Tools for MySQL

John Kim
SDSU Field Station Programs

Using PHPMyAdmin to Import Data

1) Select a database and a table
(Create a table if it doesn't exist)

2) Click on **SQL** -> **Insert Data from a Text File**

- Text file should be delimited by some character
- Leave blank auto_increment fields

Exercise I: Using PHPMyAdmin to Import Data

1) I put a small test table in your database called **mytable**. Check it out.

2) I put a small text input file on the T: drive. Check out it. Note that
   1) Semicolon is used as a delimeter
   2) The first "column" is left blank

3) Try importing it. Select the test table. Click on **SQL -> Insert Data from a Text File.**

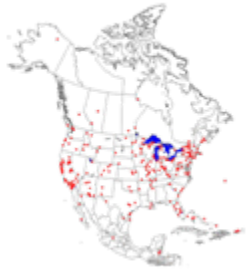
4) Verify that it worked. How?

Exercise II: Using PHPMyAdmin to Import Data

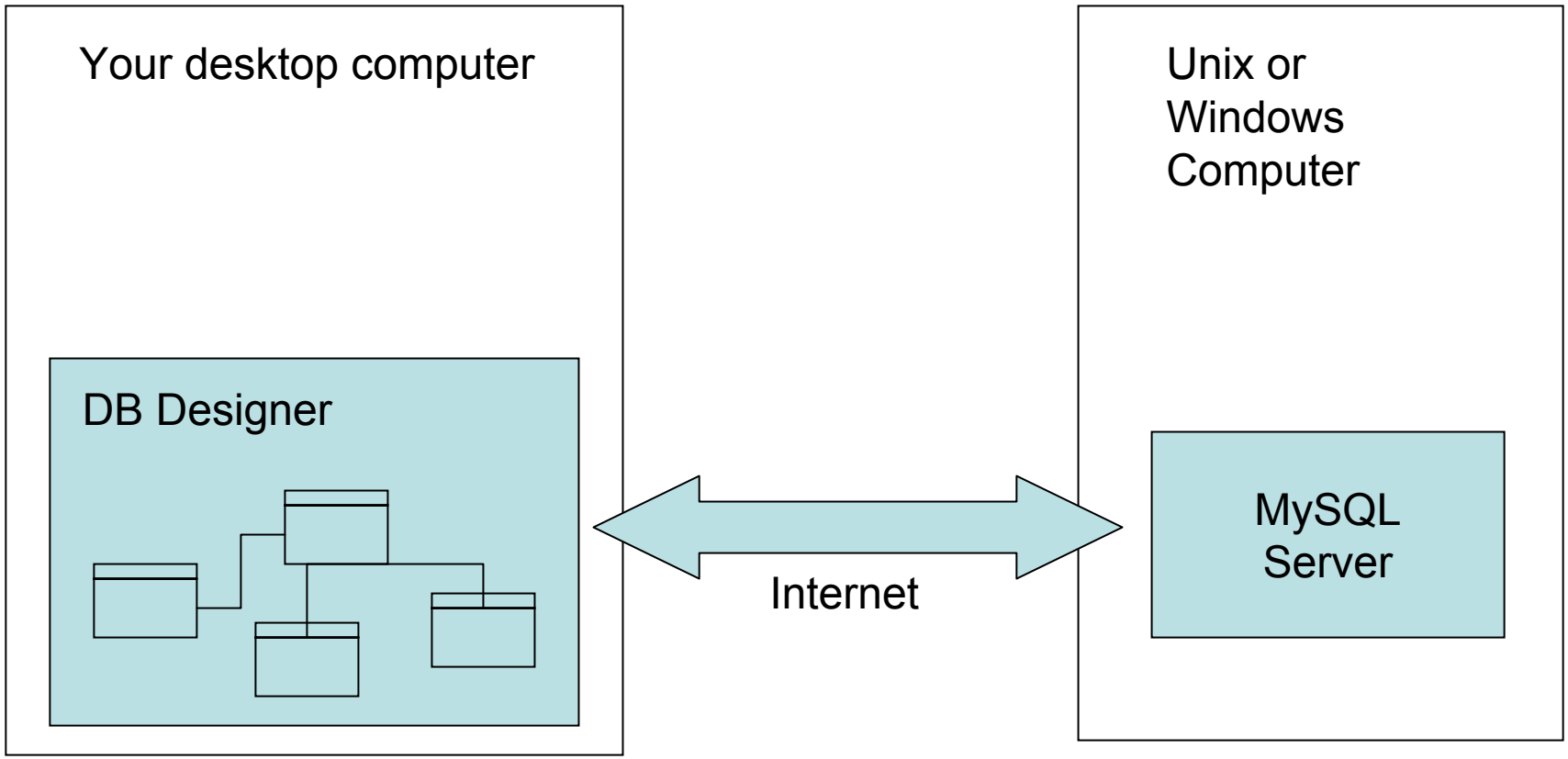
1) I put a text input file containing plant data on the T: drive (same as the one you imported into Access). Check out it. Note that
   A) Tabs are used as delimeters. In PHPMyAdmin, you denote it with `\t`
   B) There is no primary key column

