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TOLL MANAGER

Thesaurus

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MCD

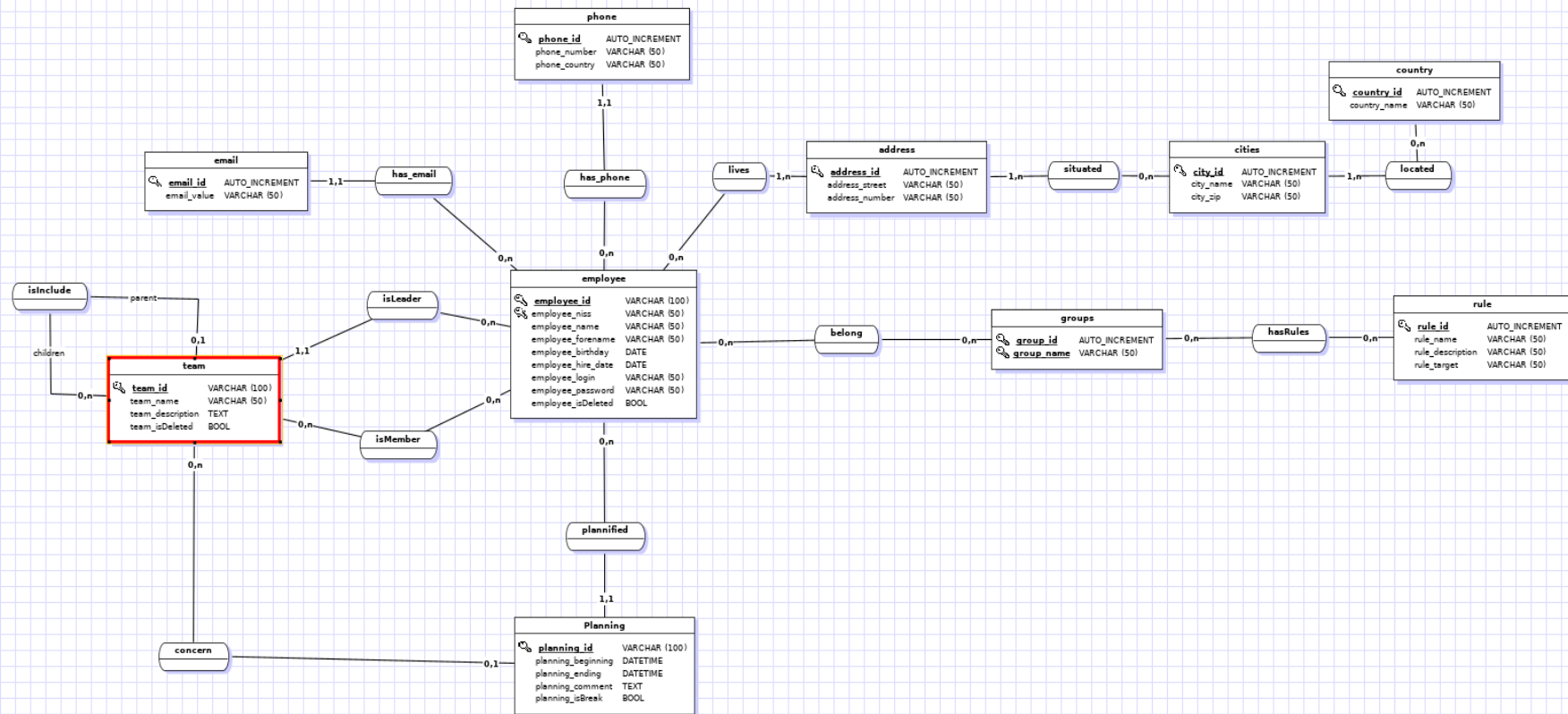


Figure 1mcd

MLD

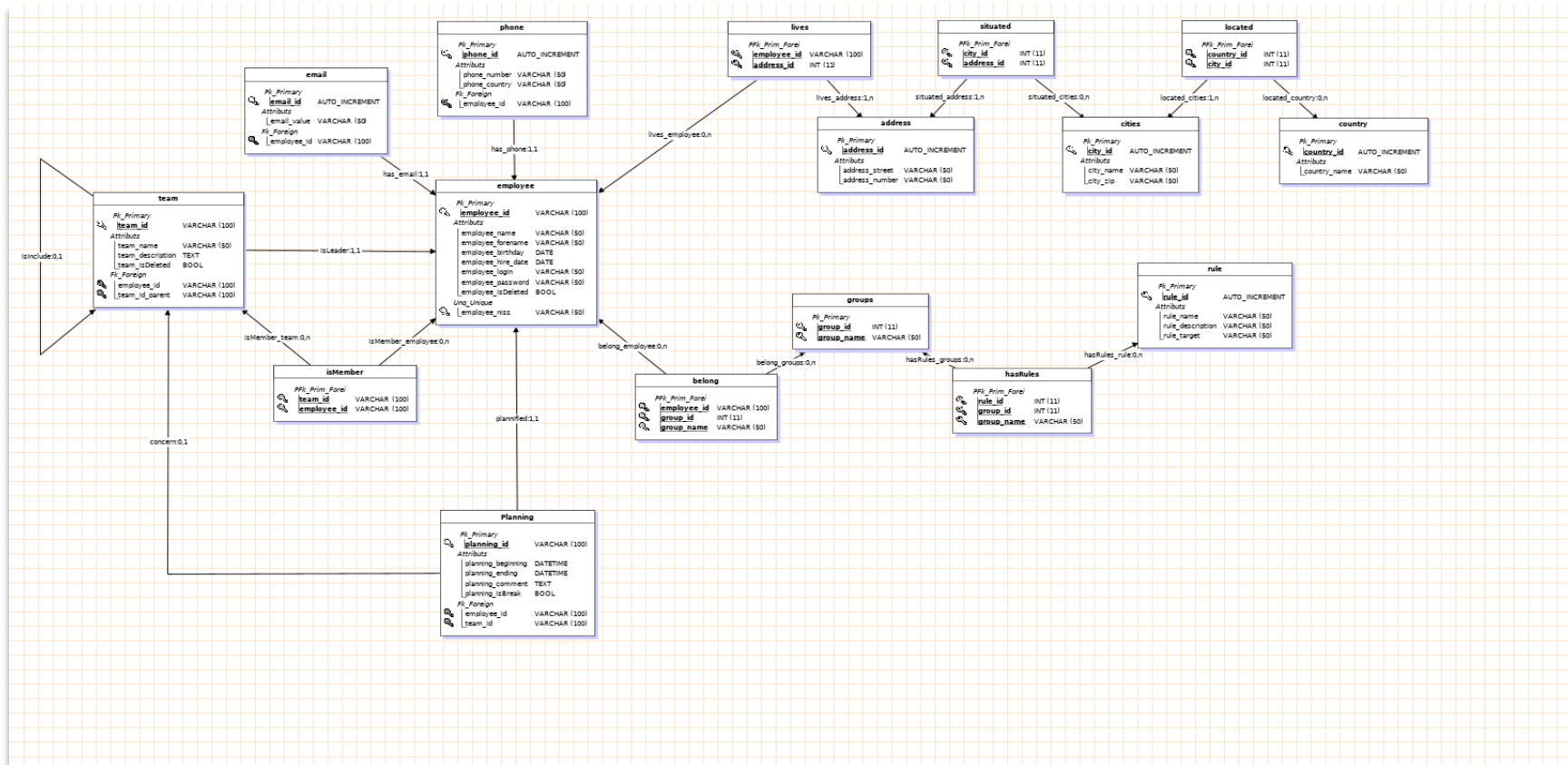


Figure 2mld

Addresses

Country

Represent a country with a name that be unique, a country can have zero or many cities

Country_id	SERIAL auto_incremented	The id generated by the database
Country_name	VARCHAR(50)	The name of the country

Cities

Represent a city with a name and a zip code, the tuple (city,zip) must be unique, a city can belong ONE OR MANY country and has ZERO OR MANY address

city_id	SERIAL auto_incremented	The id generated by database
City_name	VARCHAR(50)	The name of the city
City_zip	VARCHAR(50)	The zip code of the city

Address

Represent the house number and the street where an employee can be live, an address can have ONE OR MANY employee (case where couple works at same work).

