
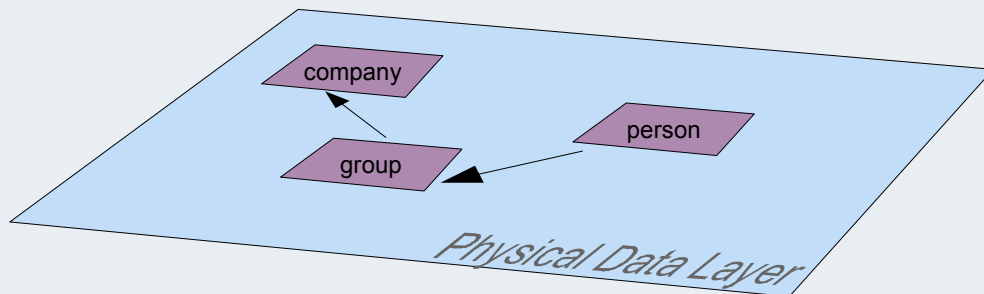




What is a „Relation Set“ in the context of
jACOB?

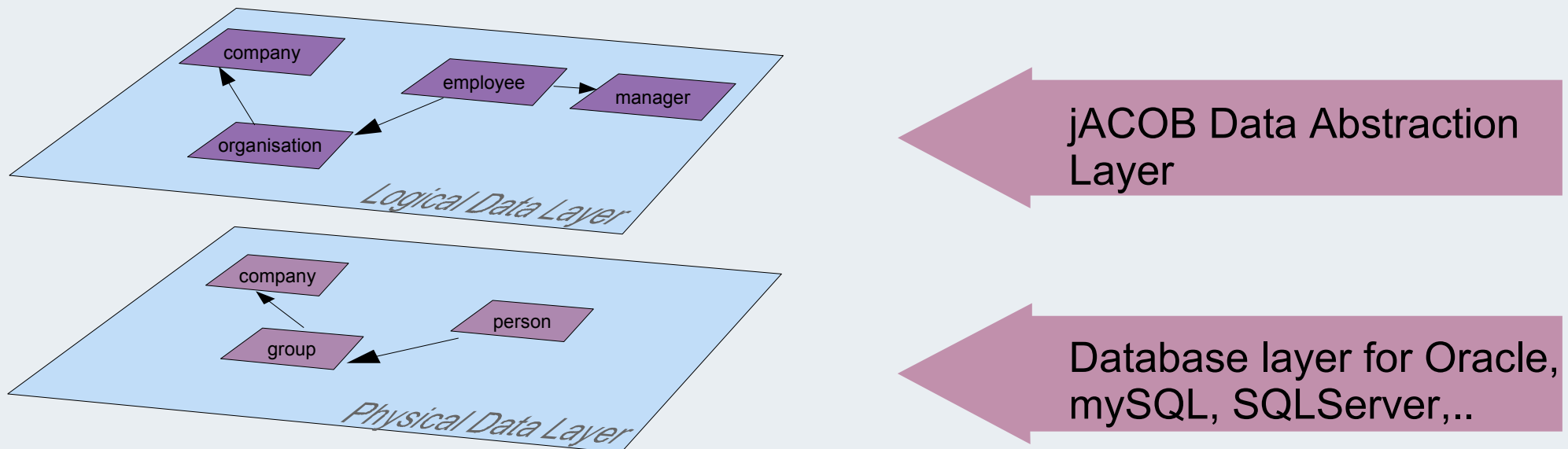
First of all jACOB is divided into three different layers.

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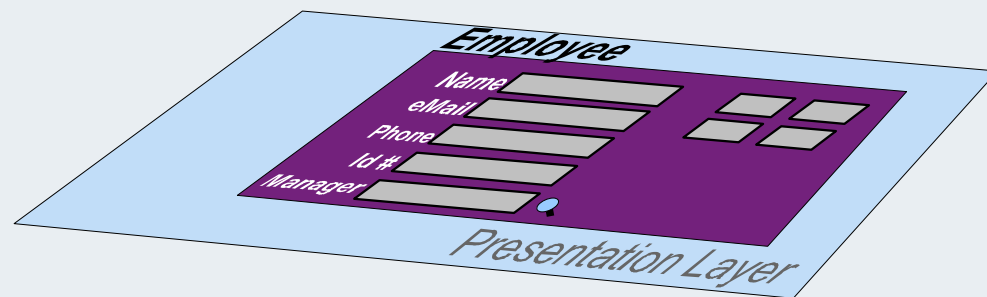


Database layer for Oracle,
mySQL, SQLServer, ..

