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**Requirements Gathering Inception Report**

**For**

**CHILD HELPLINE KENYA**

**14 June, 2021**

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# Acronyms

GBV Gender Based Violence

VAC Violence Against Children

FRD Functional Requirements Document

ACHT Average Call Handling Time

TAT Turn Around Time

QC Quality Control

MNO’s Mobile Network Operators

LAN Local Area Network

UPS Uninterrupted Power Supply

NITA National Information Technology Authority

BITZ ITC Bitz IT Consulting Ltd

# Acknowledgments

The BITZ ITC team would like to express our gratitude to all who took the time to speak to us during this exercise

We were able to meet and share experiences with the helpline teams in Kenya & Tanzania.

Because of this support BITZ ITC We believe that we can now go ahead and customize the system to fit . At the same time, we accept responsibilities for any errors, omissions or misunderstandings in this report.

# Executive Summary

## Introduction

OPENCHS is a case management system with a call tracker for Child Helplines using the global child helpline 116. The system is currently used in four countries namely ( Kenya, Tanzania, Uganda and now Lesotho).

## Problem Statement .

BITZ IT has been requested to enable integration for the Mental Health Chatbot so that all conversations received in the chatbot can also be created in the helpline CRM. And where necessary employees of the helpline can engage with the client upon request and in cases where there are clear indication of RISK as defined in the CHATBOT.

## Proposed Solution.

Bitz proposed an upgrade of the current solutions in the two countries(Kenya & Tanzania) with the same system being used in Lesotho and Uganda, Because the system is ready for intergration.

The new system is also expected to improve the efficiency of the helpline as it comes ready with reporting, Process optimization and customizable interface that will allow helplines to self customize there system.

## Next Steps.

This documents indicates our understanding of the individual country needs. This documents is also used as the initial guideline for our Engineers in understanding the initial requirement. The teams have commenced with the customization that will lead towards the deployment of the current system in the two countries and final integration of the CHATBOT to be user for mental health cases.

# Scope

The upgrade should put the following into consideration:

1. The system should be able to receive calls for VAC on the toll free number 116 through E1 or SIP trunk channel .
2. System is developed on the Open Source Licence with commonly used languages and necessary documentation provided.
3. Build capacity of the end user teams to be able to make minor adjustments to the system (configurable modules where possible e.g case categories, SIP accounts,) and to manage the system after it has been handed over.
4. Develop a universal documented API to enable integration with other 3rd Party systems. Provide API Documentation.
5. The solution should be able to handle case distribution, routing, escalation based on roles & permissions regarding access for reported VAC cases. This should include follow-ups, case prioritization as well as case closure by providing necessary assistance to the clients who reach out to the Call Center for VAC cases.
6. The solution is expected to be multi-channel including: voice, SMS, U-Report, WhatsApp, Web-Online, Tweet-CHAT and CHATBOT with ability to provide distributed and remote terminals.
7. Provide dashboard real time call and case analytics which include sex, age, disability status for Counsellors, Supervisors, Case Managers and Case Workers as well as Performance Management Data based on Key Performance Indicators (KP Is) for individual agents and the helpdesk as a whole for VAC cases.
8. The solution should be able to provie reports based on various metrics and indicators such as (age, sex, disability status,case category) primarily on VAC
9. The system allows for case capture and categorization for reporting and follow up.
10. Design and documentations such as:
    1. End-user training manuals, job aids, reference manuals and quick guide reference cards.
    2. Technical system documentation such as system architecture and technical specifications documentation, system manuals including quick troubleshooting guides and summaries, system administration manuals, guides, configuration, backup and restore procedure manuals.
11. The system should be accessible/friendly to users with disability specifically for vision, hearing and motor skills impairments.
12. Plan and conduct training for: Helpline staff, Helpline Supervisors, case managers (as describe in point 7), local helpline VAC nominated IT STAFF who will act as single point of contact and other relevant staff identified.
13. Provide technical support and ongoing routine maintenance for the Helpline, including regular software updates/upgrades for a period of one year after commissioning of the system.
14. Deploy the enhancements on the hosting platform and secure it with a Secure Sockets Layer (SSL) certificate for added security.
15. Allow remote working by providing agents and/or caseworkers not tied down to the office to handle cases through VPN.
16. Develop a public accessible webpage for the Helpline with information dashboards, information about services of the helpline, documentations among others.
17. Data migration plan and as needed.

# Requirements Gathering Participants( Kenya)

The team comprised of Agents and Helpline superviors , Management Staff and Government representatives.

