
Bs_Debedoo:

db do, yabadabadoo! :-)

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BlueShoes

DEBEDOO VISUALIZES MYSQL DATABASE TABLES AND MAKE THEM EDITABLE, EVEN WITH RELATIONS TO OTHER TABLES (FOREIGN KEYS).

Features:

- Page through the records (by default there are 20/page)
- Search for records (even searches foreign key tables)
- View/edit/delete records in detail
- Automatically finds and resolves foreign keys
- Many settings for customization

What you need:

- An existing installation of PHP/MySQL/Apache (or IIS) and *BlueShoes*.
- A website running *BlueShoes*.
- Some knowledge about PHP, understanding of how to use existing classes. Some knowledge of how to use SQL/MySQL.

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This is a step-by-step guide to create an example Debedoo “Application”.

You can find the sources here:

applications/debedoo/examples/phoneBook_step1.php
applications/debedoo/examples/phoneBook_step2.php
applications/debedoo/examples/phoneBook_step3.php
applications/debedoo/examples/phoneBook.php
applications/debedoo/examples/create.sql

All phoneBook_stepX.php files are usable by themselves. The phoneBook.php is the end result. The files may be helpful if you get stuck or to copy/paste.

We'll create a very small phonebook application. Let's go.

For all the following SQL code, use your existing site database, or use the test database.
Create the following MySQL table:

```
DROP TABLE IF EXISTS ExamplePhoneCompany;
CREATE TABLE ExamplePhoneCompany(
  ID          INT          NOT NULL DEFAULT 0 AUTO_INCREMENT,
  caption     VARCHAR(30)  NOT NULL DEFAULT '',
  location    VARCHAR(30)  NOT NULL DEFAULT '',
  PRIMARY KEY ID (ID)
);
```

That's a table to add companies to. The ID is the unique key of the table. The caption is the name of the company.

Now let's insert some records:

```
INSERT INTO ExamplePhoneCompany (caption, location) VALUES ('Zend Technologies Ltd.',
'Ramat Gan (Israel)');
INSERT INTO ExamplePhoneCompany (caption, location) VALUES ('MySQL AB', 'Uppsala
(Sweden)');
INSERT INTO ExamplePhoneCompany (caption, location) VALUES ('MySQL AB', 'Edmonds (USA)');
INSERT INTO ExamplePhoneCompany (caption, location) VALUES ('Red Hat', 'Raleigh (USA)');
INSERT INTO ExamplePhoneCompany (caption, location) VALUES ('Google', 'Mountain View
(USA)');
INSERT INTO ExamplePhoneCompany (caption, location) VALUES ('Google', 'Toronto (Canada)');
```

Go to your webroot and create a new directory. In my case that is:
/examples/Debedoo/.

Create the new file phoneBook.php in that directory, and open it in your favorite text editor. Copy/paste this code into the file. (If that's a pdf you're looking at, then yes, that is possible too. There is a "T" button you have to press.)

```
<?php
require_once($_SERVER["DOCUMENT_ROOT"] . "../global.conf.php");
require_once($APP['path']['applications'] . 'debedoo/Bs_Debedoo.class.php');

$d =& new Bs_Debedoo();
$d->setLanguage('en');
$d->internalName = 'ExamplePhoneBook';
$d->dbTableName = 'ExamplePhoneCompany';
$d->addHeadString = "BS Phone Book Example";

$ddsn = array(
    'name'=>'test', 'host'=>'localhost', 'port'=>'3306', 'socket'=>'',
    'user'=>'root', 'pass'=>'', 'syntax'=>'mysql', 'type'=>'mysql'
);
$status = $d->setDbByDsn($dsn);
if (isEx($status)) {
    $out->stackDump('die');
}

$out = $d->doItYourself();
if (isEx($out)) {
    $out->stackDump('die');
} else {
    echo $out;
}
?>
```