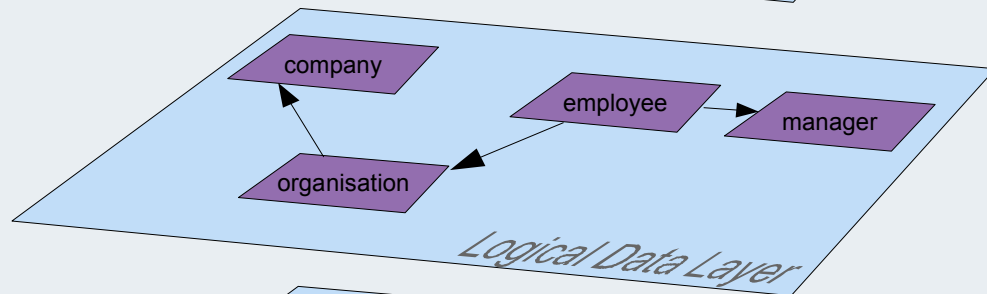
First of all jACOB is divided into three different layers.



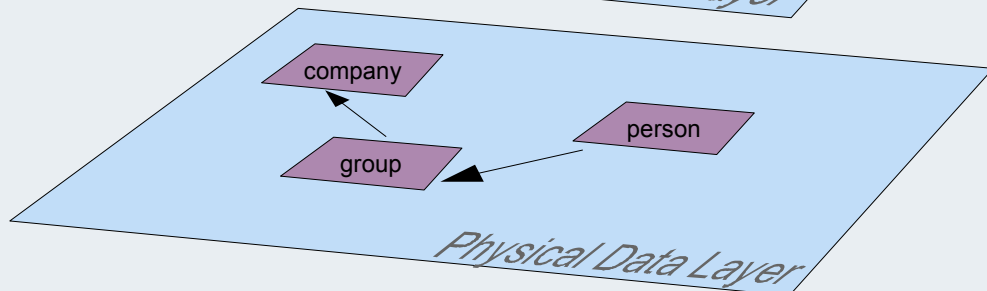
First of all jACOB is divided into three different layers.



User interface layer for
HTML or XUL.

