

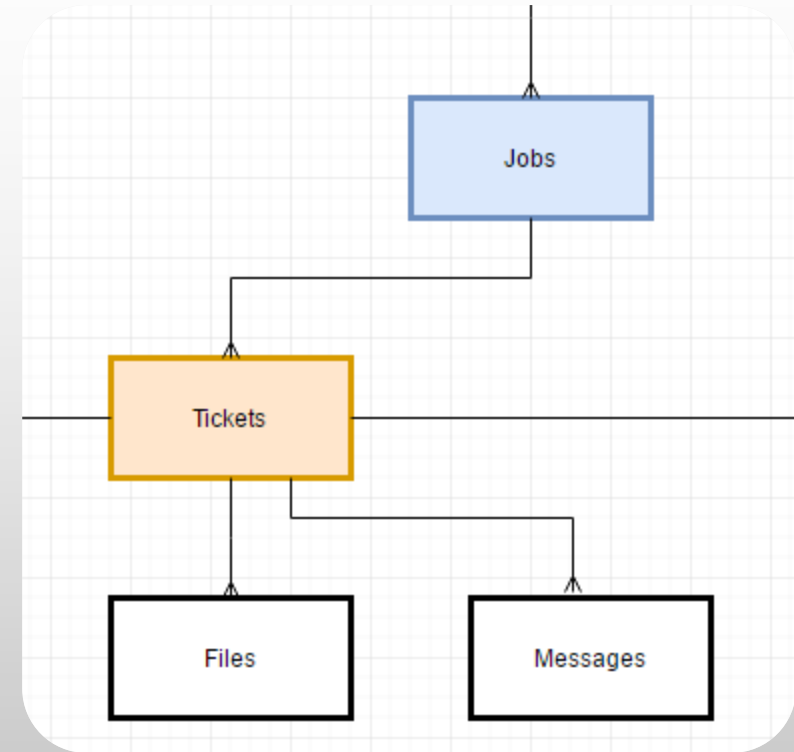
DATABASE DESIGN

DB GURUS INTERNAL TRAINING

INTRO

After the prototyping phase (or earlier if possible) we need to review the database design to ensure it has a logical structure and no duplicate or unnecessary tables.

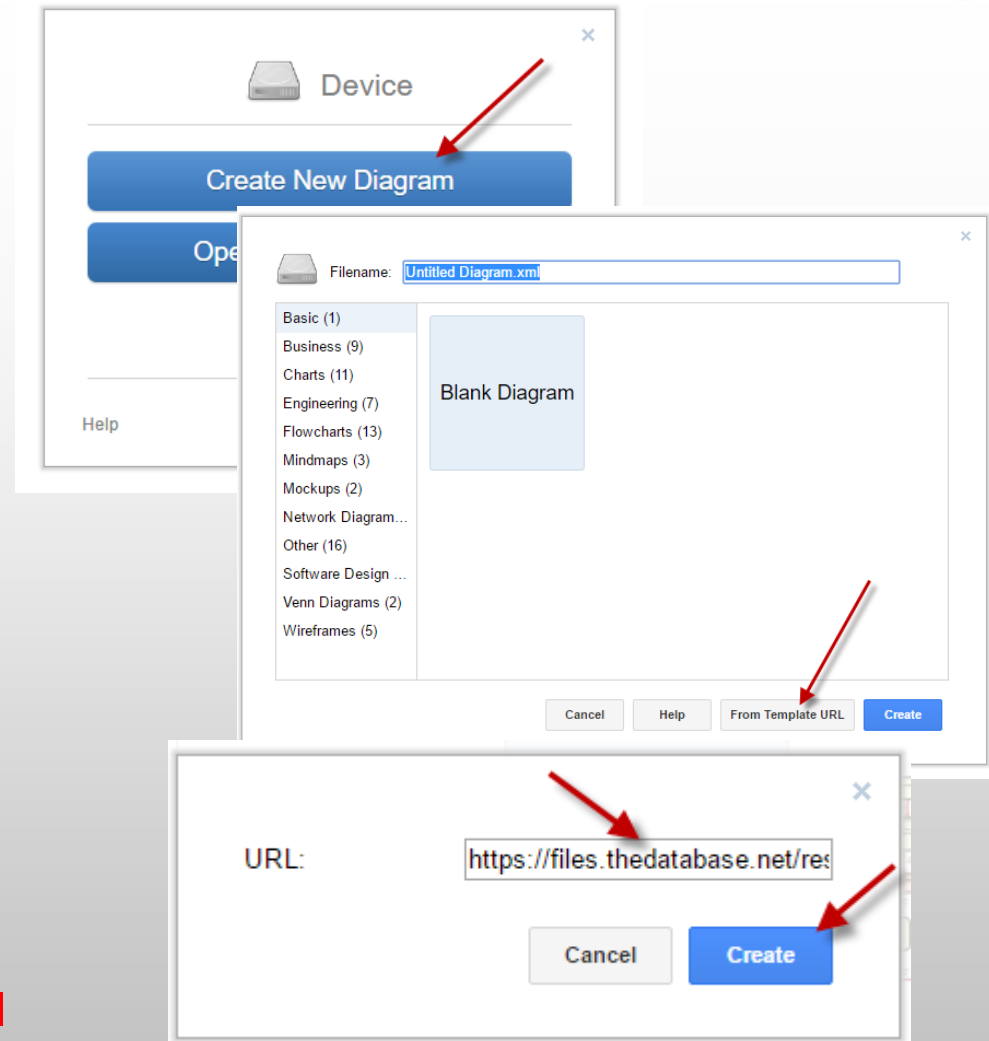
In order to do this we are going to create a database relationship diagram just showing the table names and how they are connected.



