

Test Results

```
mysql> source ~/Documents/eadocs/testSQL.sql; \T /home/martin/Documents/eadocs/testResults.txt
-----
INSERT INTO AuthUsers values('cert1',1,1,'anders','hansen')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO AuthUsers values('cert2',2,2,'mette','Nielsen')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO AuthUsers values('cert3',3,3,'birken','birk')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO AuthUsers values('cert4',4,5,'egebakken','ege')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Profile values(1,'Anders','Hansen',null,1,12345678,'/pics/anders.png','blob')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Profile values(2,'Mette','Nielsen','s.',2,81234567,'/pics/metter.png','blob')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Department valueS(3,'stranden','strandvejen',12121212,'str@stranden.dk')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Department valueS(4,'egebakken','egebakkevej',21212121,'ege@bakken.dk')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO HasDepartment values(1,3)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasDepartment values(1,4)
-----

Query OK, 1 row affected (0.06 sec)

-----
INSERT INTO HasDepartment values(2,3)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasDepartment values(2,4)
-----

Query OK, 1 row affected (0.06 sec)

-----
INSERT INTO HasSubDepartment values(3,4)
-----

Query OK, 1 row affected (0.04 sec)
```

```

-----
INSERT INTO HasSubDepartment values(4,3)
-----

Query OK, 1 row affected (0.06 sec)

-----
INSERT INTO Apps values(1,'Angry Birds','1.0','icon1','package1','activity1')
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO Apps values(2,'Very Angry Birds','2.0','icon2','package2','activity2')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO ListOfApps values(1,1,'settings','stats')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO ListOfApps values(2,1,'more_setting','more_stats')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO ListOfApps values(1,2,'Even_more_settings','Even_More_Stats')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO ListOfApps valueS(2,2,'2nd_setting','2nd_stats')
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Media valueS(1,'/sti','name',true,1,1)
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Media valueS(2,'/stien','named',true,1,1)
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Media valueS(3,'/stier','rename',true,1,1)
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Media valueS(4,'/sti','name',true,1,2)
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Media valueS(5,'/stien','named',true,1,2)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO Media valueS(6,'/stier','rename',true,1,2)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO Tags values(1,'bil')
-----

```

```

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO Tags values(2,'tr')
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO Tags values(3,'hund')
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(1,1)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(1,2)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(1,3)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(2,1)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(2,2)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(2,3)
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO HasTag values(3,1)
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO HasTag values(3,2)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(3,3)
-----

Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO HasTag values(4,1)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(5,2)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO HasTag values(6,3)
-----

```

```

Query OK, 1 row affected (0.04 sec)
-----
INSERT INTO HasLink values(1,2)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO HasLink values(2,3)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO HasLink values(3,4)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO HasLink values(4,5)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO HasLink values(5,6)
-----

Query OK, 1 row affected (0.06 sec)
-----
INSERT INTO MediaDepartmentAccess values(3,1)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO MediaDepartmentAccess values(3,2)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO MediaDepartmentAccess values(4,1)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO MediaDepartmentAccess values(4,2)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO MediaProfileAccess values(1,1)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO MediaProfileAccess values(1,2)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO MediaProfileAccess values(2,1)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO MediaProfileAccess values(2,2)
-----

Query OK, 1 row affected (0.05 sec)
-----
INSERT INTO HasGuardian values(1,2)

