engenic

"Automating Telecommunications"

TeleFlow Relay

Database Design Rules

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Database Design Rules

Primary Keys

With the following listed exceptions, all primary keys will be: Auto-incrementing, Unsigned INT(10)
- Exception: Smaller INTs can be used for tables that are unlikely to grow much, if at all. Application settings tables (replacements for the old ivrconfig table) are a good example, since these tend to have a single row at the client database level.
- Exception: Some PKs in the top-level teleflow_relay database may be copied into their counterparts in the client-level database.

Record-level Date/Time Stamps

In any table it might be beneficial to know when a row is created or updated (this is true of most tables, although exceptions might exists, particularly where it is more advantageous/useful to track when particular fields or groups of fields have changed, in which case each such group has appropriate field(s) to track this detail), the following fields should be added to the end of the table, and the appropriate triggers created to populate them: (copy the triggers from existing tables that have these fields)

create_dtm_utc	datetime	-	Row create date/time in UTC.
update_dtm_utc	datetime	-	Last date/time the row was updated in UTC.
create_dtm_host	datetime	-	Row create date/time, in local database host/server time.
update_dtm_host	datetime	-	Last date/time the row was updated, in local database host/server time.

In client-level databases, the following additional datetime fields can be added to the four, or can replace the _host fields (as appropriate to the table) above:

| create_dtm_client | datetime | - | Row create date/time, in client's local time. |
| update_dtm_client | datetime | - | Last date/time the row was updated, in client's local time. |

DB Dictionary – Table Description / Layout

The Database Dictionary is sorted alphabetically by table name.

Generally, the table description format/layout is as follows:

Table name: The name of the table. For client-level database tables, this is followed by (client) to make the table of contents easier to read.

Database: Indicates whether the table can be found in the top-level management TeleFlow Relay database, or in TFRelay client databases. Can be one of: "TeleFlow Relay" or "Client".

Primary Key: The table's primary key field.

Foreign Keys: List of foreign keys in the table. Following each foreign key field name, the table the field can be found in is defined in (parentheses).

Indexes: Lists all indexes on the table. (Not including the assumed PK clustered index)

Relationships: Describes the relationships between this table and any others. Notes the tables that it has a relationship with in **bold**, followed by the name of the foreign key(s) used to make the link in the relationship in (parentheses).

Description: A description of the table precedes the table contents.

Table/field contents: A table describing all the fields in the table, their data types, sizes, and any special information about the data they contain.

SPECIAL: Yellow highlights are fields that need the logic they suggest built up around them.

SPECIAL: Muted grey highlights are for fields that are deprecated, or reserved for future use. Each is noted for which of these it is.