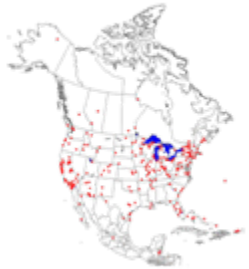
2) Create a table for the plant data. **DO NOT create a primary key yet**.

3) Import the data.
4) **Add a field as a primary key with auto-increment.**
5) Verify that it worked.



DB Designer Overview





What DB Designer Can Do

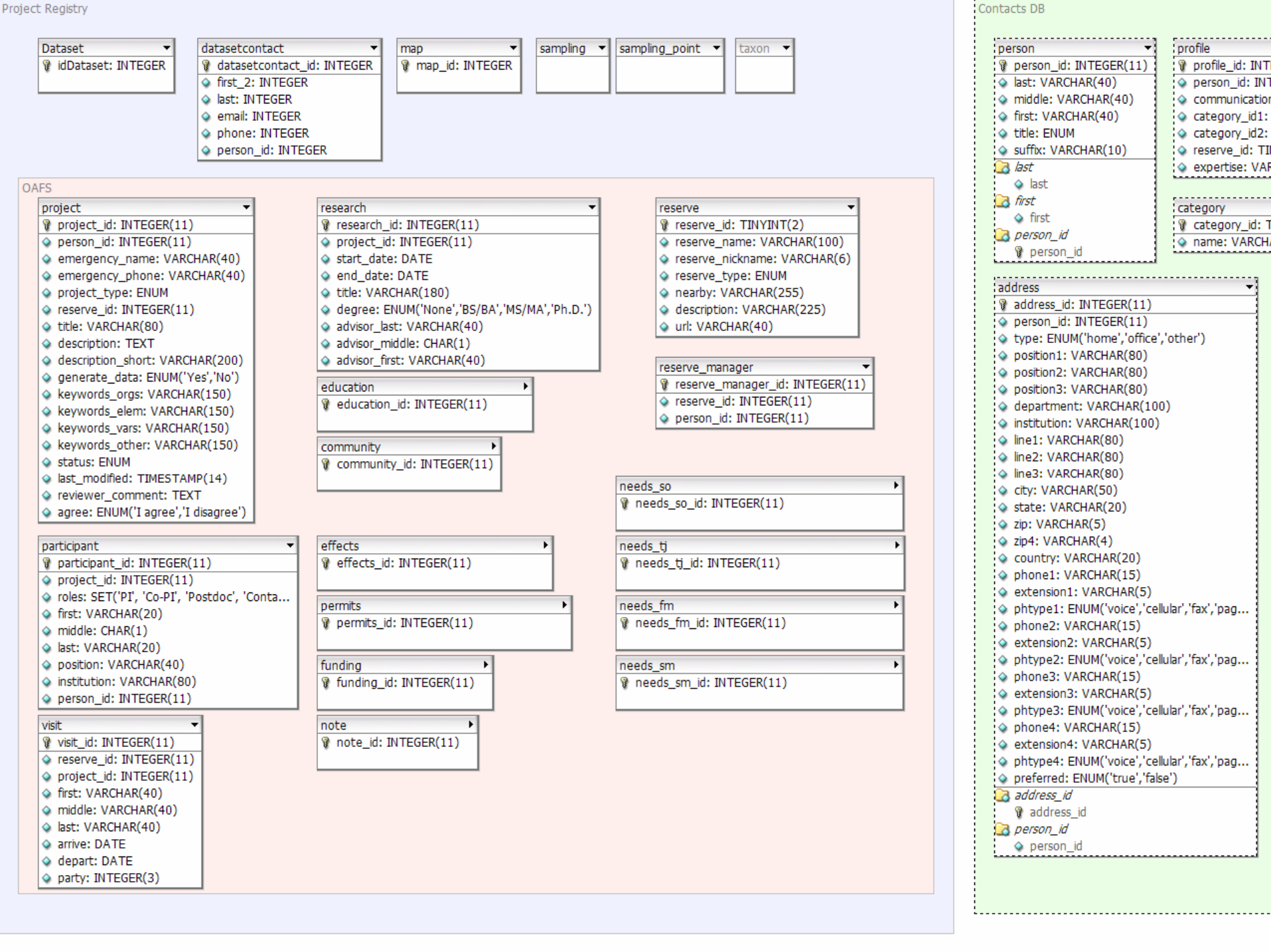
- Usage Scenario 1: design from scratch

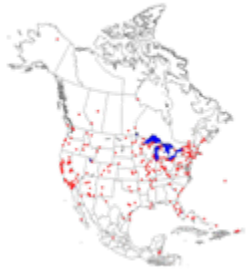
1. Draw/design tables in a blank document
2. Synchronize with a MySQL Server

