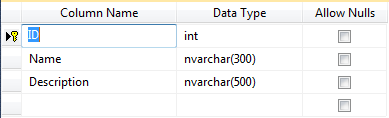
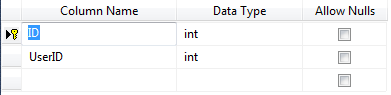
Fzero Database Schema Documentation

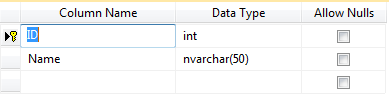
1. **Tables**
2. ActionTypes: contains all types of actions that are logged to track users’ activity on the application



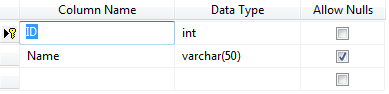
1. ApplicationUsers: contains all System Users who can access the Main portal of the Application.



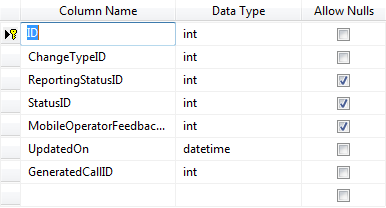
1. AppType: contains lookup data of user types.



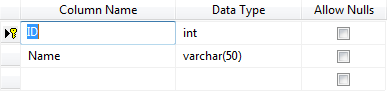
1. Carriers: carries all carriers from who we receive CDRs… this table is incremented automatically whenever we receive a CDR from an undefined carrier.



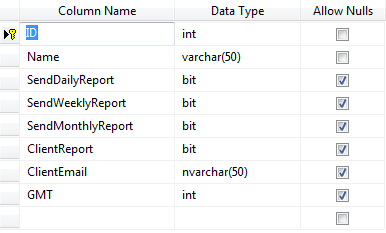
1. CasesLogs: used to log case statuses through the case cycle in case management module.



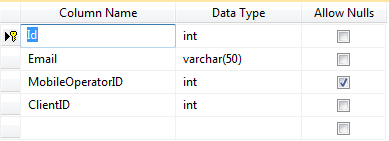
1. ChangeTypes: lookup table for change types that may occur for a given case.



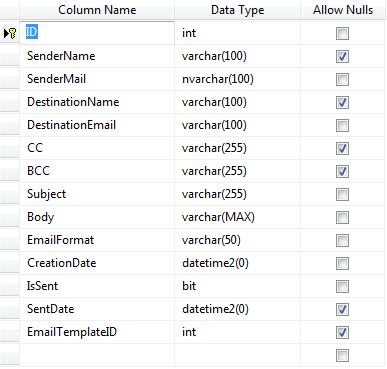
1. Clients: contains lookup table for clients that we provide service in this application, also we specify types of reports that are allowed to be sent through deployed windows services.



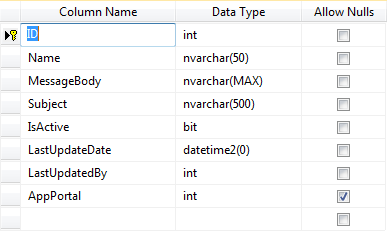
1. EmailCCs: contains cc list to whom we sent reports for given clients and mobile operators.



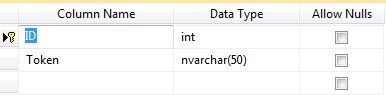
1. Emails: contains log of all Emails sent by the system to clients and mobile operators for tracking purpose.



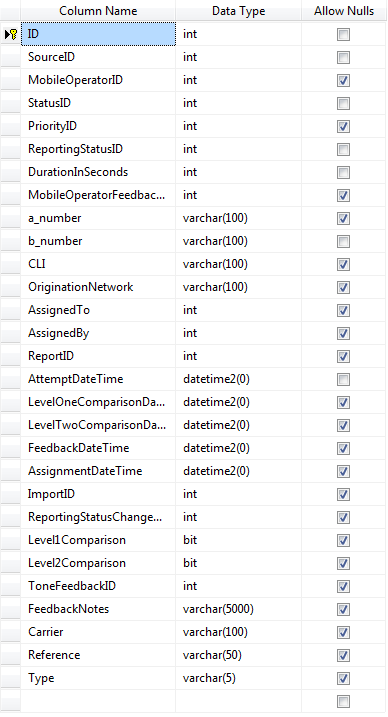
1. EmailTemplates: carries templates for emails that are send to customers



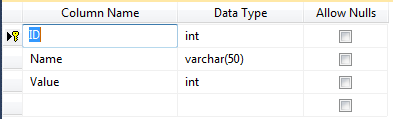
1. EmailTokens: contains characters that are replaced on runtime in email templates... for example we have %link% … this token will contain URL that is sent in the email sent.