# Summary of Key Findings

The current system was presented to the users as is currently used in Uganda. The ultimate goal was to record any deviation that could impact the operation of the helpline in Kabete. Our observation initial observation did not indicate any significant changes on the system. The users have requested to minimal removal of some fields deemed as uneccessary for a complete record of the cases.

## Summary table of requirements(Kenya) .

|  |  |  |
| --- | --- | --- |
|  | **Problem** | **Proposed Solution** |
| 1 | Reporter Information Data Capture | Only the following fields will be used when collecting reporter information   * Reporter's Name * Age * DOB * Age Group * Location * Sex * Nearest Landmark * Phone Number * Alternative Contact * Email * Nationality * ID Type * ID Number   so that I can be able to report on the following metrics. |
| 2 | Client Summary Information | The following fieds will be   * Reporter's Name * Age * DOB * Age Group * Location * Sex * Nearest Landmark * Phone Number * Alternative Contact * Email * Nationality   The fields/columns crossed should be removed.   * Reporter's Relationship with Client * Relationship Comment * Client's Health Status * Client's HIV Status * Clients' Marital Status * Parent/Guardian's Name * ~~Parent/Guardian's Marital Status~~ * ~~Parent/Guardian's~~ ~~Identification Number~~ * ~~Household~~ ~~Type~~ * ~~Head of Household~~ ~~Occupation~~ * Number of Adults in Household * Is the client attending school?{The Address fields are also not needed. } * Yes * No * Unknown * Is the client disabled? * Yes * No * Unknown |
| 3 | Perpetrator Information | The following fields will be on the perpetrator's form. The ones crossed should be removed   * New Perpetrator * Perpetrator's Name * Age * DOB * Age Group * Location * Sex * Nearest Landmark * Phone Number * Alternative Contact * Email * Nationality * ID Type * ID Number * Relationship with Client? * Shares Home with Client? * ~~Perpetrator's Profession~~ * ~~Perpetrator's Marital Status~~ * Health Status * Perpetrator's Guardian's Name |
| 4 | Case categories | Case Categories have been lifted from the current system however, its our recommendation that we review what is currently available on the CPIMS system to be used initially. This will greatly improve the quality of data. |
| 5 | Disposal | The teams have suggested that all calls be created as cases only that we create an extra category to indicate Non- Intevention, However as we have enhanced reporting we have proposed to dipose of calls that do not become cases while providing reports for monitoring. |
| 6 | Integration to other systems | We observed that credential for CPIMS are broken and as such the system does not send any information to CPIMS.  It is recommended that thiscredentials be restored and the information passed to our engineers to configure and push all the Pending cases to CPIMS.  It is also recommended that the CPIMS team provides us with common data like Categories, Age Groups , and Locations. |
| 7 | Be able to generate reports based Case status e.g. Pending cases, Closed Cases, Escalated Cases | That the syste can generate reports from different dimensions. |
| 8 | Be able to generate reports based Case status e.g. Pending cases, Closed Cases, Escalated Cases | Exists in the current VAC system and will be provided in the upgraded UCHLGBV system |
| 12 | Social media reporting platform not integrated with the CRM | The function will be added in the upgraded system |
| 14 | Referral and feedback mechanism not working | More integrations to government systems envisaged and referrals expected to be more effective in the upgraded system. |
| 15 | The client experience long delays before their call is picked. | The new system has addressed the issue through the integrated web RTC. This means that calls will now be picked directly on the web browser. |
| 16 | The case form popping is not reliable for it at times does not respond |
| 17 | System slows down during the pulling of reports | With the new system the Reporting has been redesigned. |
| 18 | Inability to customize reports | Allow customizing of reports in the upgraded system. |

# Other Findings and Recommendations

## Infrastructure

## Hardware Findings

The helpline requires a revamp of the current LAN setup inorder to guarantee security and integrity of the data.

Call termination Is done by Jamii Telkom who provide an E1’s Termination

The sever room has an inadequate power backup system and whenever there is a power blackout there is an existing Generator which has to be switched on manually.

