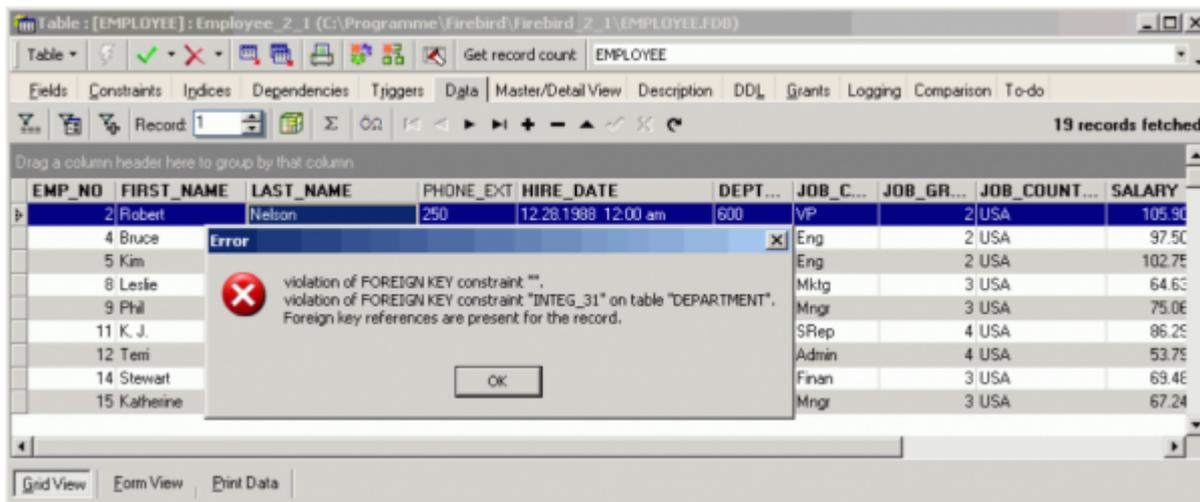


Cascading referential integrity

Since InterBase® v5/Firebird, cascading referential integrity is also supported.

When a **foreign key** relationship is specified, the user can define which action should be taken following changes to, or deletion of its referenced **primary key**. **ON UPDATE** defines what happens when the primary key changes and **ON DELETE** specifies the action to be taken when the referenced primary key is deleted. In both cases the following options are available:

1. **NO ACTION:** throws an **exception** if there is a existing relationship somewhere in another table:



2. **CASCADE:** the foreign key column is set to the new primary key value. A very handy function when it comes to updating, as all referenced foreign key fields are automatically updated. When deleting the **CASCADE** option also deletes the foreign key row when the primary key is deleted. Be extremely careful when using **CASCADE ON DELETE**; when you delete a customer, you delete his orders, order lines, address, everything where there is a defined key relationship. It is safer to write a procedure that ensures just those data sets necessary are deleted in the right order.

3. **SET NULL:** if the foreign key value is allowed to be **NULL**, when a primary key value is deleted, it will set the relevant foreign key fields referencing this primary key value also to **NULL**.

4. **SET DEFAULT:** the foreign key column is set to its default value when a primary key field is deleted.

From: <http://ibexpert.com/docu/> - IBExpert

Permanent link: <http://ibexpert.com/docu/doku.php?id=01-documentation:01-13-miscellaneous:glossary:cascading-referential-integrity>

Last update: 2023/08/14 08:52