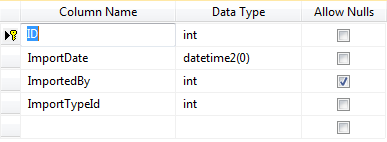
1. GeneratedCalls: carries all generated calls that are collected from generating sources defined in sources table.



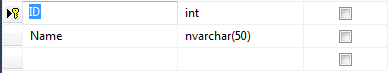
1. GMTs: lookup table for GMTs



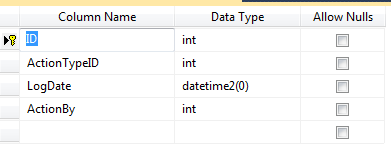
1. Imports: logs all the imports that are done either manually or automatically.



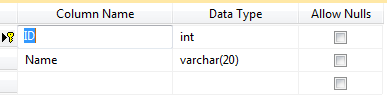
1. ImportTypes: lookup table for import types (Generated or Received)



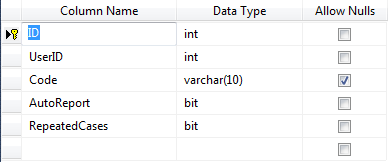
1. LoggedActions: contains log of actions that are done by system users



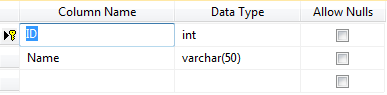
1. MobileOperatorFeedbacks: lookup table for feedback of operators



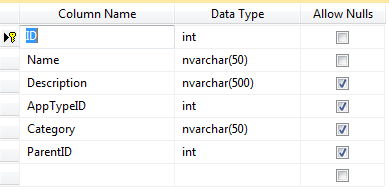
1. MobileOperators: contains mobile operators registered in Fzero.



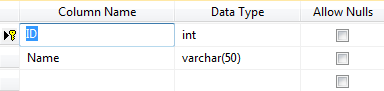
1. OriginationNetworks: carries all the origination networks from which we received calls... Note that this table is automatically updates… i.e. Whenever a new CDR is imported from a new origination network not registered before... the network will be inserted automatically



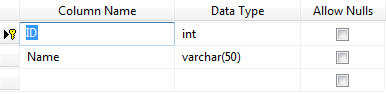
1. Permissions: contains set of permissions that might be granted to system users.



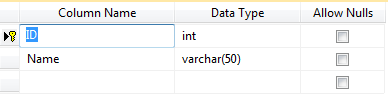
1. PredefinedColumns: lookup table for predefined columns used in mapping CDRs to generated or received calls table.



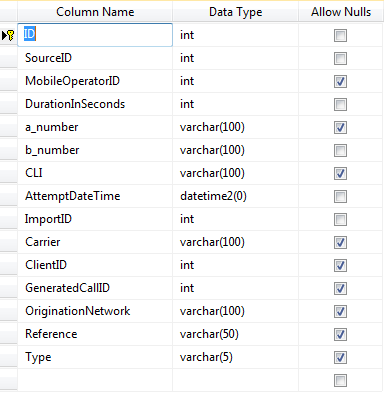
1. PredefinedColumnsforRelatedNumbers: same as above but it is specific for related numbers.



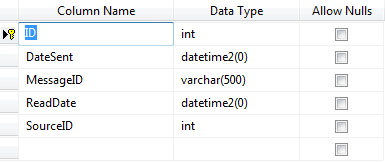
1. Priorities: lookup table for priorities in the suspicion level of cases



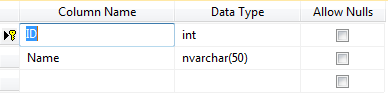
1. RecievedCalls: contains all the received calls that are collected form the sources that are specified in sources table who are receivers



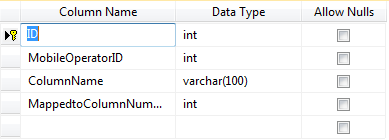
1. RecievedEmails: logs all the emails that where received by Fzero



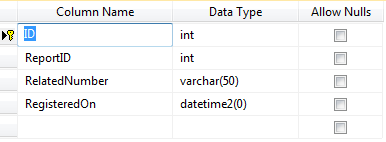
1. RecommendedActions: lookup table for recommended action for cases



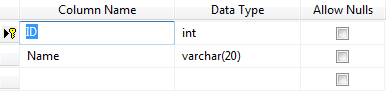
1. RelatedNumberMappings: contains mapping for related numbers… that is used to import related numbers delivered by mobile operators.



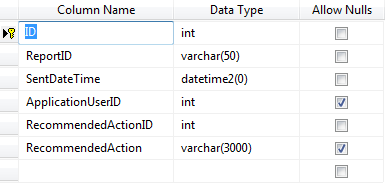
1. RelatedNumbers: contains the related numbers to a given number this was sent as fraud to an operator



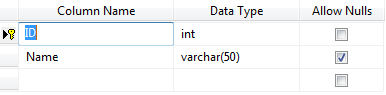
1. ReportingStatuses: lookup of Reporting Statuses for cases immerging in the system.