**Current Infrastructure Setup**

**Server Specification are Identified as seen below**

HP Server:

Model: ProLiant DL380p Gen8 (733646-425)

RAM: 16 GB

CPU: Intel(R) Xeon(R) CPU E5-2620 v2 @ 2.10GHz

Disk: Capacity 1TB, Available: 100GB Approx  
  
Cisco Server:  
Model:

CPU: Intel(R) Xeon(R) CPU E5-2660 0 @ 2.20GHz

Processor: 2 Intel(R) Xeon(R) CPU E5-2620 v2 @ 2.10GHz

Disk: Capacity 1 TB, Available: 250GB Approx

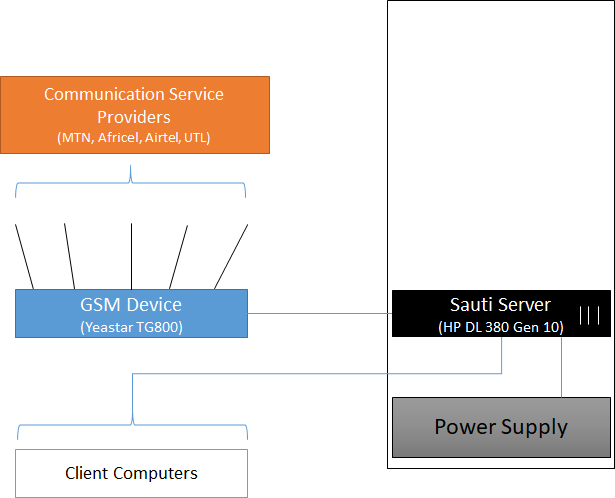
Telephony: E1

VPN Available: Libreswan on Centos

Internet Connection Bandwidth: 75 Mbps

Public IP: Available, Registrar: Faiba

**Current Infrastructure**

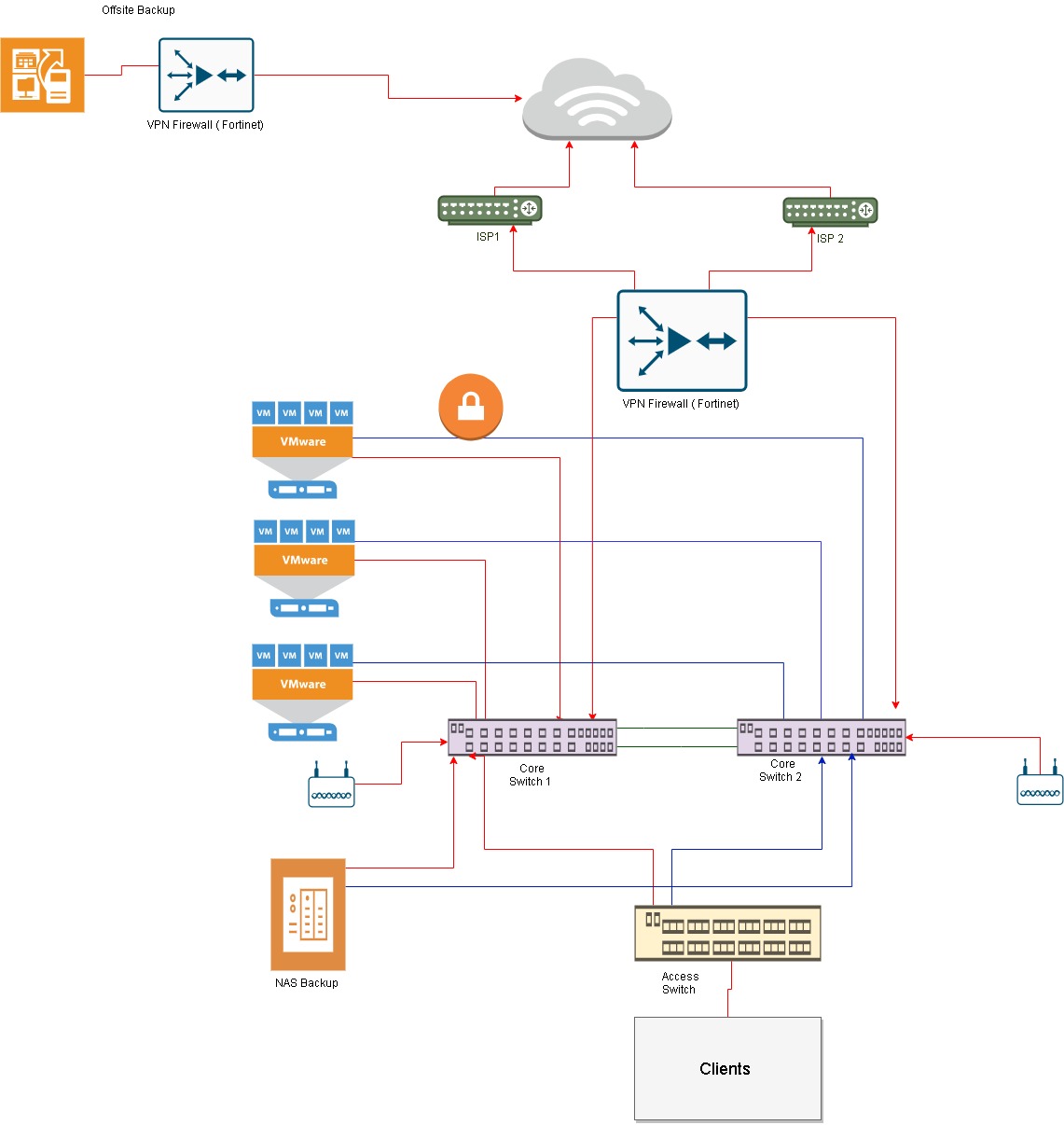


There is an Extra Server that remains un used. We have recommended that the server be setup with additional disk space. To accomplish these goals, BITZ IT CONSULTING proposes the following:

HP DL 380 600G Hard Disks 3 pieces

|  |  |  |
| --- | --- | --- |
| 872477-B21 | HPE 600GB SAS 10K SFF SC DS HDD ( For GEN10) X 3 | KES |

**Proposed Infrastructure**



# Operations and Roles

The system shall have the following user levels: administrator, counsellor/agent, and supervisor.

Every user level shall dashboard representative of their account roles and activity including statistics of calls and cases based on parameters such as categories, status, gender, districts, priority and any other applicable field. The dashboards will also have graphical displays line & pie charts, bar graphs, etc.

## Partners UNFPA and UNICEF

They will be assigned **View** roles so that they can log-in to the system and anytime and view the activities and statistics at the Helpline as may be required. Mostly they will be given access to view reports from the system.

## Administrator

This is a general system administrator responsible for general system configurations, the can view cases, they have minimal or no action. The following are some of the roles by administrators:

* Create and update configurable parameters such as case categories and services offered.
* Manage system users.
* View reports.

## Counsellor

Counsellor handle calls and are mainly based at the call center. They are trained to offer first-line support for both VAC and GBV. Additionally, they:

* create cases from calls
* escalate cases to supervisors
* view their own cases.
* Can search cases from all cases

## Supervisor

A supervisor is the call center manager who is in charge of counsellor/agent work affairs and to ensure they are within the set policies of the helpline. They:

* Can create cases.
* View all cases with an option to update.
* Perform QA on calls.
* Propose system settings and updates to the administrator.