```

```

-----
Query OK, 1 row affected (0.05 sec)

-----
INSERT INTO HasGuardian values(2,1)
-----

Query OK, 1 row affected (0.04 sec)

-----
INSERT INTO AuthUsers values('stringinIntfield',null,'cannot be done','i are wrong','wrong hansen')
-----

ERROR 1366 (HY000): Incorrect integer value: 'cannot be done' for column 'aRole' at row 1
-----
INSERT INTO AuthUsers values('tolongstring',null,1,'username00username00username00username00','hansen')
-----

ERROR 1406 (22001): Data too long for column 'username' at row 1
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds
to your MySQL server version for the right syntax to use near 'INT(2))' at line 1
-----
INSERT INTO Department values(50,'stranden','strandvejen',12121212,'str@stranden.dk')
-----

ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails
('testbase`.`Department`, CONSTRAINT `Department_ibfk_1` FOREIGN KEY
('idDepartment') REFERENCES `AuthUsers` ('idUser'))
-----
INSERT INTO Profile values(50,'Anders','Hansen',null,1,12345678,'pics/anders.png','blob')
-----

ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails
('testbase`.`Profile`, CONSTRAINT `Profile_ibfk_1` FOREIGN KEY
('idProfile') REFERENCES `AuthUsers` ('idUser') ON DELETE CASCADE)
-----
SELECT * FROM AuthUsers,Profile
WHERE AuthUsers.certificate='cert2' AND
Profile.idProfile=(SELECT idUser
FROM AuthUsers
WHERE certificate='cert2')
-----

+-----+-----+-----+-----+-----+-----+
| certificate | idUser | aRole | username | password | idProfile |
+-----+-----+-----+-----+-----+-----+
| cert2      | 2      | 2     | mette    | Nielsen  | 2         |
+-----+-----+-----+-----+-----+-----+

+-----+-----+-----+-----+-----+-----+-----+
| firstname | surname | middlename | pRole | phone | picture | settings |
+-----+-----+-----+-----+-----+-----+-----+
| Mette     | Nielsen | s.         | 2     | 81234567 | /pics/metter.png | blob      |
+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

-----
SELECT * FROM AuthUsers,Department
WHERE AuthUsers.certificate='cert3' AND
Department.idDepartment=(SELECT idUser
FROM AuthUsers
WHERE certificate='cert3')
-----

+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| certificate | idUser | aRole | username | password | idDepartment | name | address | phone | email |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| cert3      | 3      | 3     | birken   | birk     | 3            | stranden | strandvejen | 12121212 | str@stranden.dk |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

-----
SELECT * FROM HasDepartment
WHERE HasDepartment.idProfile=(SELECT idUser FROM AuthUsers WHERE certificate='cert1')
-----

+-----+-----+
| idProfile | idDepartment |
+-----+-----+
| 1         | 3             |
| 1         | 4             |
+-----+-----+

```

2 rows in set (0.00 sec)

```
-----  
SELECT * FROM HasSubDepartment  
WHERE HasSubDepartment.idDepartment=(SELECT idUser FROM AuthUsers WHERE certificate='cert1')  
-----
```

Empty set (0.00 sec)

```
-----  
SELECT * FROM Apps,ListOfApps  
WHERE Apps.idApp=ListOfApps.idApp AND  
      ListOfApps.idProfile=(SELECT idUser  
                             FROM AuthUsers WHERE certificate='cert1')  
-----
```

idApp	name	version	icon	package	activity	idApp	idProfile	setting	stats
1	Angry Birds	1.0	icon1	package1	activity1	1	1	settings	stats
2	Very Angry Birds	2.0	icon2	package2	activity2	2	1	more_setting	more_stats

2 rows in set (0.00 sec)

```
-----  
SELECT * FROM Media  
WHERE ownerID=(SELECT idUser  
                   FROM AuthUsers  
                   WHERE certificate='cert1')  
-----
```

idMedia	mPath	name	mPublic	mType	ownerID
1	/sti	name	1	1	1
2	/stien	named	1	1	1
3	/stier	rename	1	1	1

3 rows in set (0.00 sec)

```
-----  
SELECT distinct Tags.idTags,Tags.caption  
FROM Tags,HasTag,Media  
WHERE Tags.idTags=HasTag.idTag AND  
      (HasTag.idMedia=Media.idMedia AND ownerID=(SELECT idUser  
                                                    FROM AuthUsers  
                                                    WHERE certificate='cert1'))  
-----
```

idTags	caption
1	bil
3	hund
2	tr

3 rows in set (0.00 sec)

```
-----  
SELECT distinct HasTag.idMedia,HasTag.idTag  
FROM HasTag,Media  
WHERE HasTag.idMedia=Media.idMedia AND  
      Media.OwnerID=(SELECT idUser  
                      FROM AuthUsers  
                      WHERE certificate='cert1')  
-----
```

idMedia	idTag
1	1
1	2
1	3
2	1
2	2
2	3
3	1
3	2
3	3

9 rows in set (0.00 sec)

```

SELECT distinct HasLink.idMedia,HasLink.idSubMedia
FROM HasLink,Media
WHERE (HasLink.idMedia=Media.idMedia AND
Media.OwnerID=(SELECT idUser
FROM AuthUsers
WHERE certificate='cert1'))

```

```

+-----+-----+
| idMedia | idSubMedia |
+-----+-----+
|      1 |      2 |
|      2 |      3 |
|      3 |      4 |
+-----+-----+
3 rows in set (0.01 sec)

```

```

SELECT M.idDepartment,M.idMedia
FROM MediaDepartmentAccess M,Department D
WHERE M.idDepartment=D.idDepartment AND
D.idDepartment=(SELECT idUser
FROM AuthUsers
WHERE certificate='cert1')

```

Empty set (0.00 sec)

```

SELECT M.idProfile,M.idMedia
FROM MediaProfileAccess M,Profile P
WHERE M.idProfile=P.idProfile AND
P.idProfile=(SELECT idUser
FROM AuthUsers
WHERE certificate='cert1')