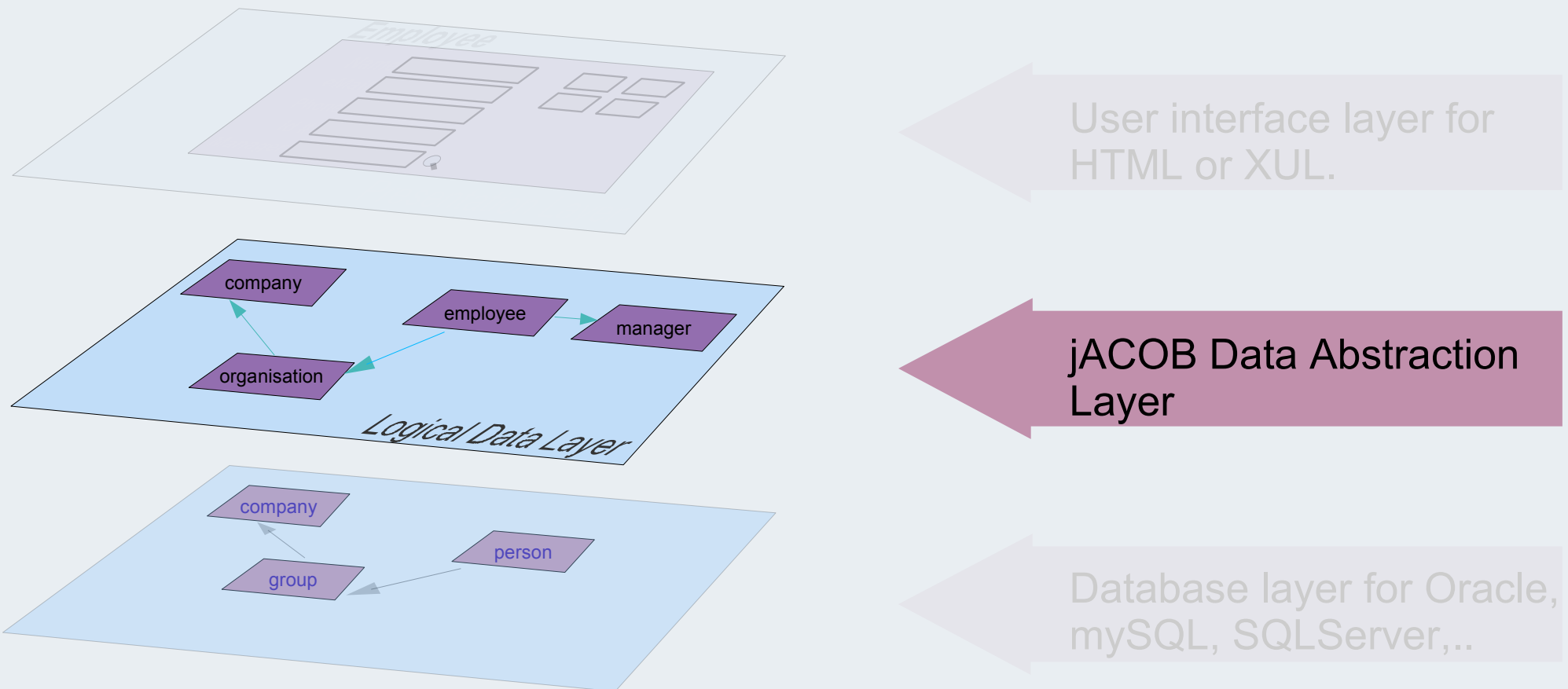


jACOB Data Abstraction
Layer

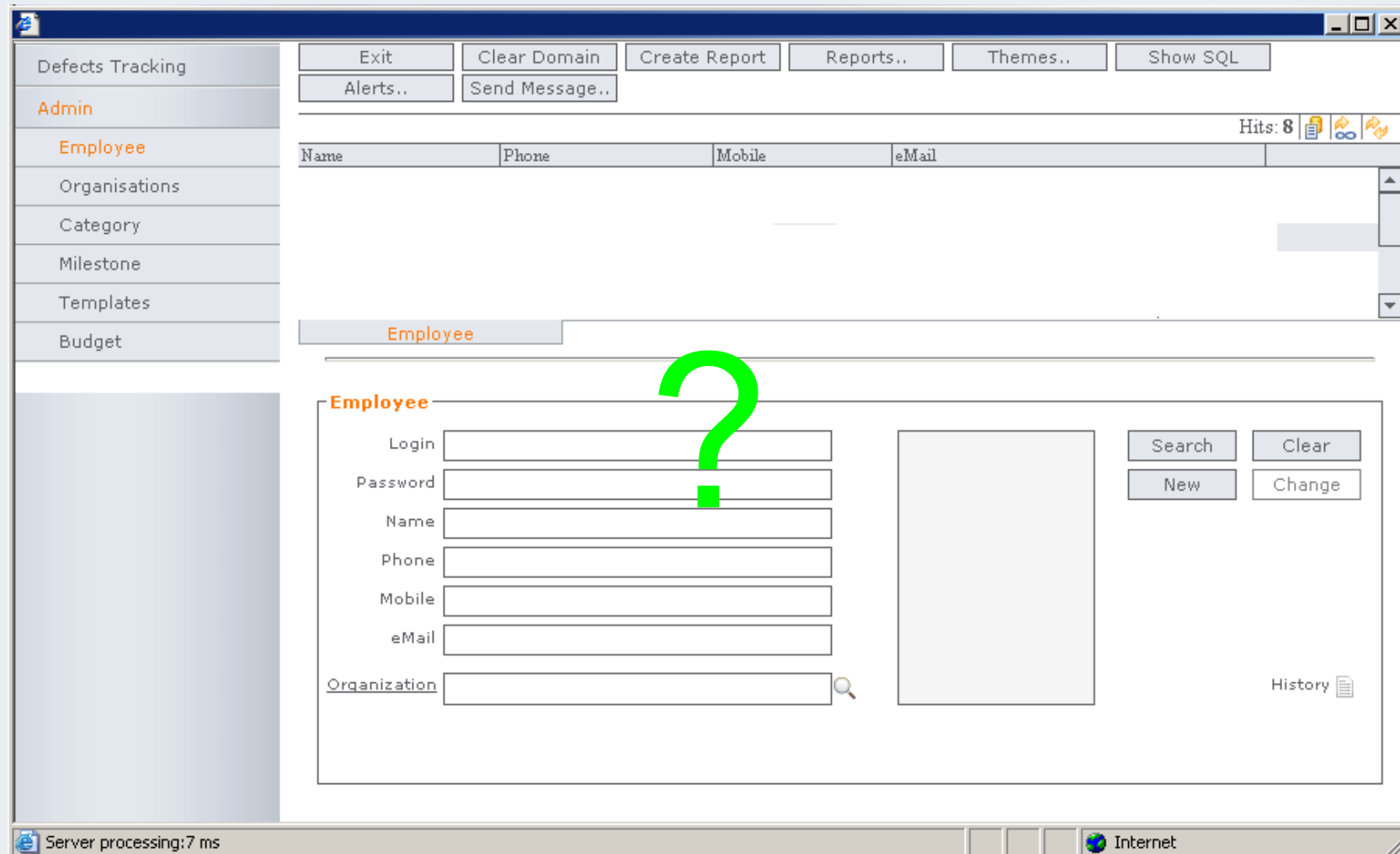


Database layer for Oracle,
mySQL, SQLServer, ..

A „Relation Set“ is part of the „Logical Data Layer“ and is a collection of [relations](#) between the logical data tables (table aliases).



Now we know the definition of a „Relation Set“.
But what is the practical usage of a „Relation Set“ in a jACOB application?



The screenshot shows a web application window titled "Defects Tracking". The left sidebar contains a menu with items: Admin, Employee (highlighted), Organisations, Category, Milestone, Templates, and Budget. The top toolbar includes buttons: Exit, Clear Domain, Create Report, Reports.., Themes.., Show SQL, Alerts.., and Send Message...

The main content area displays a table with the following headers: Name, Phone, Mobile, eMail. The table shows 8 hits. Below the table, there is a tab labeled "Employee".