# Case Escalation Process

This is the process in which a case goes through before it’s closed. A case may be closed at the time of creation by the counsellor but sometimes it requires attention from a higher level of the user hierarchy.

A counsellor can escalate a case to a supervisor who in turn can escalate the case to a case manager, the case manager assigns cases to case workers who in most of the time are in the field.

After these roles were defined Case capture flow was also discussed. Seven broadly classified tabs for the information to be captured were proposed.

1. Case Reporter Details
2. Case Category
3. Other Client Details
4. Perpetrator Details
5. Case Narrative
6. Services Offered
7. Case Action

Depending on the case status if the client is a first time Reporter the counselor would click on Create New case otherwise if the client is a repeat Reporter/ Client the form should populate their details accordingly.

Field/Case worker shall be able to access cases in their account within the mobile application and be able to update them accordingly while in the field.

# Reporting Module

All activities done on the case management system will result into reports which are used by the supervisors, management and others to analyze the trends and be proactive and take corrective measures to mitigate situations. Both call and case reports shall have list and statistical (pivoted) reports.

There shall be 2 main line of reports.

* Case Management Report – reports regarding case management.
* Call Management Reports – reports pertaining calls.

### Pivot Reports

Pivot report refers to statistical description of the data captured generated by a system user based on select report fields. It presents fields on an X and Y axes form and filtered by date and/or date range.

This gives a permeation & combination of the type of reports required and the different data required. Additional fields can be provided for filtering the reports. This applies to both call and case reports.

The report should be printable or exportable to acceptable formats such as PDF or spreadsheet.

### Comprehensive Reports

These are the main types of reports with listings of records are collected by the system. The module should provide filters for all of these kinds of reports to allow users get what is needed for a particular purpose. The filter may include date created, location, categories, gender, status among others.

These reports include:

* Call Reports
* Case Reports
* Counsellor Reports
* Performance Reports

The comprehensive reports shall have export option to formats such as XLSX, CSV, XLS and PDF either for further analysis or presentation.

