
-----
```

```
-- Table orsysformation.application
```

```
-----
```

```
DROP TABLE IF EXISTS orsysformation.application ;
```

```
CREATE TABLE IF NOT EXISTS orsysformation.application (
```

```
    idapplication INT(11) NOT NULL AUTO_INCREMENT ,  
    name_application VARCHAR(20) NOT NULL ,  
    type_application ENUM('bureautique','developpeur','financiere','autre') NOT NULL ,  
    PRIMARY KEY (idapplication) )  
ENGINE = InnoDB
```

```
AUTO_INCREMENT = 201
```

```
DEFAULT CHARACTER SET = latin1;
```

```
-----
```

```
-- Table orsysformation.contacturgent
```

```
-----
```

```
DROP TABLE IF EXISTS orsysformation.contacturgent ;
```

```
CREATE TABLE IF NOT EXISTS orsysformation.contacturgent (
```

```

idContactUrgent INT(11) NOT NULL AUTO_INCREMENT ,
nom VARCHAR(25) NOT NULL DEFAULT 'INCONNU' ,
idadresse INT(11) NULL DEFAULT NULL ,
telephone VARCHAR(10) NULL DEFAULT NULL ,
relation ENUM(' famille',' autre') NULL DEFAULT NULL ,
PRIMARY KEY (idContactUrgent) ,
INDEX in_adresse (idadresse ASC) ,
CONSTRAINT fk_adresse
    FOREIGN KEY (idadresse )
    REFERENCES orsysformation.adresse (idadresse )
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB

AUTO_INCREMENT = 201

DEFAULT CHARACTER SET = latin1;

-----

-- Table orsysformation.materiel_informatique

-----

DROP TABLE IF EXISTS orsysformation.materiel_informatique ;

CREATE TABLE IF NOT EXISTS orsysformation.materiel_informatique (

    idmateriel INT(11) NOT NULL AUTO_INCREMENT ,
    typemateriel ENUM(' PC',' Laptop',' Portable') NULL DEFAULT NULL ,
    daterevision DATE NULL DEFAULT NULL ,
    PRIMARY KEY (idmateriel) )
ENGINE = InnoDB

AUTO_INCREMENT = 201

DEFAULT CHARACTER SET = latin1;

```

```
-----  
-- Table orsysformation.materiel_pc  
-----
```

```
DROP TABLE IF EXISTS orsysformation.materiel_pc ;
```

```
CREATE TABLE IF NOT EXISTS orsysformation.materiel_pc (
```

```
    idmateriel INT(11) NOT NULL ,  
    memoire INT(11) NOT NULL DEFAULT '0' ,  
    disque INT(11) NOT NULL DEFAULT '0' ,  
    processeur ENUM('pentium','core ix','autre') NOT NULL DEFAULT 'autre' ,  
    ip VARCHAR(20) NULL DEFAULT NULL ,  
    PRIMARY KEY (idmateriel) ,  
    CONSTRAINT fk_materiel  
        FOREIGN KEY (idmateriel )  
        REFERENCES orsysformation.materiel_informatique (idmateriel )  
ENGINE = InnoDB
```

```
DEFAULT CHARACTER SET = latin1;
```

```
-----  
-- Table orsysformation.personne  
-----
```

```
DROP TABLE IF EXISTS orsysformation.personne ;
```

```
CREATE TABLE IF NOT EXISTS orsysformation.personne (
```

```
    idPersonne INT(11) NOT NULL AUTO_INCREMENT ,  
    nom VARCHAR(25) NOT NULL ,
```

```
prenom VARCHAR(25) NOT NULL ,
nom_usage VARCHAR(25) NOT NULL ,
PRIMARY KEY (idPersonne) ,
INDEX fk_personnerh (idPersonne ASC) )
ENGINE = InnoDB
```