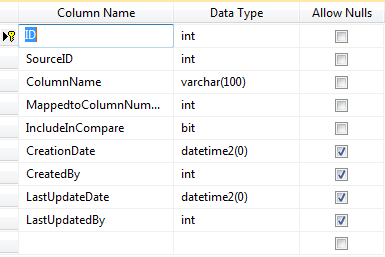
1. Reports: contains reports sent.



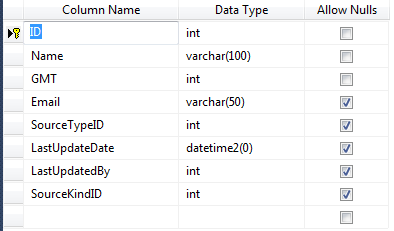
1. SourceKinds: lookup table for source kinds (GSM or SIP)



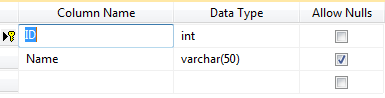
1. SourceMapping: contains mapping of sources in order to know how to read and insert records from sources to Database



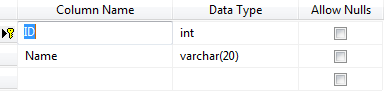
1. Sources: contains all sources that either generate calls or receive or both... with email and GMT of each to solve issue or time difference



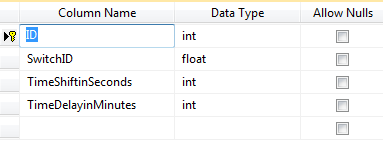
1. SourceTypes: lookup table for Source Types



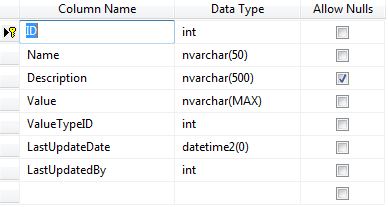
1. Statuses: look up for case statuses



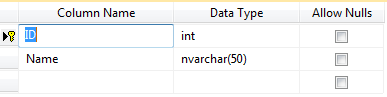
1. SwitchProfiles: contains information or switch that are used in Level two compare



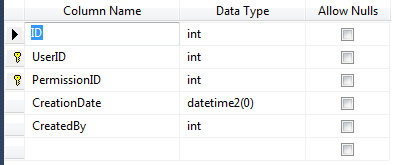
1. SysParameters: configuration parameters table



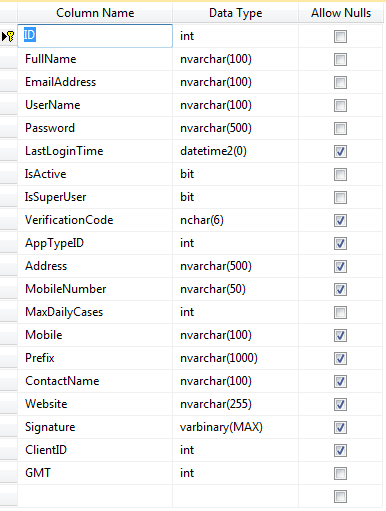
1. ToneFeedback: level two compare related feedback types sent by IGW server



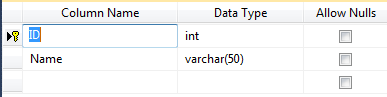
1. UserPermissions: carries permissions of system users



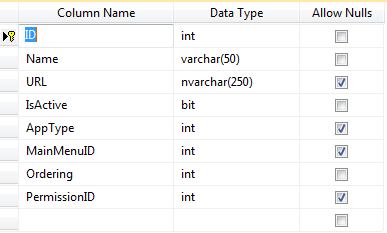
1. Users: used to register all users who can access the application. These users can be System admins or Mobile operators



1. ValueTypes: for the configuration system parameters specified above



1. WebsiteMenu: contains the menu of the main and clients portals



1. **Database Mail Configuration**
2. Mail Accounts:
3. FMS\_Account: used to send emails for Clients: ITPC, Zain, and any new client.
4. FMS\_Syria\_Account: used to send emails for ST only.
5. Profiles:
6. FMS\_Profile: related to FMS\_Account and specified in sp that queues an email to a given client or mobile operator
7. FMS\_Syria\_Profile: related to FMS\_Syria \_Account and specified in sp that queues an email to a given client or mobile operator
8. **Jobs**
9. LevelOneComparison: this job is responsible for comparing generated calls with received calls in order to link them … and find fraud calls... this is done using a complicated mechanism in which a\_number, b\_number, attemptdatetime and duration and source are needed to find the related calls and to find fraud calls