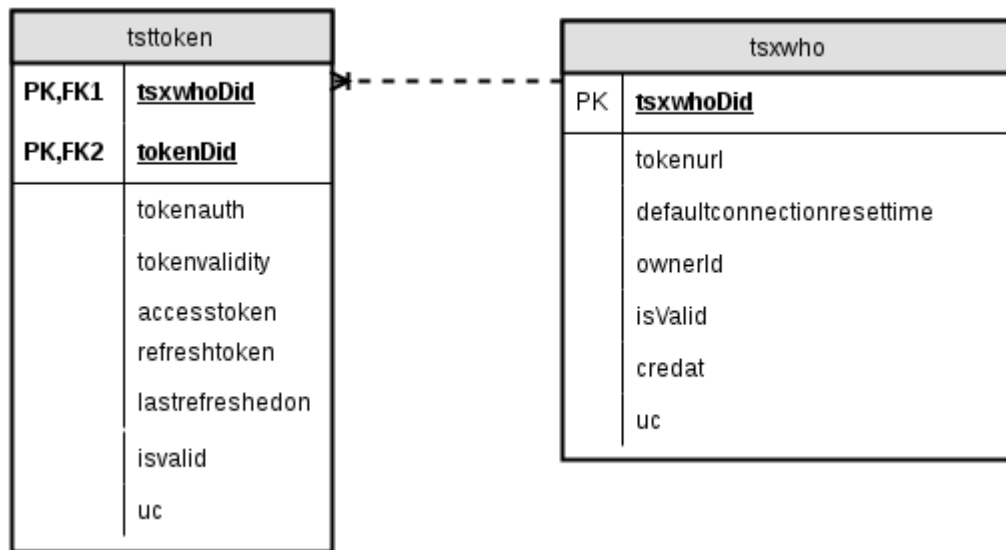ER Diagram of token service
Token service need to persists token generation endpoint agest each "who". "Who" any other party which need to generate /maintain token pool.

Example whos are
- Hub → Gateway call.
  - When an "Hub" needs to trigger api calls at operator it need to have a valid operator generated access-token/refresh token at hub. Then using the above access token hub can trigger southbound /operator apis.
  In this scenario the "who" is operator name.

- Gateway → Hub call
  When the operator successfully sends the sms to end user it required to send delivery notification back to hub which is called "call-back" . In such a scenario it required to call api at hub. Then the operator need to manage access-token/refresh token at gateway . In such a scenario the "who" is specific gateway name.

TsxWho Table
columns
- tsxwhodid (Number:PK)
  - unique number to identify specific "who"
- ownerID (Varchar : Unique)
  - name for who's identification
- tokenurl (varchar:400)
  - the token re-fresh endpoint url
- defaultconnectionresettime (Long)
  - token release time in milliseconds
  - once a token released it release this token back to pool at the end of this time interval.
- Isvalid(number :1,0)
  - the validity of a token url can be control using this.

- Credat(Date)
  - date where the record created in UTC.
- UC
  - update count to control Dirty updates.

Tsttoken Table
one tpxWho can have more than one taken entries.

columns
- tsxwhodid (Number:FK)
  - FK key from tpxWho
- tokendid(Integer:PK)
  - Auto generated unique number .
- takenauth(varchar :300)
  - this contain the base 64 decode value of Consumer Key:Consumer Secret for a application.
- Tokenvalidity(Number)
  - number of token validity in seconds.
- Accesstoken (varchar:200)
  - access-token token
- refreshtoken(varchar:200)
  - refreshtoken
- lastrefreshedon (timeStamp)
  - timestap of last refreshed.
- Isvalid(integer:1,0)
  - validity of the token
- uc(integer)
  - update count to avoid dirty update

tstevent Table

tstevent	
PK	**eventdid**
	jobname
	created
	text
	event
	status

This will log event history for each activity . Sample activities are :
- token expired
- token regenerating

<u>columns</u>
- eventdid (Number:pk)
- jobname (varchar:200)
  - name for activities if required
- created(timestamp)
  - time of the event
- text (var char:400)
  - additional text for the event.
- Event
  - event triggered
- status
  - status of the event.