- Usage Scenario 2: reverse-engineer

1. Synchronize with a MySQL Server
2. Redesign/modify
3. Synchronize again

SEEK KNB NCEAS OBFS LTER NSF


Project Registry
Dataset
idDataset: INTEGER
datasetcontact
datasetcontact_id: INTEGER
first_2: INTEGER
last: INTEGER
email: INTEGER
phone: INTEGER
person_id: INTEGER
map
map_id: INTEGER
sampling
sampling_point
taxon
OAFS
project
project_id: INTEGER(11)
person_id: INTEGER(11)
emergency_name: VARCHAR(40)
emergency_phone: VARCHAR(40)
project_type: ENUM
reserve_id: INTEGER(11)
title: VARCHAR(80)
description: TEXT
description_short: VARCHAR(200)
generate_data: ENUM('Yes','No')
keywords_orgs: VARCHAR(150)
keywords_elem: VARCHAR(150)
keywords_vars: VARCHAR(150)
keywords_other: VARCHAR(150)
status: ENUM
last_modified: TIMESTAMP(14)
reviewer_comment: TEXT
agree: ENUM('I agree','I disagree')
research
research_id: INTEGER(11)
project_id: INTEGER(11)
start_date: DATE
end_date: DATE
title: VARCHAR(180)
degree: ENUM('None','BS/BA','MS/MA','Ph.D.')
advisor_last: VARCHAR(40)
advisor_middle: CHAR(1)
advisor_first: VARCHAR(40)
reserve
reserve_id: TINYINT(2)
reserve_name: VARCHAR(100)
reserve_nickname: VARCHAR(6)
reserve_type: ENUM
nearby: VARCHAR(255)
description: VARCHAR(225)
url: VARCHAR(40)
education
education_id: INTEGER(11)
reserve_manager
reserve_manager_id: INTEGER(11)
reserve_id: INTEGER(11)
person_id: INTEGER(11)
community
community_id: INTEGER(11)
needs_so
needs_so_id: INTEGER(11)
participant
participant_id: INTEGER(11)
project_id: INTEGER(11)
roles: SET('PI', 'Co-PI', 'Postdoc', 'Conta...
first: VARCHAR(20)
middle: CHAR(1)
last: VARCHAR(20)
position: VARCHAR(40)
institution: VARCHAR(80)
person_id: INTEGER(11)
effects
effects_id: INTEGER(11)
needs_tj
needs_tj_id: INTEGER(11)
permits
permits_id: INTEGER(11)
needs_fm
needs_fm_id: INTEGER(11)
funding
funding_id: INTEGER(11)
needs_sm
needs_sm_id: INTEGER(11)
visit
visit_id: INTEGER(11)
reserve_id: INTEGER(11)
project_id: INTEGER(11)
first: VARCHAR(40)
middle: VARCHAR(40)
last: VARCHAR(40)
arrive: DATE
depart: DATE
party: INTEGER(3)
note
note_id: INTEGER(11)
Contacts DB
person
person_id: INTEGER(11)
last: VARCHAR(40)
middle: VARCHAR(40)
first: VARCHAR(40)
title: ENUM
suffix: VARCHAR(10)
last
last
first
first
person_id
person_id
profile
profile_id: INT
person_id: INT
communicatior
category_id1:
category_id2:
reserve_id: TI
expertise: VAR
category
category_id: T
name: VARCHA
address
address_id: INTEGER(11)
person_id: INTEGER(11)
type: ENUM('home','office','other')
position1: VARCHAR(80)
position2: VARCHAR(80)
position3: VARCHAR(80)
department: VARCHAR(100)
institution: VARCHAR(100)
line1: VARCHAR(80)
line2: VARCHAR(80)
line3: VARCHAR(80)
city: VARCHAR(50)
state: VARCHAR(20)
zip: VARCHAR(5)
zip4: VARCHAR(4)
country: VARCHAR(20)
phone1: VARCHAR(15)
extension1: VARCHAR(5)
phtype1: ENUM('voice','cellular','fax','pag...
phone2: VARCHAR(15)
extension2: VARCHAR(5)
phtype2: ENUM('voice','cellular','fax','pag...
phone3: VARCHAR(15)
extension3: VARCHAR(5)
phtype3: ENUM('voice','cellular','fax','pag...
phone4: VARCHAR(15)
extension4: VARCHAR(5)
phtype4: ENUM('voice','cellular','fax','pag...
preferred: ENUM('true','false')
address_id
address_id
person_id
person_id