The "Employee" form contains the following fields and controls:

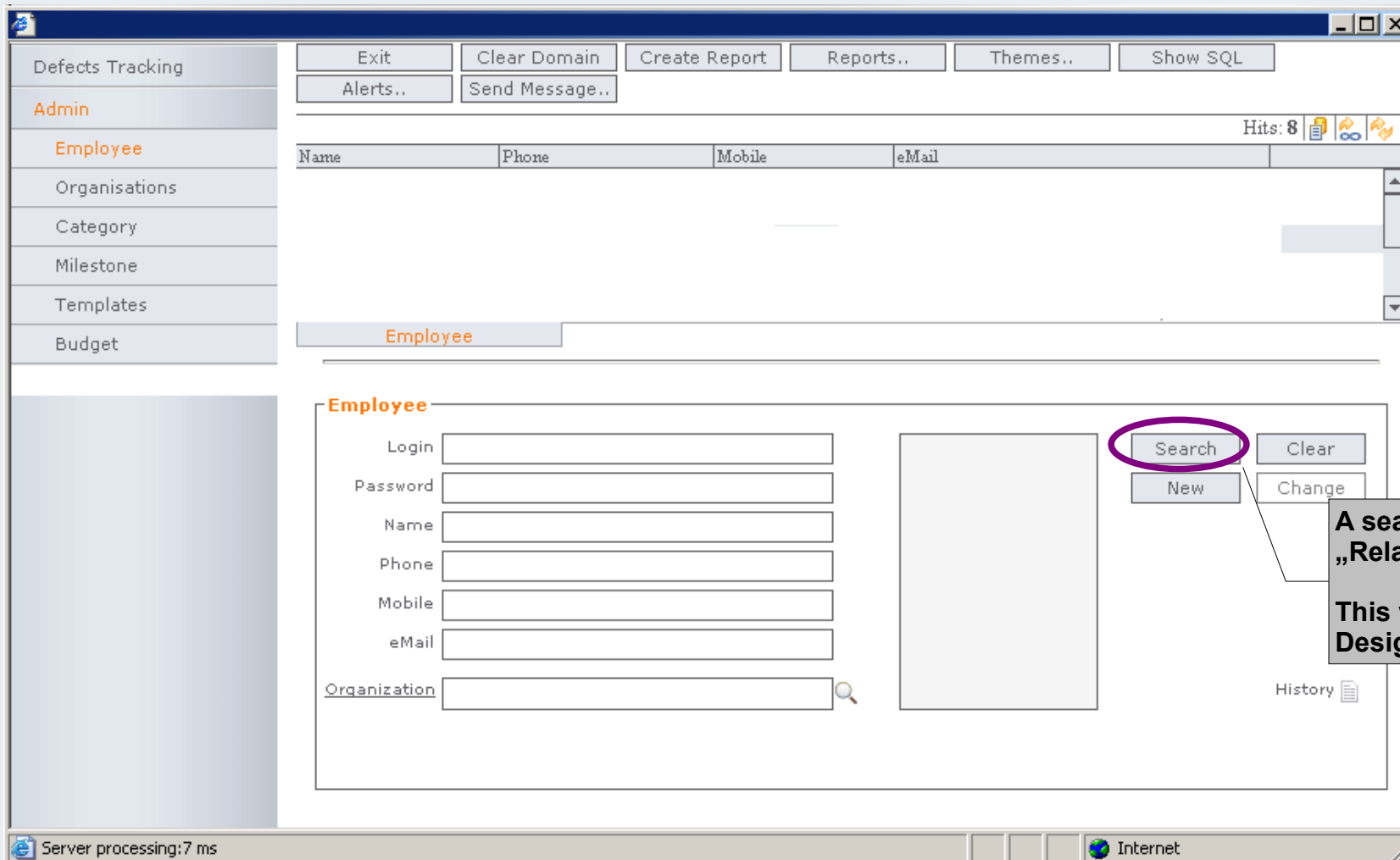
- Login:
- Password:
- Name:
- Phone:
- Mobile:
- eMail:
- Organization: (with a magnifying glass icon)

On the right side of the form, there are buttons: Search, Clear, New, and Change. A "History" link is also present.

A large green question mark is overlaid on the form fields, indicating the practical usage of a "Relation Set" in a jACOB application.

Let's show an example.

1. Assign a „Relation Set“ to a search button.



Defects Tracking

Exit Clear Domain Create Report Reports.. Themes.. Show SQL

Alerts.. Send Message..