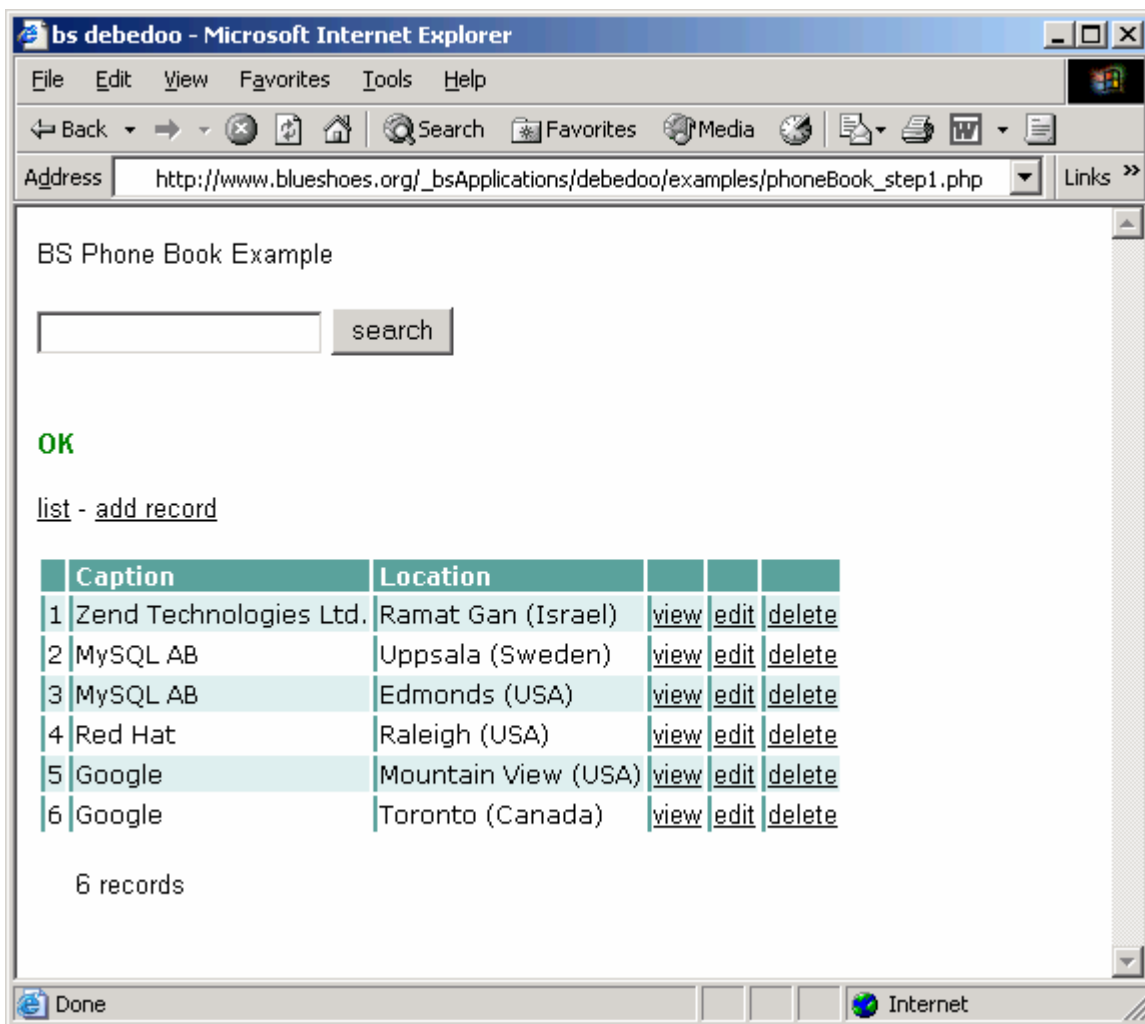
Include the needed files, create a new instance, and set a few properties.

Debedoo needs a db connection. If you have opened one in the `global.conf.php` file then you don't need to set up a dsn here and pass it using `setDbByDsn()`. If you use it, customize the dsn for your needs. The database 'test' is used in the example.

If you want another language than 'en' or 'de' just create the appropriate language file in `/applications/debedoo/lang/` (and send them to us :-).

Then we call `doItYourself()` which really does what it says. The output could be an exception if something went wrong (access denied to database or so). In that case it's spitted out, and we stop script execution. You may change that. Otherwise the output is html, and we spit it out as well.

Well that's it; point your browser at your new web page. In my case that is `phoneBook_step1.php` because `phoneBook.php` is the end result.



Feel free to click around. I just recommend you don't delete those 6 records because we're going to add references to them now.