Address_id	SERIAL auto_incremented	The id generated by database
Address_street	VARCHAR(50)	The street name
Address_number	VARCHAR(50)	The number of the house

Address example

- 1 | 400 rue du pont | 1300 Wavre | Belgique
- 2 | 72 dreve trevier | 1300 Limal | Belgique

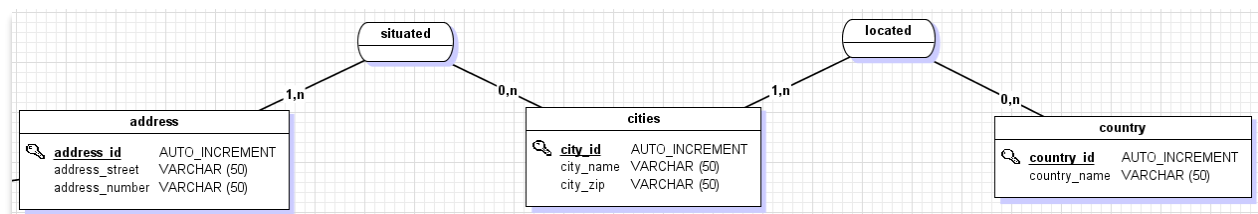


Figure 3mcd address

Contacts

Phone

Represent a phone number with a country code like BE, NL, FR, ... The phone number must be unique

Phone_id	SERIAL auto_incremented	The id generated by database
Phone_number	VARCHAR(50)	The phone number UNIQUE
Phone_country	VARCHAR(50)	The country code

Examples

- 1 | BE | 0478 69 60 60
- 2 | FR | 06 04 12 31 22

Email

Represent an email, the email must be unique

Email_id	SERIAL auto_incremented	The id generated by database
Email_value	VARCHAR(50)	The email UNIQUE

Example

- 1 | anEmail@mail.com

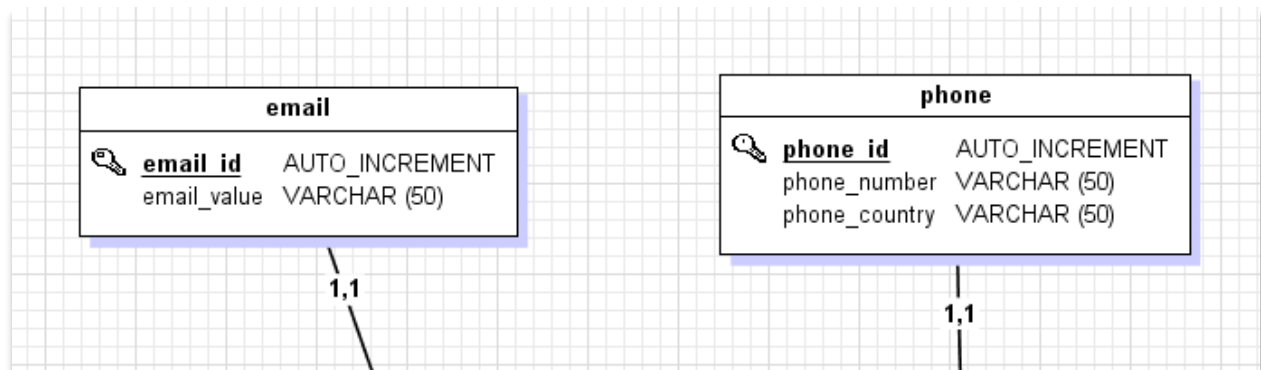


Figure 4mcd contract

Teams

Team

Represent a team where employee can be belonging and where team leader will manage, each team must have ONE AND ONLY ONE Leader, ZERO OR MANY employee, ZERO OR MANY planning and finally a team can have ZERO OR MANY team included (sub team). A team can be deleted only logically.

Team_id	VARCHAR(50)	The id must be managed by the application
Team_name	Varchar(50)	The name of the team (UNIQUE)
Team_description	TEXT	A description of the team
Team_isDeleted	BOOL	Represent if the team is deleted

Example:

- UUID-01 | Technical-team | a team for technic | false
 - isLeader UUID-01 | UUID-EMPLOYEE-1 (team | employee)
 - isMember UUID-01 | UUID-EMPLOYEE-1 (team | employee)
- UUID-02 | Technical-team-division-A | for department A | false
 - IsIncluded UUID-01 | UUID-02 (parent | children)
 - isMember UUID-01 | UUID-EMPLOYEE-2 (team | employee)

The technical team has one sub team with one member (UUID-EMPLOYEE_2), so the employee(2) belongs to technical-team-division-A and technical-team, but the first employee (UUID-EMPLOYEE-1) Not belong to the sub team and he is the team leader