Hits: 8

Name	Phone	Mobile	eMail
------	-------	--------	-------

Employee

Employee

Login Password Name Phone Mobile eMail Organization

Search Clear New Change

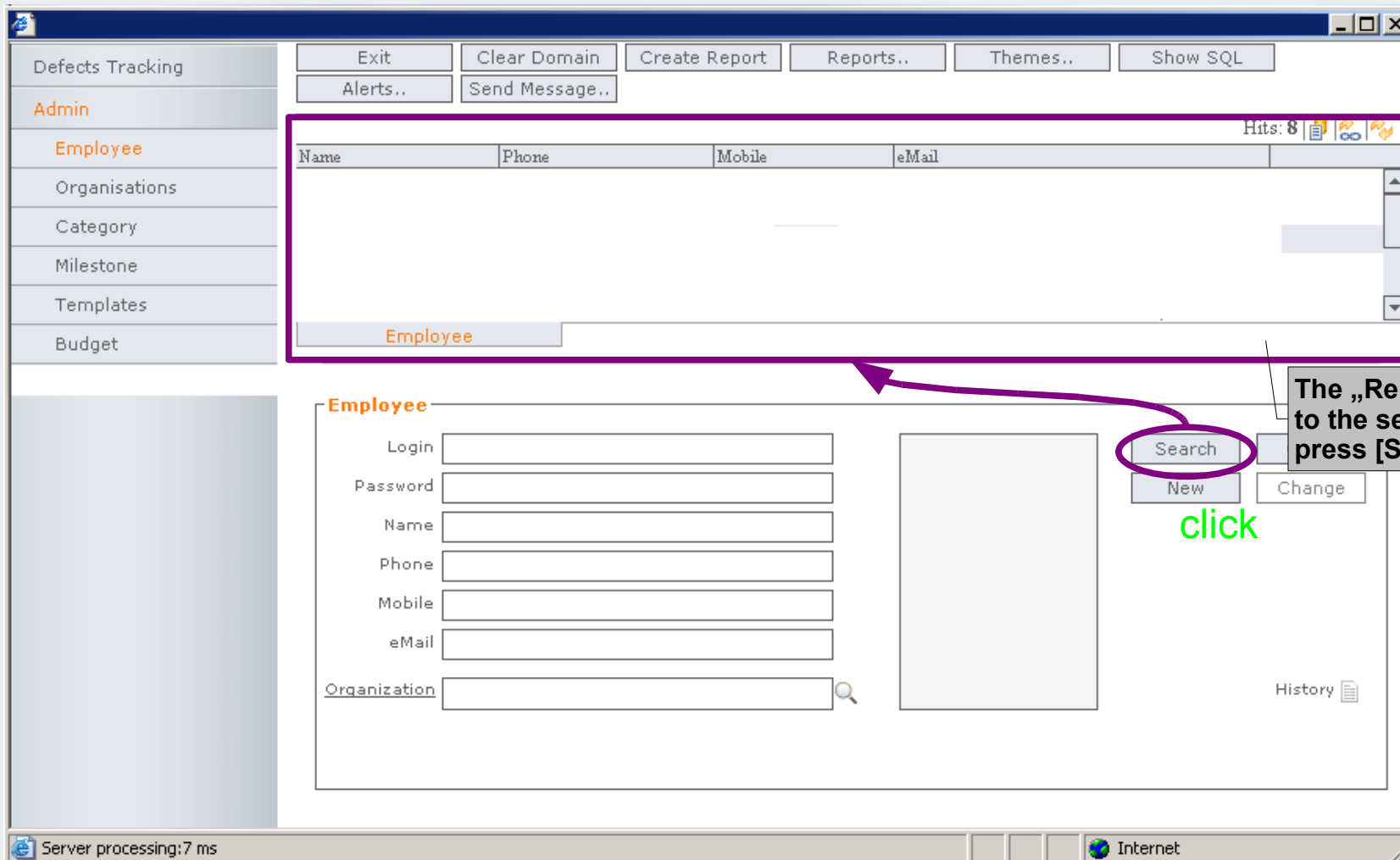
History

Server processing: 7 ms Internet

A search button has always a „Relation Set“ assigned.

This will be done in the jACOB Designer.