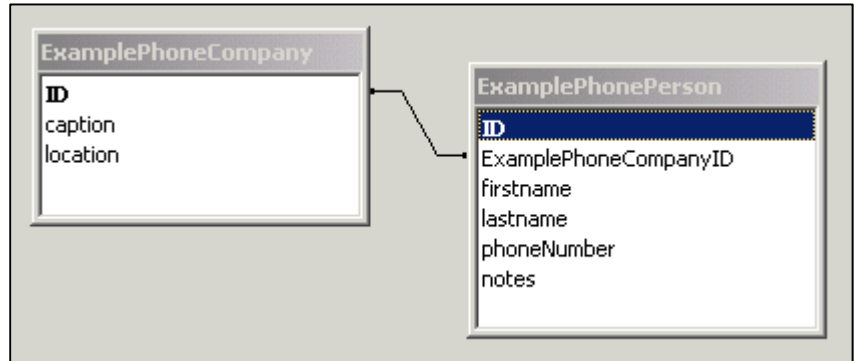
So that was nice, but we want more. We add another table:

```

DROP TABLE IF EXISTS ExamplePhonePerson;
CREATE TABLE ExamplePhonePerson(
  ID INT NOT NULL DEFAULT 0 AUTO_INCREMENT,
  ExamplePhoneCompanyID INT NOT NULL DEFAULT 0,
  firstname VARCHAR(30) NOT NULL DEFAULT '',
  lastname VARCHAR(30) NOT NULL DEFAULT '',
  phoneNumber VARCHAR(30) NOT NULL DEFAULT '',
  notes BLOB NOT NULL DEFAULT '',
  PRIMARY KEY ID (ID)
);

```

That's for storing persons. Every person works for a company. The field ExamplePhoneCompanyID is a foreign key, the relation to the ExamplePhoneComany table. It has to be exactly that string (tablename + ID), that is the naming convention. The other fields should be clear by name.



Now let's insert a bunch of people. I recommend you do them all to see the paging feature.

```

INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(1, 'Andi', 'Gutmans', '123123123', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(1, 'Zeev', 'Suraski', '441441441', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(1, 'George', 'Michael', '441441441', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(2, 'Michael', 'Widenius', '323232323', 'aka Monty');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(2, 'Bill', 'Clinton', '323232323', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(2, 'Manu', 'Chao', '323232323', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(3, 'John', 'Miller', '616161616', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(3, 'Peter', 'Johnson', '987654321', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(3, 'Will', 'Smith', '987654321', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(4, 'Peggy', 'Anderson', '123456789', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(4, 'Louise', 'Cicccone', '123456789', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(4, 'Jennifer', 'Lopez', '123456789', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(4, 'Enrique', 'Iglesias', '123456789', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(5, 'Richard', 'Peterson', '878787878', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(5, 'Robert', 'Miller', '232323232', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(5, 'Robert', 'Redford', '232323232', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(5, 'Cliff', 'Richard', '232323232', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(6, 'Bill', 'Smith', '171717171', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(6, 'John', 'Bush', '929292929', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(6, 'Peg', 'Miller', '585858585', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(6, 'Alani', 'Morissette', '585858585', '');
INSERT INTO ExamplePhonePerson (ExamplePhoneCompanyID, firstname, lastname, phoneNumber, notes) VALUES(6, 'Kylie', 'Minogue', '585858585', '');

```

Now we need to update our PHP code so we can see that table as well.
Just go and replace line 8:

```
$d->dbTableName = 'ExamplePhoneCompany' ;
```

with

```
$d->dbTableName = 'ExamplePhonePerson' ;
```

and reload your browser window. And that's what you're supposed to see:

BS Phone Book Example

search

OK

[list](#) - [add record](#)

	ExamplePhoneCompanyID	Firstname	Lastname	PhoneNumber			
1	Zend Technologies Ltd.	Andi	Gutmans	123123123	view	edit	delete
2	Zend Technologies Ltd.	Zeev	Suraski	441441441	view	edit	delete
3	Zend Technologies Ltd.	George	Michael	441441441	view	edit	delete
4	MySQL AB	Michael	Widenius	323232323	view	edit	delete
5	MySQL AB	Bill	Clinton	323232323	view	edit	delete
6	MySQL AB	Manu	Chao	323232323	view	edit	delete
7	MySQL AB	John	Miller	616161616	view	edit	delete
8	MySQL AB	Peter	Johnson	987654321	view	edit	delete
9	MySQL AB	Will	Smith	987654321	view	edit	delete
10	Red Hat	Peggy	Anderson	123456789	view	edit	delete
11	Red Hat	Louise	Cicccone	123456789	view	edit	delete
12	Red Hat	Jennifer	Lopez	123456789	view	edit	delete
13	Red Hat	Enrique	Iglesias	123456789	view	edit	delete
14	Google	Richard	Peterson	878787878	view	edit	delete
15	Google	Robert	Miller	232323232	view	edit	delete
16	Google	Robert	Redford	232323232	view	edit	delete
17	Google	Cliff	Richard	232323232	view	edit	delete
18	Google	Bill	Smith	171717171	view	edit	delete
19	Google	John	Bush	929292929	view	edit	delete
20	Google	Peg	Miller	585858585	view	edit	delete