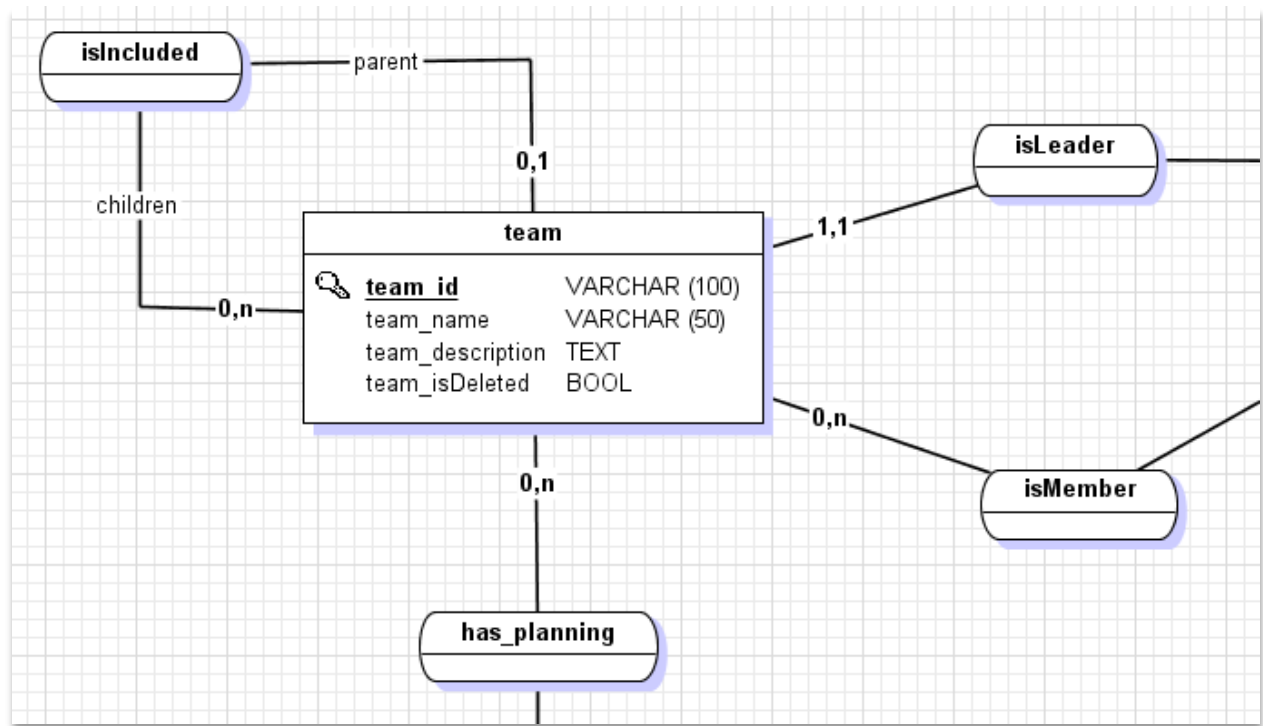


Figure 5mcd team

Planning

planning

Represent planning linked to an employee and a team

Planning_id	VARCHAR(100)	The id must be managed by the application
Planning_beginning	Datetime	Date and time for the beginning
Planning_ending	Datetime	Date and time for ending
Planning_comment	TEXT	A comment for the planning
Planning_isBreak	BOOL	Represent if the planning is a day off

Example:

- UUID-1 | 2019-12-27 08:00:00 | 2019-12-27 19:00:00 | | false |
 - Plannified (UUID-employee-01 | UUID-1)
 - Has_planning (UUID-team-1 | UUID-1)

A planning begin the 27 december 2019 at 8h to 19h for the employee UUID-EMPLOYEE-01 in TEAM UUID-team-01.