2. Click the search button.

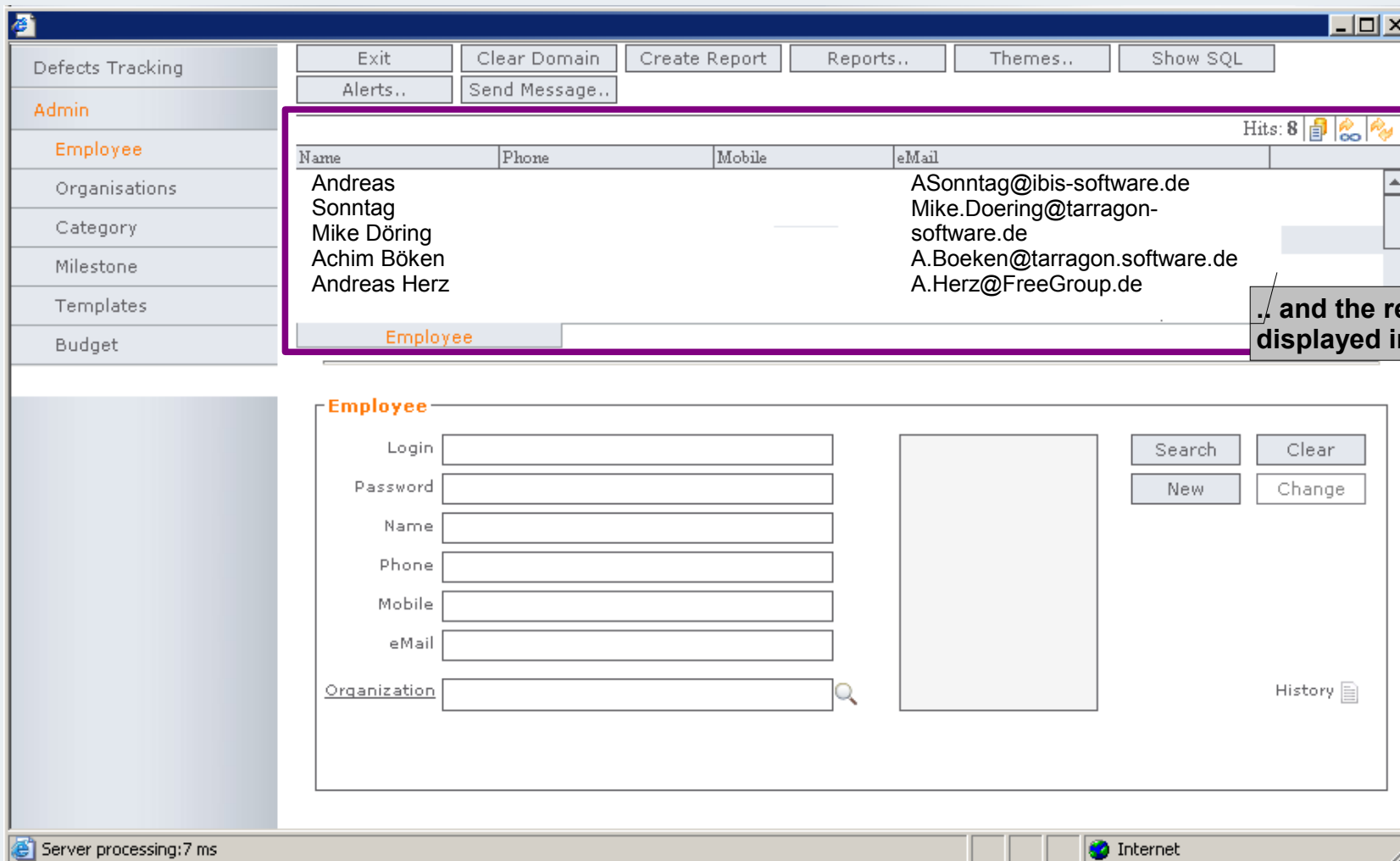


The screenshot displays the jACOB web application interface. On the left is a sidebar menu with options: Defects Tracking, Admin, Employee (highlighted), Organisations, Category, Milestone, Templates, and Budget. The top navigation bar includes buttons: Exit, Clear Domain, Create Report, Reports.., Themes.., Show SQL, Alerts.., and Send Message...

The main content area is divided into two sections. The upper section, titled "Employee", contains a table with columns: Name, Phone, Mobile, and eMail. The table is currently empty, and the status "Hits: 8" is displayed. The lower section, also titled "Employee", contains a form with input fields for Login, Password, Name, Phone, Mobile, eMail, and Organization. To the right of the form are buttons for Search, New, and Change. The Search button is circled in red, and a green arrow points to it with the word "click" written below it.

A text box on the right side of the interface states: "The „Relation Set“ will be assigned to the search browser if you press [Search].".

3. The search result will be displayed.



The screenshot shows a web application window titled "Defects Tracking". The left sidebar contains a menu with items: Admin, Employee (highlighted), Organisations, Category, Milestone, Templates, and Budget. The top navigation bar includes buttons: Exit, Clear Domain, Create Report, Reports.., Themes.., Show SQL, Alerts.., and Send Message..