# Proposed Process Flows

## Call process flow

Welcome IVR

Welcome IVR

Call Answered?

Exit IVR

Voicemail?

Voicemail message IVR

Case Capture/Follow Up

## Case Capture process Flow.

This shows the flow of the case capture process. The reporter details can be prefilled on call if the details exist and for all historical cases.

GBV Related

VAC

GBV

Reporter details

VAC Client Details

GBV Client Details

Additional VAC Fields

Additional GBV Details

Perpetrator Details

Case Details

Services Offered

Case Action/Closure

Follow Up

Search Historical Cases

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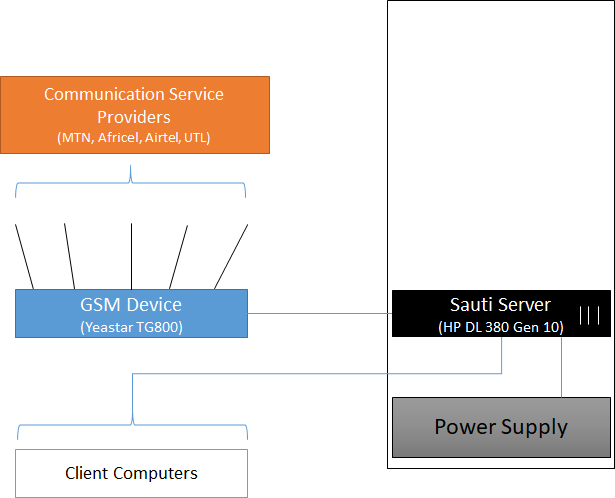
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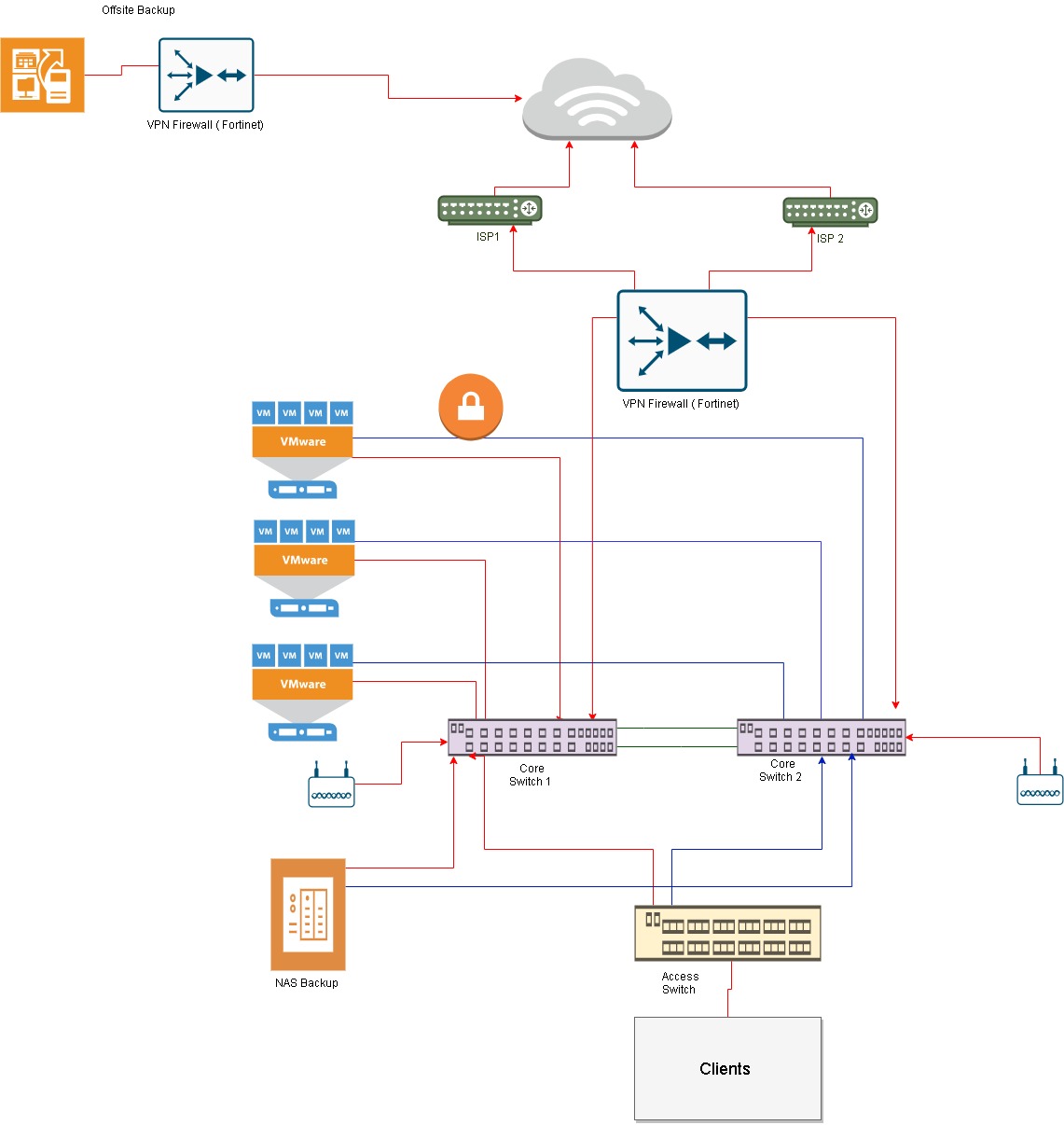


