**VoiceMailPlus**

**Technical Proposal**

# Overview

VoicemailPlus is a Core service that allow a subscriber (calling) leaves a voice message for the absent subscriber (called) and inform to calling when called is online back.

The service has convinent features and helps subscribers don’t miss any important message.

# Logical model



System has 04 main modules:

* CallProcess: handle call from subscriber A, save this call history, detect subscriber B’s status and call/send SMS to subscriber B when he is online back
* SmsProcess: send SMS notify/detect to subscriber
* ServiceProcess: handle register/unregister, renew service
* CMS: provide interface to admin lookup transaction and service statistic

# Service flow

## CallFlow



* + Step 1: Subscriber A call to subscriber B (B is offline or out of coverage), the call is forwarded to VoicemailPlus System.
  + Step 2: VoicemailPlus system establish call to B and play voice announcement to confirm with subscriber A send a voice message to absent subscriber B.
  + Step 3: Subscriber A accept to send a voice message
  + Step 4: Subscriber leave a voice message, the system store it on storage
  + Step 5: VoicemailPlus system save this call history and send SMS to subscriber to B to detect when B is online back.

## Subscriber call to VoicemailPlus to listen message



* + Step 1: Subscriber call to VoicemailPlus system over service prefix (example 123)
  + Step 2: VoicemailPlus system establish call to B and play voice to guide subscriber.
  + Step 3: Subscriber do follow the guide to listen the voice message.
  + Step 4: Subscriber hangup this call, VoicemailPlus save this call history.

## Call to subscriber play the voice message



* + Step 1: When subsciber (he has a voice message) is online back, VoicemailPlus create a call to the subscriber
  + Step 3: Subscriber accept the call, VoicemailPlus play the voice message to the subscriber.
  + Step 4: Subscriber hangup this call, VoicemailPlus save this call history.

## Deletec subscriber B’s status



* + Step 1: VoicemailPlus send a silence SMS to subscriber B to detect B’s status
  + Step 2: Subscriber B is online back, SMSC send notify to VoicemailPlus
  + Step 3: VoicemailPlus receive SMSC’s notification and know B is online back.
  + Step 4: VoicemailPlus system send a notification SMS to subscriber A about subscriber B’s status

# Requirement

* + ***Connection***
    - Connect to GMSC (SIP protocol)
    - Connect to SMPPGW (SMPP protocol)
    - Connect to ChargingGW/MPS
    - Connect to BCCSGW
    - Connect to Provisioning
  + ***Hardware***
    - 02 server application
    - 02 server database: Oracle RAC