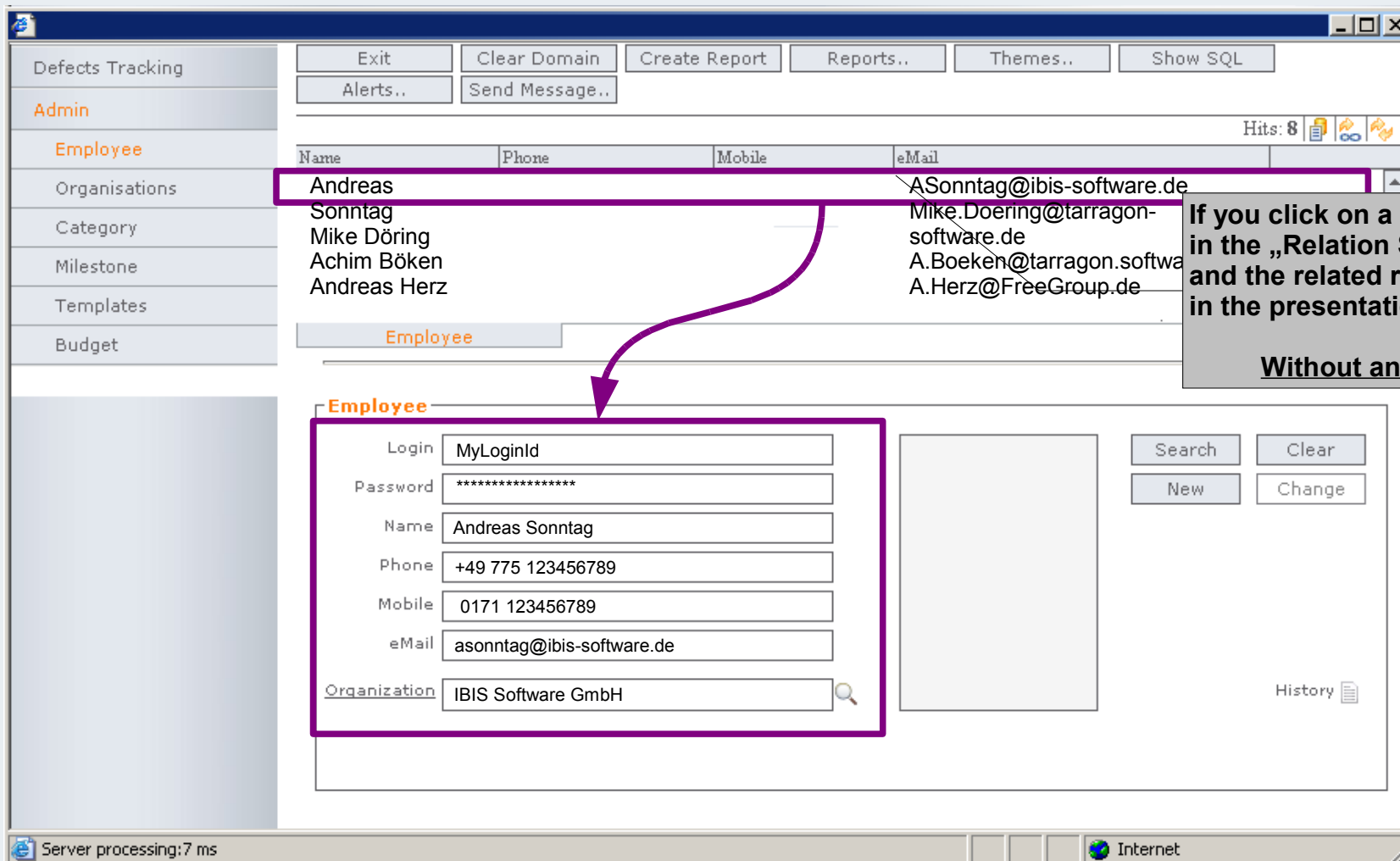
The main content area displays a table of search results for the "Employee" category. The table has columns: Name, Phone, Mobile, and eMail. The results are as follows:

Name	Phone	Mobile	eMail
Andreas Sonntag			ASonntag@ibis-software.de
Mike Döring			Mike.Doering@tarragon-software.de
Achim Böken			A.Boeken@tarragon.software.de
Andreas Herz			A.Herz@FreeGroup.de

Below the table, there is a section titled "Employee" with input fields for Login, Password, Name, Phone, Mobile, eMail, and Organization. To the right of these fields are buttons for Search, Clear, New, and Change. A "History" link is also present. The status bar at the bottom indicates "Server processing: 7 ms" and "Internet".

.. and the resulting data records will be displayed in the result list.