```

```

+-----+-----+
| idProfile | idMedia |
+-----+-----+
|      1 |      1 |
|      1 |      2 |
+-----+-----+
2 rows in set (0.00 sec)

```

```

SELECT idGuardian,idChild
FROM HasGuardian,Profile
WHERE idGuardian=idProfile AND
idProfile=(SELECT idUser
FROM AuthUsers
WHERE certificate='cert1')

```

```

+-----+-----+
| idGuardian | idChild |
+-----+-----+
|      1 |      2 |
+-----+-----+
1 row in set (0.00 sec)

```

```

SELECT *
FROM AuthUsers
WHERE idUser=50

```

Empty set (0.00 sec)

```

UPDATE Profile
SET firstname='torben'
WHERE idProfile=(SELECT idUser
FROM AuthUsers
WHERE certificate='cert1')

```

Query OK, 1 row affected (0.04 sec)
Rows matched: 1 Changed: 1 Warnings: 0

```

SELECT *
FROM Profile

```

```

-----
+-----+-----+-----+-----+-----+-----+-----+-----+
| idProfile | firstname | surname | middlename | pRole | phone | picture | settings |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | torben | Hansen | NULL | 1 | 12345678 | /pics/anders.png | blob |
| 2 | Mette | Nielsen | s. | 2 | 81234567 | /pics/metter.png | blob |
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

-----
UPDATE Profile
SET firstname=1
WHERE idProfile=1
-----

Query OK, 1 row affected (0.05 sec)
Rows matched: 1 Changed: 1 Warnings: 0

-----
SELECT *
FROM Profile
-----

+-----+-----+-----+-----+-----+-----+-----+-----+
| idProfile | firstname | surname | middlename | pRole | phone | picture | settings |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | Hansen | NULL | 1 | 12345678 | /pics/anders.png | blob |
| 2 | Mette | Nielsen | s. | 2 | 81234567 | /pics/metter.png | blob |
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

-----
UPDATE Profile
SET firstname=null
WHERE idProfile=1
-----

ERROR 1048 (23000): Column 'firstname' cannot be null

-----
SELECT *
FROM Profile
-----

+-----+-----+-----+-----+-----+-----+-----+-----+
| idProfile | firstname | surname | middlename | pRole | phone | picture | settings |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 1 | 1 | Hansen | NULL | 1 | 12345678 | /pics/anders.png | blob |
| 2 | Mette | Nielsen | s. | 2 | 81234567 | /pics/metter.png | blob |
+-----+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)

-----
DELETE FROM Profile
WHERE idProfile='1'
-----

Query OK, 1 row affected (0.04 sec)

-----
SELECT *
FROM Profile
-----

+-----+-----+-----+-----+-----+-----+-----+-----+
| idProfile | firstname | surname | middlename | pRole | phone | picture | settings |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 2 | Mette | Nielsen | s. | 2 | 81234567 | /pics/metter.png | blob |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

-----
DELETE FROM Profile
WHERE idProfile='50'
-----

Query OK, 0 rows affected (0.00 sec)

-----
SELECT *
FROM Profile
-----

```



```

+-----+-----+-----+-----+-----+-----+-----+-----+
| idProfile | firstname | surname | middlename | pRole | phone | picture | settings |
+-----+-----+-----+-----+-----+-----+-----+-----+
|          2 | Mette    | Nielsen | s.         |      2 | 81234567 | /pics/metter.png | blob      |
+-----+-----+-----+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

-----
DELETE FROM AuthUsers
WHERE certificate='cert3'
-----

ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails
('testbase'.Department', CONSTRAINT 'Department_ibfk_1' FOREIGN KEY
('idDepartment') REFERENCES 'AuthUsers' ('idUser'))

```

Evaluation

Pages 1 to 4 and the first few lines of page 5, are the messages from insertion of two full valid profiles into the database. There were no real surprises here before a few other tests were run. These results cover test cases 0 to 12.

The errors following on page 5, marked error 1366,1406,1064 and 1452 are attempts at inserting data that is not valid according to our schema. first run of these test cases showed that we had a small flaw in the server setup. Instead of barring invalid data into some fields, it would just give a warning. Changing the mode of the database to strict fixed this, at least for strings into int fields, and to long strings, however, it will still accept an int value into a string field.

From the middle of page 5 and forward we verify one of the profiles that we have inserted, we only check one of the profiles as we find it safe to assume that if we can insert 1 profile, we can also insert 2. During this process out test cases showed us that we the group did not share an understanding of the database schema, which also means that part of the server implementation made in our project, is actually incorrect.

Near the beginning of page 7 and til the end we attempt to read, update and delete aspect of the data set, this worked pretty much as expected, with the database changed to strict.