The diagram for the contact db contains 22 tables.

There is a big number of mapping tables addressing many-many relations.

Abstraction seems to be high in an attempt to prevent big db restructures even when new features need to be added in future following business evolution or more fields need to be kept/added/used by data analysts or data scientists :)

All tables should have IsDeleted field, since we do not delete data. We keep it for big data specialists or reference or audits or beacause we do not want to lose anything :)

The following tables have been created :

PhoneTypes

Phone

Phone\_PhoneTypes

Person

Address

Person\_Address

Company

Person\_Company

Image

Image\_Type

Image\_ImageType

Contact

Comments

AddressTypes\_Digital

Address\_Types

AddressTypes\_Physical

Social\_Networks

SocualNetworkType

Social\_Network\_Network\_Type

Instant\_Messengers

Instant\_Messengers\_IMTypes

IM\_Types

/note: above table names may contain a few typos as have been re-typed by hand/

**Contact:**

This table contains 1 FK(Person\_Contact) and is being referred by 5 Fks.

**Comments:**

This table keeps some data for the contact objects like working time. Refers only the Contact table. Referred by noone. One contact may have many comments or pieces of information tied to it.

**Image\_ImageType:**

Mapping table serving many to many bw Contact table and ImageType and Image. One contact may have many Images and those images may have many categories like profile pics, badge pics etc.

**AddressTypes\_Physical:**

Various fileds/address are available for a single object. All those are physical.

**AddressTypes\_Digital:**

One object has many digital addresses. This table will grow a lot in future due the technologies advancements in the sector/any sector :)/

We have here the URL address and the email address. Note we assume there is only one email address. Note email functionality may be abstracted to a db. We need further discussions on the email clients supported and whether we need to keep track of it and map it to supported email protocols. Also we need to plan for how many contact objects would have access and respond from an email account. It would be somewhat normal to have numerous people answering the same account e.g. startups, call centers, support.

**Address\_Type:**

This is a mapping table for the physical and digital addresses.

**Address:**

Mapping table. We have the most complex logic here. One contact may have many addresses.

One person(from Person table) may have many addresses and those addresses may be of various types(digital/physical). Therefore we have many to one to the object contact.

**InstantMessengers\_IMTypes:**

Mapping Table. One contact may have multiple IM and having every business and every group using diff messengers, we need to have the IM with diff purpose/type.

**Instant\_Messengers:**

Apart from the obvious many-one provded to the contact via a mapping table, we have the relation with Social Networks. Many Spcoal networks offer their own messenger(i.e. Facebook, GooglePlus) but some use well established messengers like Slack or Skype.

**SocialNetwork\_Network\_Type:**

Mapping table allowing for a contact to have many social networks of many types(personal/work/club etc)

**Person\_Company:**

Mapping table allowing for every person(in Person table) from a company(from Comany tablr) to have various types of phone numbers.

In our model the company the person is working with handles the issue of phone nums. We are a very company centric company :)

Other tables seem to not need an explanation.

Known issues/Bugs:

1. [Bug-minor]Company table has a typo in name:

2. [Bug-minor]Company table field Company\_Name has a typo in name

3. [Bug-medium]Phone table need to have IsDeleted field added

4. [Bug-minor]Contact and Company and IM\_Types tables have IsDeleted field with wrong type. Need to alsoe check all toehr tables for wrong types.

5. [Feature] Person table may need to have a many-one with Phone\_PhoneType for easier query acess. - need more time.

6. [Enhancement] Email db architecture – need more info.

7. [Bug-medium]PhoneTypes has a Phone field. Probably a To be removed. Check documentation for the other filed names in this table.