4. Click on a row to display the whole data record and its related data.



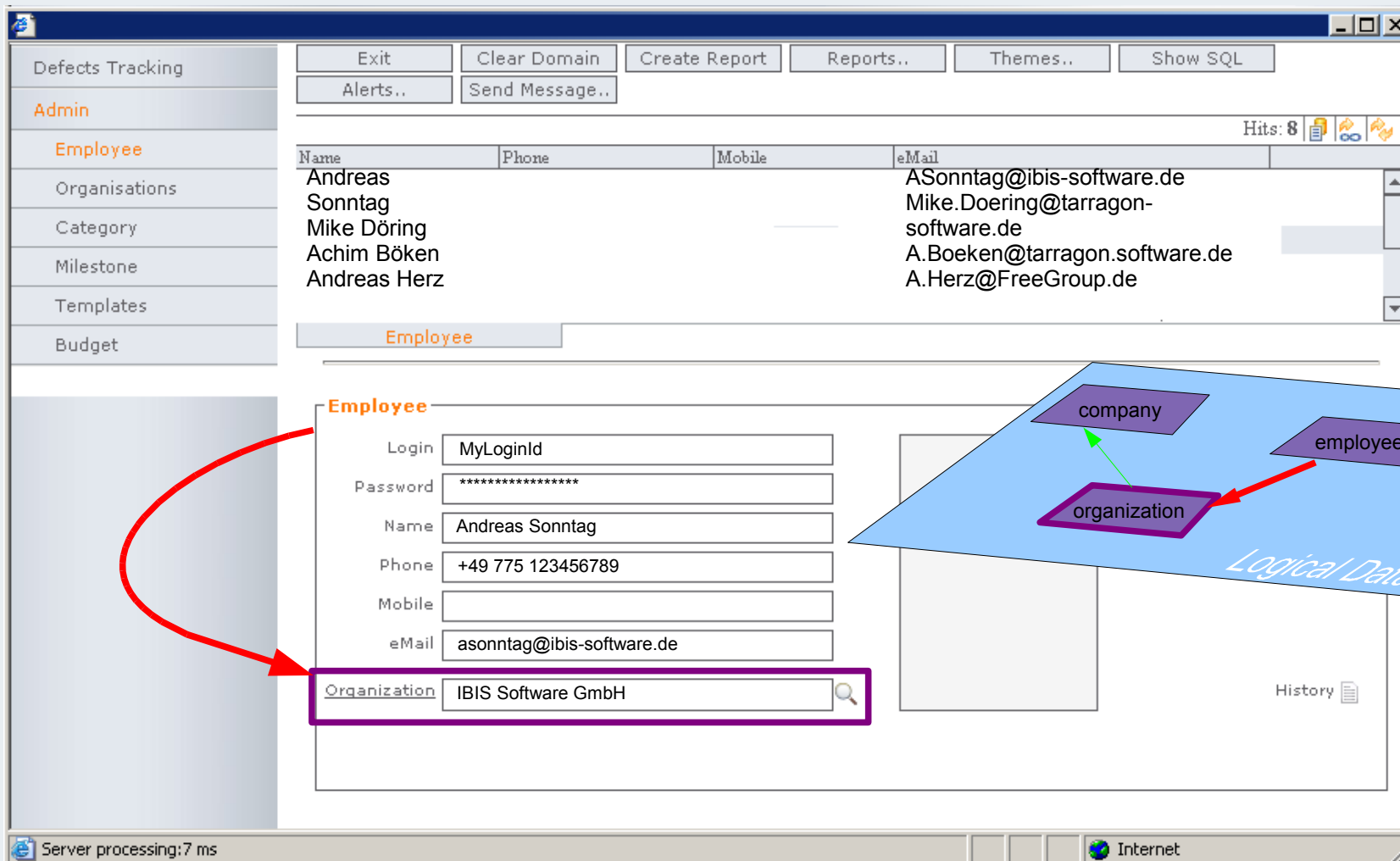
The screenshot shows a web application window titled "Defects Tracking". On the left is a sidebar menu with items: Admin, Employee (highlighted), Organisations, Category, Milestone, Templates, and Budget. The main area displays a table with columns: Name, Phone, Mobile, and eMail. The table contains five rows of employee data. The first row, "Andreas Sonntag", is highlighted with a purple border. A purple arrow points from this row to a detailed form below. The form, titled "Employee", contains fields for Login (MyLoginId), Password (masked), Name (Andreas Sonntag), Phone (+49 775 123456789), Mobile (0171 123456789), eMail (asonntag@ibis-software.de), and Organization (IBIS Software GmbH). To the right of the form are buttons for Search, Clear, New, and Change. A "History" link is at the bottom right. The status bar at the bottom shows "Server processing: 7 ms" and "Internet".

Name	Phone	Mobile	eMail
Andreas Sonntag			ASonntag@ibis-software.de
Mike Döring			Mike.Doering@tarragon-software.de
Achim Böken			A.Boeken@tarragon.softwa
Andreas Herz			A.Herz@FreeGroup.de

If you click on a row, all relations defined in the „Relation Set“ will be traverse through and the related records will be displayed in the presentation layer.

Without any line of code or SQL !

„Relation Sets“ provide a powerful mechanism to define and handle complex **relations** between data tables without any line of code or SQL.



The screenshot shows the jACOB application interface. On the left is a sidebar with a tree view containing 'Defects Tracking', 'Admin', 'Employee', 'Organisations', 'Category', 'Milestone', 'Templates', and 'Budget'. The 'Employee' item is selected. The main area displays a table with 8 hits, showing employee details. Below the table is an 'Employee' form with fields for Login, Password, Name, Phone, Mobile, and eMail. A red arrow points from the 'Employee' item in the sidebar to the form. Below the form is an 'Organization' field with the value 'IBIS Software GmbH', which is highlighted with a purple box. To the right of the form is a 'Logical Data Layer' diagram showing a blue plane with four purple boxes: 'company', 'employee', 'manager', and 'organization'. Green arrows connect 'company' to 'employee' and 'organization' to 'employee'. A red arrow points from the 'organization' box to the 'Organization' field in the form. The status bar at the bottom shows 'Server processing: 7 ms' and 'Internet'.

Name	Phone	Mobile	eMail
Andreas Sonntag			ASonntag@ibis-software.de
Mike Döring			Mike.Doering@tarragon-software.de
Achim Böken			A.Boeken@tarragon.software.de
Andreas Herz			A.Herz@FreeGroup.de

Employee

Login: MyLoginId
 Password: *****
 Name: Andreas Sonntag
 Phone: +49 775 123456789
 Mobile:
 eMail: asonntag@ibis-software.de

Organization: IBIS Software GmbH

Logical Data Layer

```

graph LR
    company --> employee
    organization --> employee
    employee --> manager
  
```