```
AUTO_INCREMENT = 201
```

```
DEFAULT CHARACTER SET = latin1;
```

```
-----
-- Table orsysformation.personnerh
-----
```

```
DROP TABLE IF EXISTS orsysformation.personnerh ;
```

```
CREATE TABLE IF NOT EXISTS orsysformation.personnerh (
```

```
idPersonne INT(11) NOT NULL ,
date_naissance DATE NULL DEFAULT NULL ,
adresse_personnel INT(11) NULL DEFAULT NULL ,
bureau VARCHAR(25) NULL DEFAULT NULL ,
telephone VARCHAR(14) NOT NULL DEFAULT '0033600000000' ,
telephone_mobile VARCHAR(14) NULL DEFAULT NULL ,
sexe ENUM('M','F','XX') NULL DEFAULT 'XX' ,
PRIMARY KEY (idPersonne) ,
INDEX in_contacturgent (idPersonne ASC) ,
INDEX in_personne (idPersonne ASC) ,
INDEX in_adresse (adresse_personnel ASC) ,
CONSTRAINT personnerh_ibfk_1
    FOREIGN KEY (idPersonne )
    REFERENCES orsysformation.personne (idPersonne )
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
CONSTRAINT personnerh_ibfk_2
    FOREIGN KEY (adresse_personnel )
```

```

REFERENCES orsysformation.adresse (idadresse )
ON DELETE NO ACTION
ON UPDATE NO ACTION)
ENGINE = InnoDB

DEFAULT CHARACTER SET = latin1;

-----

-- Table orsysformation.rel_materiel_personne

-----

DROP TABLE IF EXISTS orsysformation.rel_materiel_personne ;

CREATE TABLE IF NOT EXISTS orsysformation.rel_materiel_personne (

idpersonne INT(11) NOT NULL ,
idmateriel INT(11) NOT NULL ,
PRIMARY KEY (idmateriel) ,
INDEX fk_materielinformatique (idmateriel ASC) ,
INDEX in_personne (idpersonne ASC) ,
CONSTRAINT fk_materielinformatique
FOREIGN KEY (idmateriel )
REFERENCES orsysformation.materiel_informatique (idmateriel )
ON DELETE NO ACTION
ON UPDATE NO ACTION,
CONSTRAINT fk_personne
FOREIGN KEY (idpersonne )
REFERENCES orsysformation.personne (idPersonne )
ON DELETE NO ACTION
ON UPDATE NO ACTION)
ENGINE = InnoDB

DEFAULT CHARACTER SET = latin1;

```

```

-----

-- Table orsysformation.rel_personne_application

-----

DROP TABLE IF EXISTS orsysformation.rel_personne_application ;

CREATE TABLE IF NOT EXISTS orsysformation.rel_personne_application (

    idpersonne INT(11) NOT NULL ,
    idapplication INT(11) NOT NULL ,
    login VARCHAR(20) NULL DEFAULT NULL ,
    password VARCHAR(20) NULL DEFAULT NULL ,
    PRIMARY KEY (idpersonne, idapplication) ,
    INDEX fk_rel_personne_application_personnerh1 (idpersonne ASC) ,
    INDEX in_applicatif (idapplication ASC) ,
    INDEX log_pass (login ASC, password ASC) ,
    CONSTRAINT fk_applicatif
        FOREIGN KEY (idapplication )
        REFERENCES orsysformation.application (idapplication )
        ON DELETE NO ACTION
        ON UPDATE NO ACTION,
    CONSTRAINT fk_rel_personne_application_personnerh1
        FOREIGN KEY (idpersonne )
        REFERENCES orsysformation.personne (idPersonne )
        ON DELETE NO ACTION
        ON UPDATE NO ACTION)
ENGINE = InnoDB

