



**INT NETLINK's Past Projects**

# **Cisco Call Centre Solution**

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**Afghanistan**

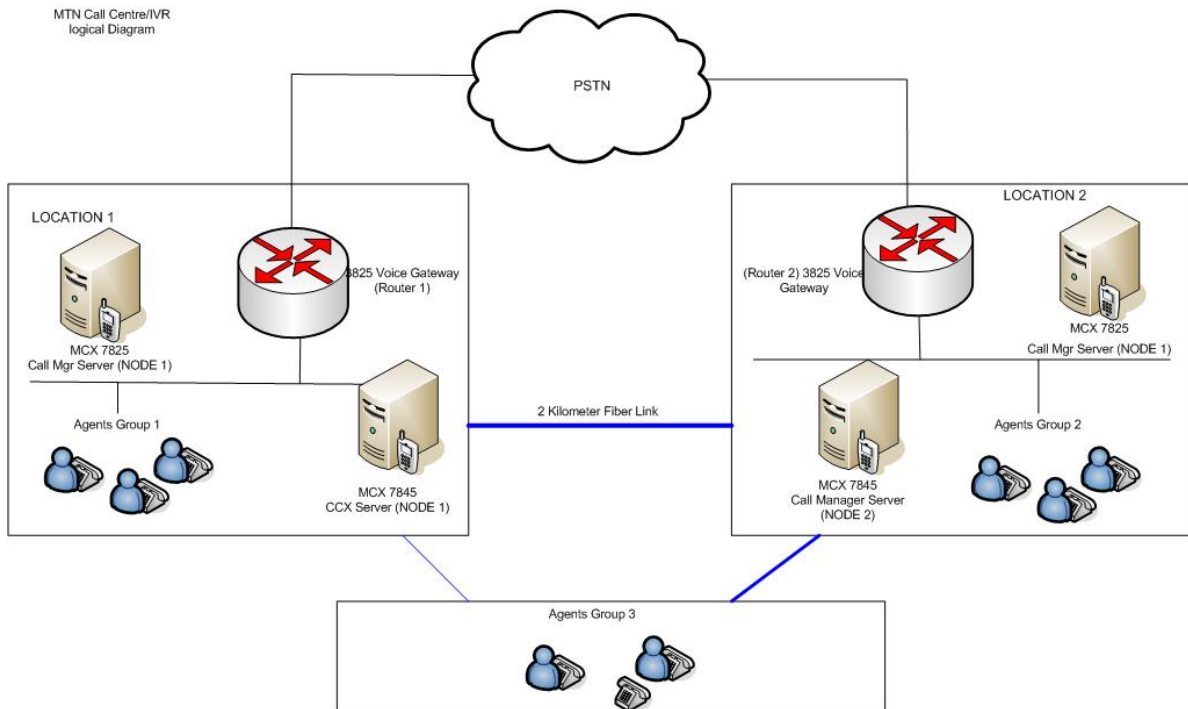


## Cisco Unified Contact Center Solutions Overview

Cisco Unified Contact Center solutions feature a comprehensive portfolio of advanced technologies that simplifies and improves the way the agency interacts with citizens.

MTN will avail the all the possibilities of solution like Redundancy, ease of deployment of agents using existing IP cloud etc

A logical diagram of solution is as follows



Cisco Unified Contact Center solutions enable MTN agency to elevate citizen interaction and day-to-day operations to reach new heights of efficiency, productivity and success.

- Enable customer service agents to be more efficient and productive
- Increase responsiveness
- Decrease contact center costs
- Deliver powerful self-service solutions that will enhance citizens' experience
- Deploy a new generation of flexible, customer-centric applications to establish an IP-based customer interaction environment
- Provide personalized service through unique citizen-centric experiences
- Virtualizes the knowledgeable staff and contact applications within your agency to make sure your constituents are connected to the right resource wherever they may reside

### The components involved in the solutions are

- Cisco Unified communication Manager redundant server capable to support up to 1000 users

The Cisco Unified Communications System delivers fully integrated communications by enabling data, voice, and video to be transmitted over a single network infrastructure using standards-based Internet Protocol (IP). Leveraging the framework provided by Cisco IP hardware and software products, the Cisco Unified Communications System delivers

unparalleled performance and capabilities to address current and emerging communications needs in the enterprise environment.

- Cisco Unified contact center redundant server scalable up to 300 agents

Cisco Unified CCX is a complete customer interaction management solution available in three different packages: Standard, Enhanced and Premium. Different packages provide varying levels of customer interaction management channel options and capability within a contact channel.

***Customer Interaction Channel Availability by Cisco Unified CCX Package for Cisco Unified CM***

<b>Contact Channel</b>	<b>Premium</b>
Inbound Voice	Yes
Inbound Voice High Availability	Yes
Cisco Unified CCX Outbound Preview Dialer	Yes
Basic or Advanced Email Interaction Manager	Yes
Basic or Advanced Web Interaction Manager	Yes
Quality Manager	Yes
Workforce Manager	Yes

- Voice gate way routers Cisco 3945 with 10 E1 PSTN trunks

Cisco Integrated Services Router platforms embed voice and security functions directly inside the router, enabling customers to deploy advanced services simply by installing digital signal processors (DSPs) and advanced integration modules (AIMs) for IP telephony conferencing, voice gateways, Cisco Unity™ Express voice mail and automated attendant, as well as industry-standard security. For call processing, customers can enable the company’s award-winning Cisco CallManager Express solution as part of Cisco IOS® Software, and easily reconfigure the same software at any time to support Cisco Survivable Remote Site Telephony (SRST) for centralized call processing with Cisco CallManager, the industry’s leading solution for enterprise-class IP telephony.

By embedding proven voice technologies inside the platform, Cisco Integrated Services Router platforms free up integrated modular slots, enabling customers to take advantage of new high-speed slots such as the high speed WAN interface card (HWIC) and enhanced network module (NME) for additional services, interfaces, and densities.

**System sizing**

The Sizing approaches generally use ERLANG B & C, but Calculating the number of agents required is a continuous process which will require regular reassessment as the circumstances of a call center change. Assessments may be made for each working hour of a day, and should take such factors as marketing campaigns and daily call peaks into account.

The Call Center PSTN trunks and IVR channels Calculations are done based on the following assumptions:

- Number of Agents = 90,
- Number of IVR channels = 120
- Average Call duration = 180 Seconds

Average Delay of Calls = 30 Seconds

Number of Trunks = Number of IVR channels + Number of agents (1.2 times number of agents) i.e,  $(120 + (1.2 \times 90)) = 228 / 30 = 8$  E1 ISDN PRI trunks.

We will consider another 2-3 PRI trunks for the additional Users who will be leveraging the Call Manager from corporate Telephony network