

 Liferay Entity Relationship Overview for your workplace. For Liferay Portal 7.2 CE and Liferay DXP 7.2

You found this document, because you looked for a documentation of Liferay's *internal* database structure. Print the poster in full size, hang it in your team's workspace and make sure everybody who changes data through SQL signs guilty. There's a reason for the database structure not being published. You'll find the reason in the long paragraph on this poster, as well as on <https://liferay.dev/blogs/-/blogs/understanding-liferay-s-database> and numerous other places on the internet.



Despite the warnings, I have made manual changes to Liferay's database before/after I've read the message above.
Note: There's no need to specify the *exact* changes you did.
Your team should just know *who* messed with the database.

About understanding Liferay's underlying database structure:

You shouldn't even attempt to figure out relationships between Liferay's tables. This would only give you the false impression to know what you might be able to change in individual tables. However, much damage has been done in the past – and you won't even recognize the future problems in the moment of your change: They might manifest during your next upgrade. Or – for example with duplicate key problems – during normal business hours.

Odds are that your follow-up problems appear on a Sunday night at 3am, in your production system, and you won't immediately attribute the problem to your own changes (from half a year ago). But you should!

Odds are also that your own changes will cause severe problems that you can't even imagine now.

Save yourself from a lot of pain:

- There are no enforced foreign key relationships between Liferay's tables
- Any relationship is enforced through the API's implementation. This is necessary as all of the supported database engines have different feature sets.
- Even if you understand some of the relationships now, you can never be sure that you understand them *all*. Or all *future* constraints.
- If you manually change(d) any data in Liferay's database: Print this poster, hang it in your Liferay Team's workspace, and make a note that you changed data despite this warning.
- As soon as you run into problems later, add a marker to the count of people that regret having made manual changes to the database.

Qualifying changes to the database include:

- DDL statements
- INSERT / UPDATE / DELETE statements, no matter if executed directly or through stored procedures
- Anything else that changes data in Liferay's tables trying to circumvent the qualifications mentioned above, that's *not* triggered through Liferay's API and has *not* been authorized by Liferay Support.

Count of known teams regretting past changes to the database