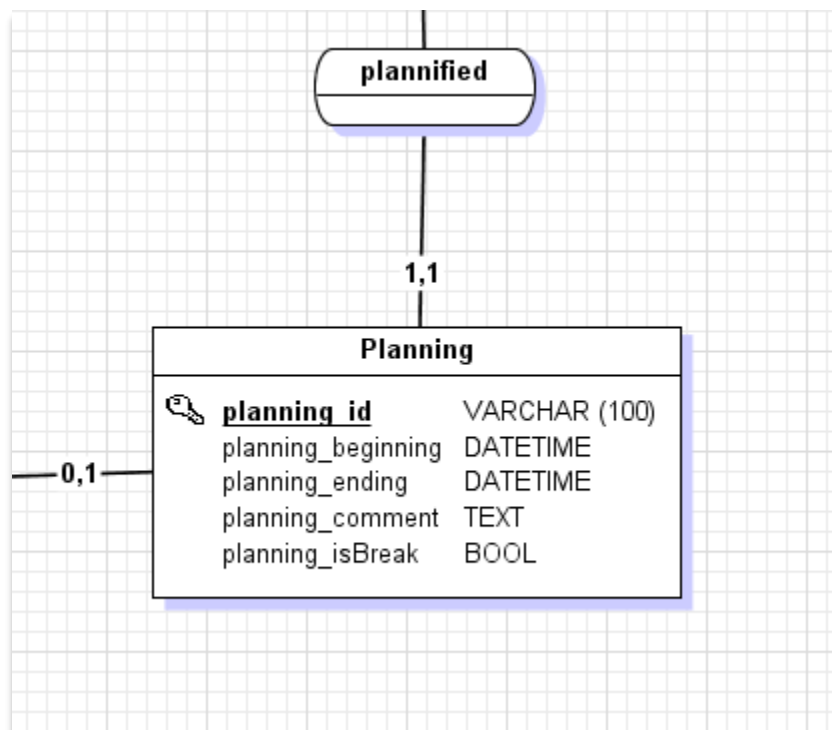


Figure 6mcd planning

Groups authorities

Groups

Represent a group that has ZERO OR MANY rules and has ZERO OR MANY employee. A group represents the authority in the application, so which group employee belongs involve his roles and authorization

Group_id	SERIAL Auto_increment	The id generated by database
Group_name	VARCHAR(50)	The name of the group UNIQUE

Example:

- UUID-GROUP-1 | administrator

Rule

Represent a rule with a name and a target, a rule can belong to ZERO OR MANY groups. The target of a rule can be anything , an employee, a group , a team, A special character '*' for everything

Rule_id	SERIAL auto_incremented	The id generated by database
Rule_name	VARCHAR(50)	The name of the rule
Rule_description	TEXT	Describe the rule
Rule_target	VARCHAR(50)	The target of the rule

Example:

- UUID-RULES-1 | create_employee | rule to create employee | team_manager
 - hasRules UUID-GROUP-1 | UUID-RULES-1

The group administrator can create employee into the team manager.

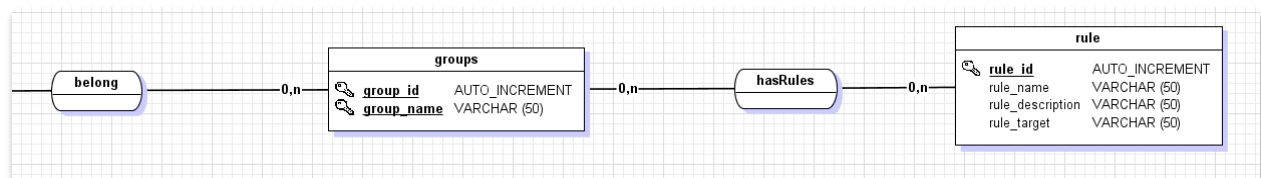


Figure 7MCD group and rule

Employees and user

Employee

Represent an employee who will be an employee, a manager, a team leader... It depends which group he will belong.

Employee_id	VARCHAR(50)	The id must be managed by the application
Employee_niss	VARCHAR(50)	The NISS of the employee
Employee_name	VARCHAR(50)	The name of the employee
Employee_birthday	DATE	The birthday of the employee
Employee_hireDate	DATE	The date when the employee is encoded in application
Employee_login	VARCHAR(50)	The login of the employee nullable
Employee_password	VARCHAR(100)	The password of the employee

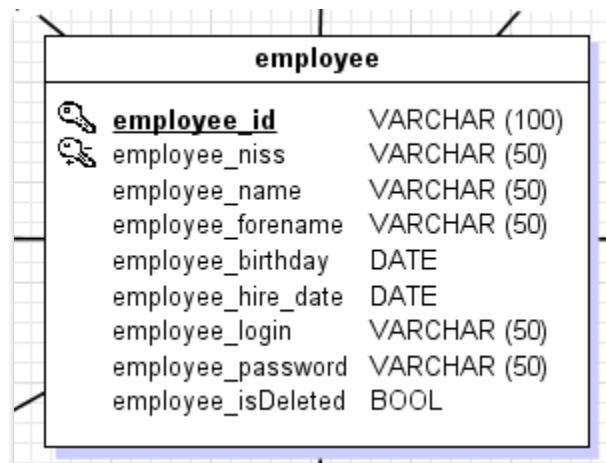


Figure 8mcd employee