1 [forward](#) 22 records

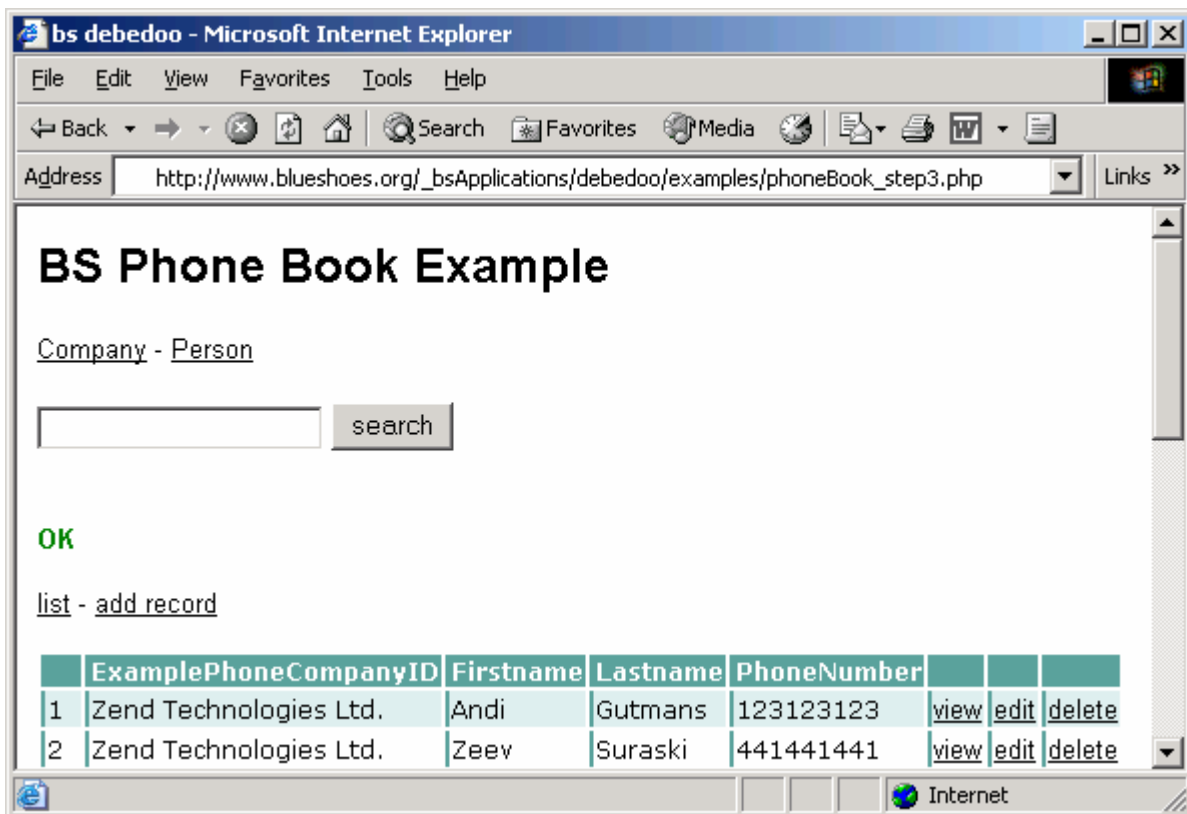
Two things to note: you can page through the records (page 1 and 2, 20 records per page). And the 2nd column (ExamplePhoneCompanyID) there is not the number you see, it is the caption from the referenced table. This is some hocus pocus that works because we've followed the naming convention.

So now we can edit that table, but not the other. What to do?