DEFAULT CHARACTER SET = latin1;

```

```

-----

-- Table orsysformation.relpersonnerhcontacturgent

-----

```

```
DROP TABLE IF EXISTS orsysformation.relpersonnerhcontacturgent ;
```

```
CREATE TABLE IF NOT EXISTS orsysformation.relpersonnerhcontacturgent (
```

```
    idPersonneRH INT(11) NOT NULL ,  
    idContactUrgent INT(11) NOT NULL ,  
    PRIMARY KEY (idContactUrgent) ,  
    INDEX in_personne (idPersonneRH ASC) ,  
    CONSTRAINT fk_contacturgent  
        FOREIGN KEY (idContactUrgent )  
        REFERENCES orsysformation.contacturgent (idContactUrgent ) ,  
    CONSTRAINT relpersonnerhcontacturgent_ibfk_1  
        FOREIGN KEY (idPersonneRH )  
        REFERENCES orsysformation.personnerh (idPersonne )  
        ON DELETE NO ACTION  
        ON UPDATE NO ACTION)  
ENGINE = InnoDB
```

```
DEFAULT CHARACTER SET = latin1;
```

```
-----
```

```
-- Placeholder table for view orsysformation.parc_applicatif
```

```
-----
```

```
CREATE TABLE IF NOT EXISTS orsysformation.parc_applicatif (nom INT, name_application INT,  
type_application INT, login INT, password INT);
```

```
-----
```

```
-- Placeholder table for view orsysformation.vue_demenageur
```

```
-----
```

```
CREATE TABLE IF NOT EXISTS orsysformation.vue_demenageur (idpersonne INT, nom INT, prenom INT,  
nom_usage INT, bureau INT, telephone INT);
```

```

-----

-- View orsysformation.parc_applicatif

-----

DROP VIEW IF EXISTS orsysformation.parc_applicatif ;

DROP TABLE IF EXISTS orsysformation.parc_applicatif;

USE orsysformation;

CREATE OR REPLACE ALGORITHM=UNDEFINED DEFINER=root@localhost SQL SECURITY DEFINER VIEW
orsysformation.parc_applicatif AS select orsysformation.personne.nom AS
nom, orsysformation.application.name_application AS
name_application, orsysformation.application.type_application AS
type_application, orsysformation.rel_personne_application.login AS
login, orsysformation.rel_personne_application.password AS password from
((orsysformation.personne join orsysformation.rel_personne_application
on((orsysformation.personne.idPersonne = orsysformation.rel_personne_application.idpersonne)))
join orsysformation.application on((orsysformation.rel_personne_application.idapplication =
orsysformation.application.idapplication)));

-----

-- View orsysformation.vue_demenageur

-----

DROP VIEW IF EXISTS orsysformation.vue_demenageur ;

DROP TABLE IF EXISTS orsysformation.vue_demenageur;

USE orsysformation;

CREATE OR REPLACE ALGORITHM=UNDEFINED DEFINER=root@localhost SQL SECURITY DEFINER VIEW
orsysformation.vue_demenageur AS select orsysformation.personne.idPersonne AS
idpersonne, orsysformation.personne.nom AS nom, orsysformation.personne.prenom AS

```

```
prenom, orsysformation.personne.nom_usage AS nom_usage, orsysformation.personnerh.bureau AS
bureau, orsysformation.personnerh.telephone AS telephone from (orsysformation.personne left
join orsysformation.personnerh on((orsysformation.personne.idPersonne =
orsysformation.personnerh.idPersonne)));
```

```
USE orsysformation;
```

```
DELIMITER $$
```

```
USE orsysformation$$
```

```
DROP TRIGGER IF EXISTS orsysformation.insert_personne $$
```

```
USE orsysformation$$
```

```
CREATE
```

```
DEFINER=root@localhost
```

```
TRIGGER orsysformation.insert_personne
```

```
AFTER INSERT ON orsysformation.personne
```

```
FOR EACH ROW
```

```
BEGIN
```

```
DECLARE mycontactId INTEGER;
```

```
insert into personnerh(idPersonne) values (NEW.idPersonne);
```

```
insert into contacturgent values ();
```

```
select MAX(contacturgent.idContactUrgent) from contacturgent into mycontactId;
```

```
insert into relpersonnerhcontacturgent values(NEW.idPersonne,mycontactId);
```

```
END$$
```

```
DELIMITER ;
```

```
SET SQL_MODE=@OLD_SQL_MODE;
```

```
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;
```

```
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

---

Revision #2

Created 6 September 2022 14:05:42 by ggpilou2

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