1. CREATE DIAGRAM

1. Open www.draw.io
2. Create New Diagram
3. Choose **From Template URL**
4. Paste in this URL:

<https://files.thedatabase.net/resources/DBTables.xml>

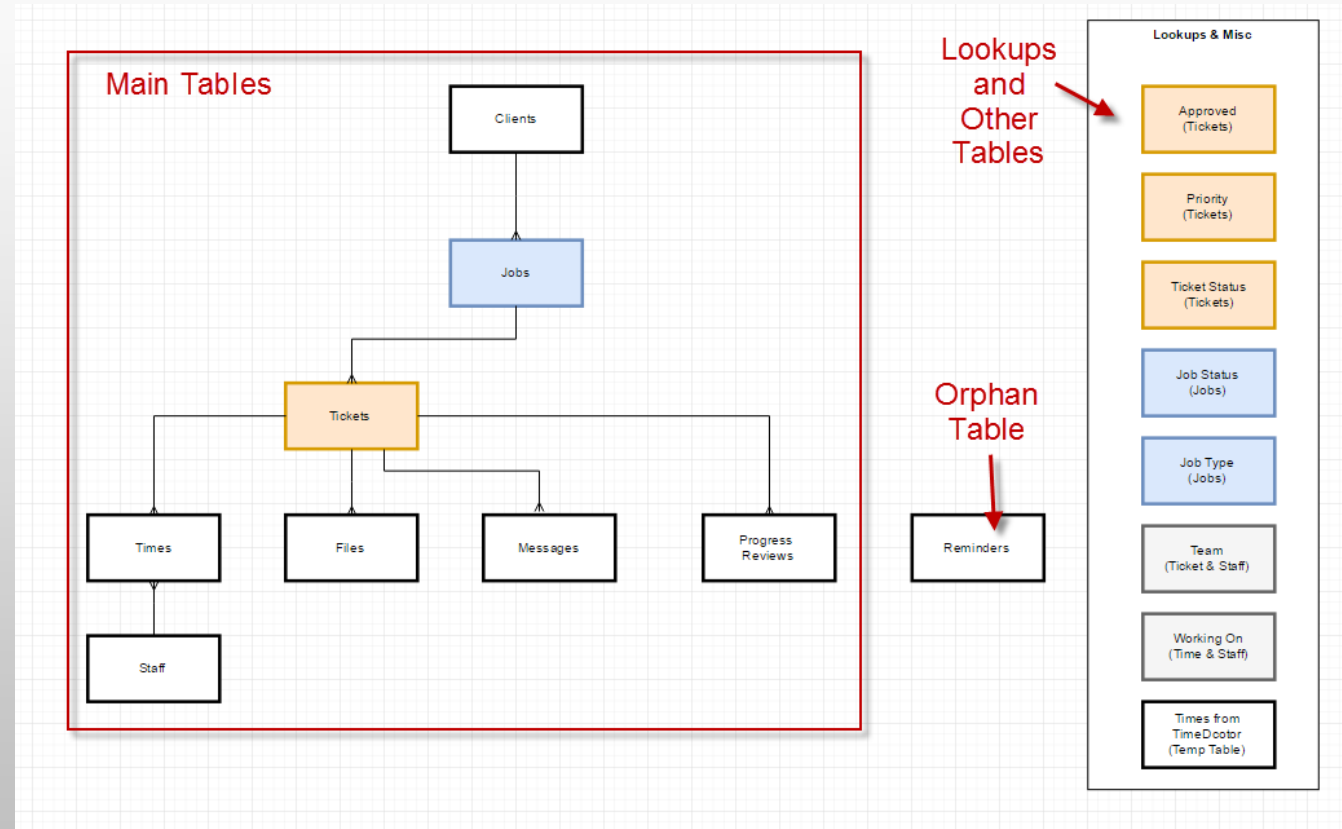


2. ADD MAIN TABLES

Modify the template and add all your tables to the diagram:

1. Main tables on the left
2. Lookup tables on the right
3. Uncertain tables in the middle (in my example Reminders)

NOTE: View names and table names should match

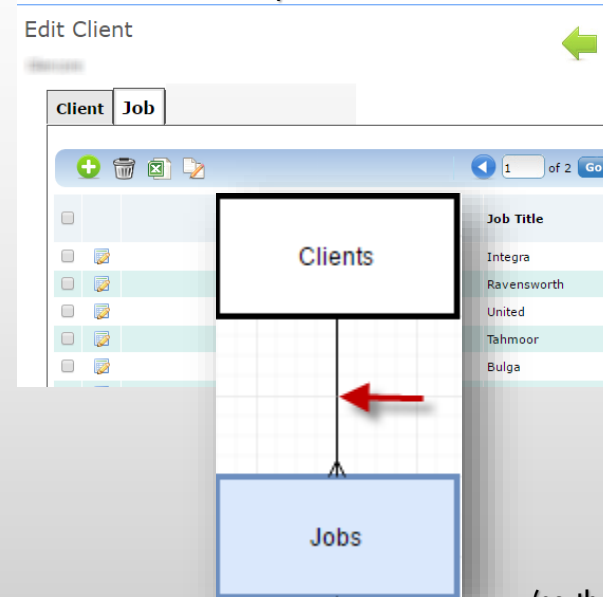


3. SET RELATIONSHIPS

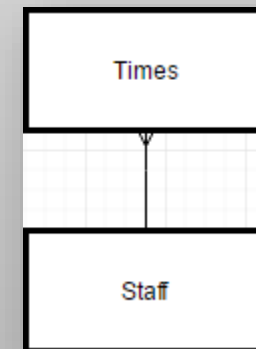
Use the connectors to show which tables are related to which

1. The tables should be positioned to indicate flow (we go from the client to the job, from the job to the ticket etc.)
2. Link the connector to the boxes so as you move the boxes the connectors move too
3. Orientate the connectors so the 3 lines are at the end with multiple records

Each Client has multiple Job Records
(so the connector has a tripod at the Jobs end of the line)



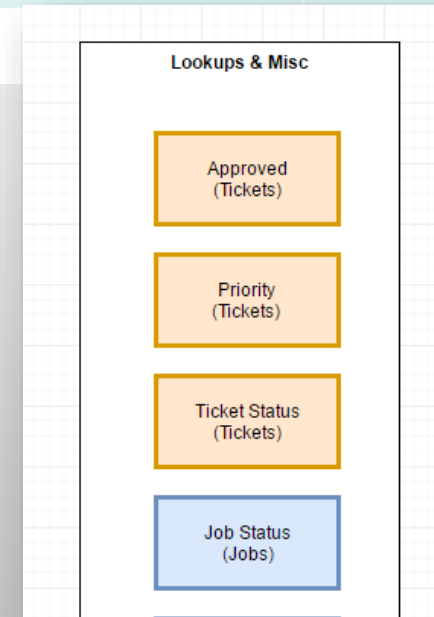
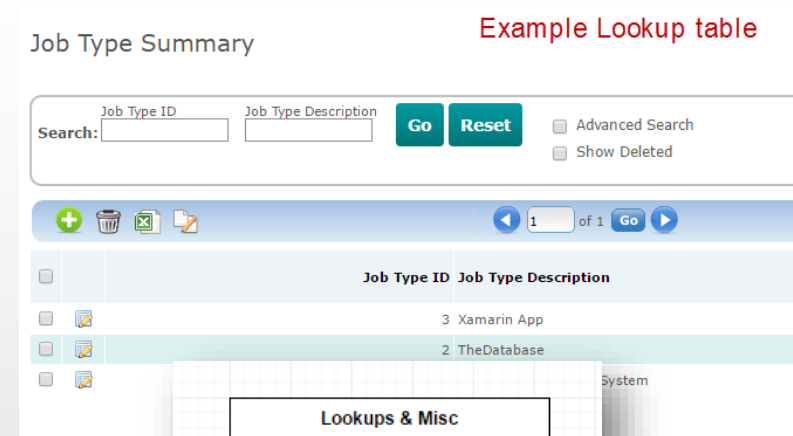
Each Staff has multiple Time Records
(so the connector is the opposite way round)



4. ADD LOOKUP TABLES

Lookup tables are used as a list of values in a dropdown.

1. We put these down the right hand side of the diagram to avoid clogging up the main design
2. Put the name of the main tables they are used by (in brackets)
3. Use background colour to help show how they are used



5. DELETE TABLES

If you find a table is not required then rename the table the TheDatabase and delete it (but not permanently.. We may change our mind later!)

1. Rename the table with an x in the front so we can see if it appears somewhere it should not
 2. Delete the table and confirm
 3. Do not permanently delete it!