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Services Offered

Case Action/Closure

Follow Up

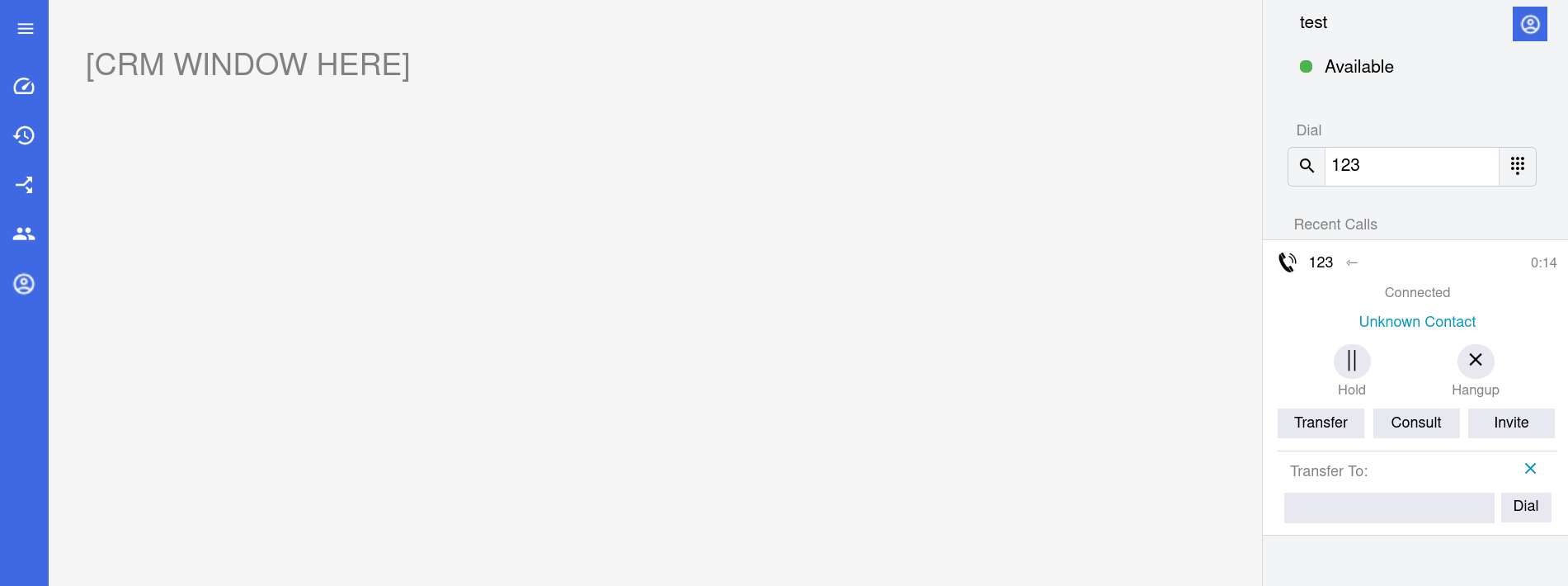
Search Historical Cases

# Additional Feature

**INTEGRATED WEBRTC SOFTPHONE**

This will provide the following improvement

* No need to maintain separate softphone
* Seamless transfer and conferencing



# Conclusion

Not so much deviations from the existing system. Therfore, the it will be a lot less complex to upgrade from the current system with minimal impact to the users.