Change the settings for internalName, dbTableName and addHeadString like this:

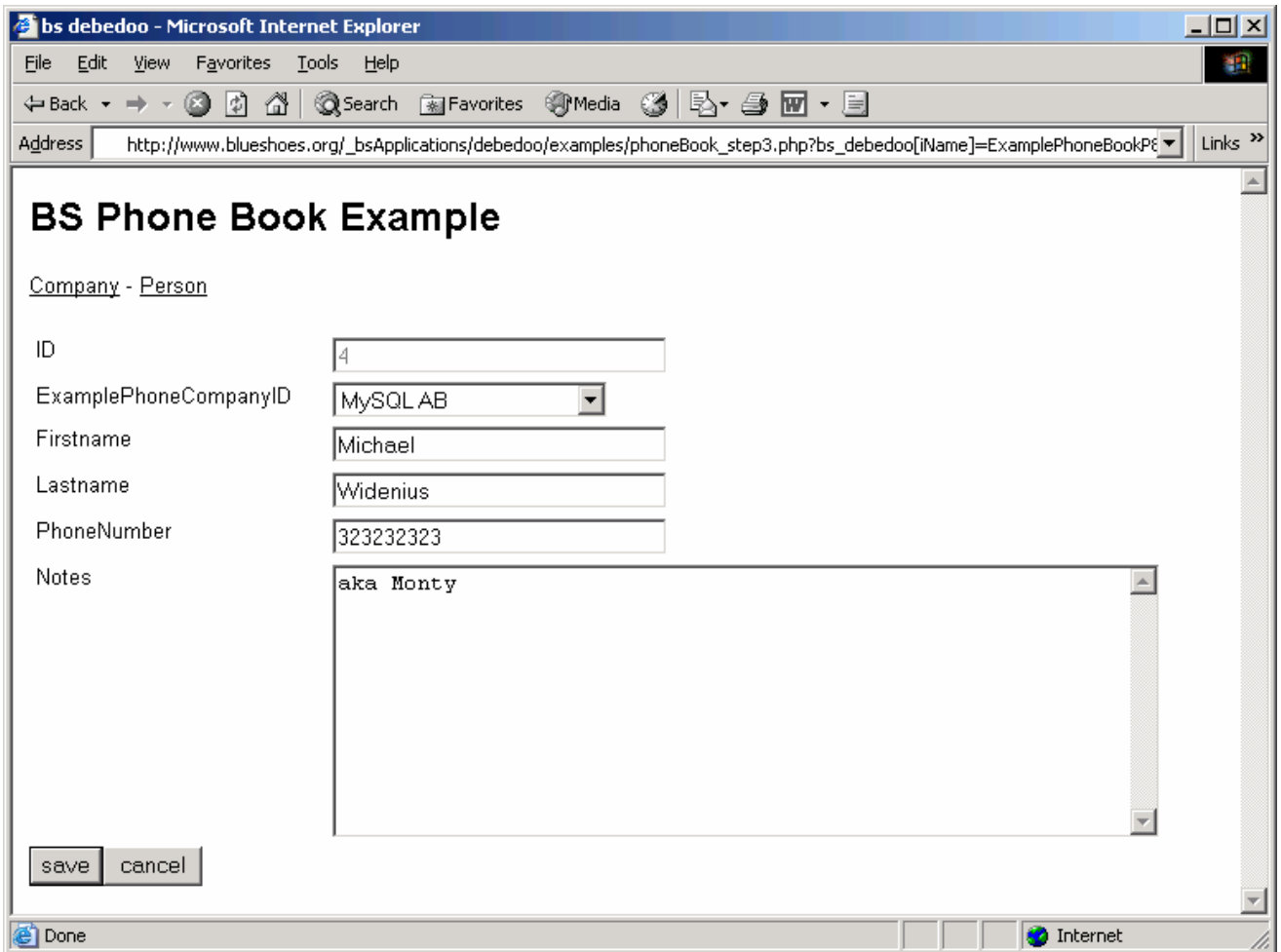
```
$d->internalName = (isset($_REQUEST['bs_debedoo']['iName'])) ?  
$_REQUEST['bs_debedoo']['iName'] : 'ExamplePhoneBookP';  
  
$d->dbTableName = ($d->internalName == 'ExamplePhoneBookP') ?  
'ExamplePhonePerson' : 'ExamplePhoneCompany';  
  
$d->addHeadString = "<h2>BS Phone Book Example</h2><a  
href='?bs_debedoo[iName]=ExamplePhoneBookC'>Company</a> - <a  
href='?bs_debedoo[iName]=ExamplePhoneBookP'>Person</a><br><br>";
```

That's how the header looks now:



We got two new links; we now have the 'Company' and 'Person' view, the 'Person' is the default.