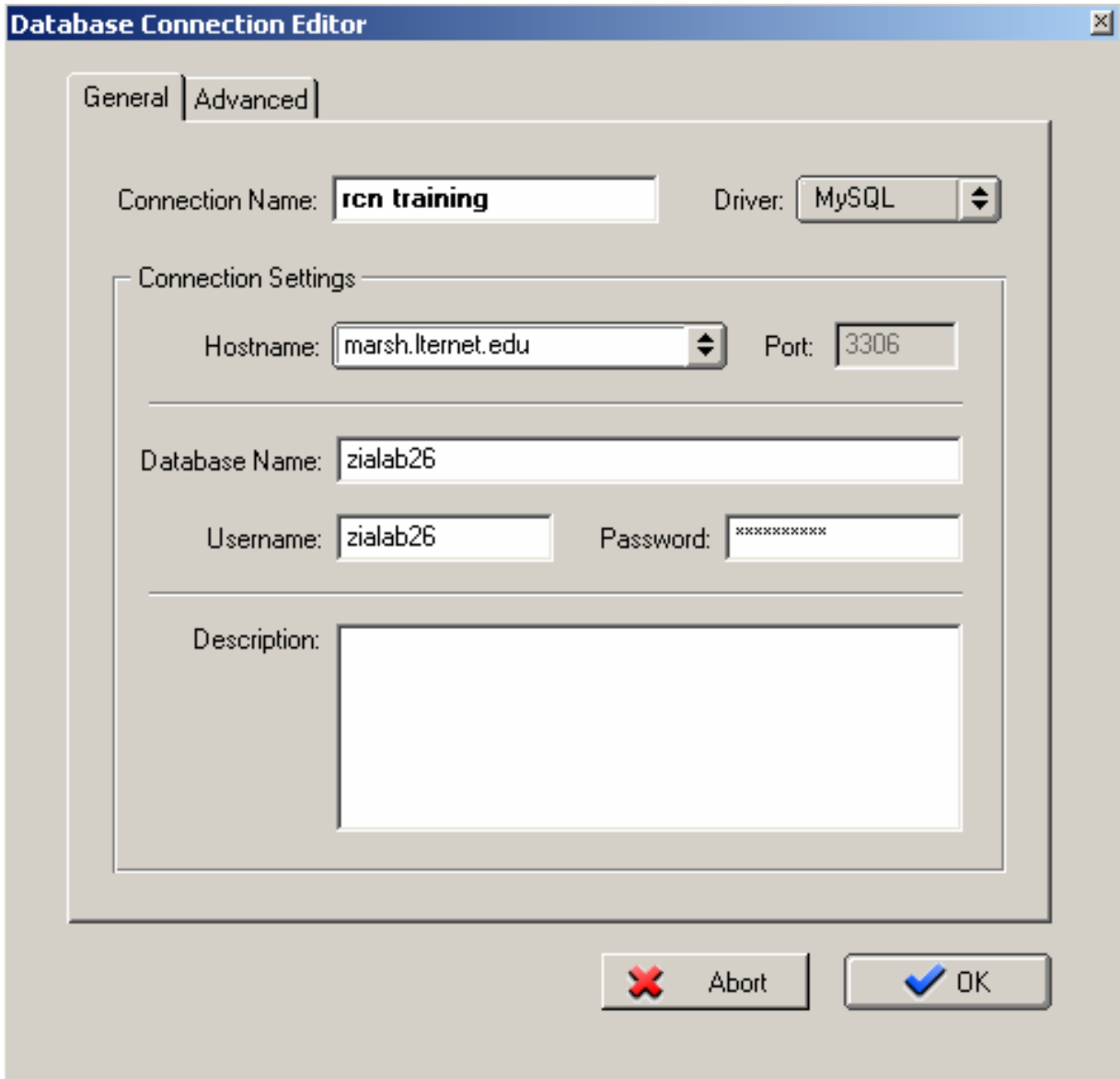
Try Reverse Engineering with DB Designer

TO START DB DESIGNER:

Start ->
All Programs ->
fabForce ->
DB Designer 4

TO CONNECT TO DB:
Database ->
Reverse Engineering -> New Database Connection

CLICK OK, THEN CONNECT



Other Notable Tools

1) Navicat: GUI for creating, editing table structures & content. Mature, good design. No ER diagram. $59.

2) MySQL Administrator & Query Browser:
GUI for creating, editing table structures & content. No ER diagram. Multiple query windows. Free.

3) MS Access:
Table Analysis Wizard