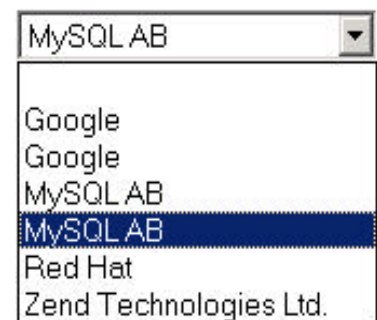
Let's edit the person record for Michael Widenius.



The ID is not editable, the foreign key is a select field, the blob is a textarea field.

But there's a problem with the company names. It's not unique.

What can we do about that? And why do we see the caption here at all? It's by definition that if a foreign table is found, the field named "caption" is displayed by default. But we can change that using settings.



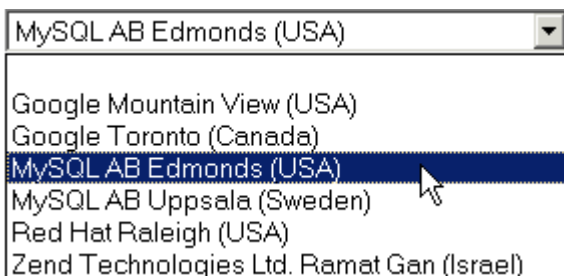
Add this code right before calling doItYourself(): (around line 19)

```
if ($d->internalName == 'ExamplePhoneBookP') {
    $d->useOverviewProfile = 'default';
    $d->overviewSettings['default']['fields'] = array(
        'ID' => TRUE,
        'ExamplePhoneCompanyID' => array(
            'caption' => 'Company',
            'trim' => '40',
            'foreignKey' => array(
                'fields' => array('caption', 'location'),
                'orderBy' => 'caption, location',
            ),
        ),
        'firstname' => TRUE,
        'lastname' => TRUE,
        'phoneNumber' => TRUE,
        'notes' => TRUE,
    );
}
```

Now our overview looks different:

	Company	Firstname	Lastname	PhoneNumber	Notes			
1	Zend Technologies Ltd. Ramat Gan (Israel)	Andi	Gutmans	123123123		view	edit	delete
2	Zend Technologies Ltd. Ramat Gan (Israel)	Zeev	Suraski	441441441		view	edit	delete
3	Zend Technologies Ltd. Ramat Gan (Israel)	George	Michael	441441441		view	edit	delete
4	MySQL AB Uppsala (Sweden)	Michael	Widenius	323232323	aka Monty	view	edit	delete
5	MySQL AB Uppsala (Sweden)	Bill	Clinton	323232323		view	edit	delete
6	MySQL AB Uppsala (Sweden)	Manu	Chao	323232323		view	edit	delete
7	MySQL AB Edmonds (USA)	John	Miller	616161616		view	edit	delete

The first column is now titled “Company”, that looks better. And the column "Notes" is added. By default blob fields don't appear in the overview. The content of the blob won't blow up our table; it's limited to the first 20 chars now. Of course you can change that as well.



The select field in edit mode is now usable too.

You may have noticed in the added code that we created a “profile” called “default”. Based on sessions/user login, you'd be able to set different fields as visible/editable and the like.

Using such settings foreign keys can be added to tables in other databases as well. They're quite flexible, and can be extended. Feel free ☺

Now let's try a search. Go to the overview page of the person table (not company). Type in "zend" into the search field, and hit the button. The person-table does not have a record with such a value, but the 3 records are found nevertheless. Why? There's a foreign key to the company table. That's how it works.

Styles:

You don't like green as color? Or your boss wants you to make the editor look like the CI/CD? Well that's easy. Add the following code right before the doItYourself():

```
$d->overviewWindroseStyles = array(  
    'ALL' => 'color:black; weight:normal; font-size:12px; font-style:normal; font-family:Verdana,Arial;',  
    'ZR_0' => 'background-color:white;',  
    'ZR_1' => 'background-color:#DEE3E7;',  
    'N' => 'color:white; background-color:#182842; font-weight:bold;',  
);
```

And reload your page. If you want to learn how to use those styles, check out [/core/html/table/Bs_HtmlTableWindrose.class.php](#).

Or just point your browser at

http://www.blueshoes.org/_bsToolbox/html/table/windroseEditor/ and play with this gui to create your own style. Once you get going it's great! ☺ Also see the windrose page: http://www.blueshoes.org/en/framework/html/table/html_table_windrose/

