

## Branch Deployment - Communications Architecture Project

### Customer profile:

- Industry sector: Financial Services--Brokerage
- Number of Employees: 3,000
- Number of Branches: 500 – Grew from 50 offices to 500 in less than 4 years.
- Key critical success factor(s):
  1. Grown significantly due to their ability to service the customer with a local presence.
  2. Offices are located close to customer base, often in shopping areas with high traffic.
  3. Offices have local phone numbers and personnel in offices to handle walk up volume.
  4. 95-98% of calls into local branches are handled by local personnel versus routing to a call center for overflow volume.

### Design challenge:

- Need flat, extended network for heavy communications traffic to 500+ branches
- Centralized Management of all the branches were critical to operational requirements
- Heavy reliance on enterprise applications for compliance and speed of execution. For example, Centralized Call Recording is required on every call
- High resiliency requirements and ability to handle traffic without disruption due to any issue with network or telephony component
- DR Facility in Phoenix, AZ

### Implementation challenges:

- Installed base of over 200 older key systems that had to be replaced over a 6-8 week period. Typically this takes 3-4 months.
- Training at new offices with new personnel – How to use the new telephony functionality. RTS developed a training video in conjunction with their training office to ensure this was consistent and timely.
- New technology was implemented while maintaining older technology that was functional, until client was comfortable with swap out and migration.
- Voice Mail platform was end of life and causing major issues at corporate facility
- Major work was underway to expand their call center to include People Soft CRM technology. RTS had to position the Enterprise Avaya platform (Interaction Center) for call center technology as the voice routing engine to interface with People Soft.
- IP handsets were slow to adopt at customer locations until network technology was proven to handle the same quality as digital sets. Today, all new traffic and sets are using IP technology at corporate facilities.

**Key solution components:**

- Over 20,000 ports installed and operational to support voice traffic
- Avaya Aura Communication Manager 5.2.1
- Core Survivable Enterprise Communication Manager
- Aura Session Manager SIP
- Avaya Modular Messaging 4.0 with SIP integration to Session Manager using Mutare Message Mirror for replication to secondary
- Media Gateways: G350 or G430 to handle digital and analog requirements at Branches with S8300 LSP servers, digital 64xx endpoints with analog trunking for failover.
- Avaya Interaction Center 7.0 with Seibel integration for CRM and CTI, Avaya IQ 5.0 Analytics (soon to be Survivable IQ 5.x)
- Avaya IQ Call Center Reporting 5.0, Avaya Call Management System R14, NICE Call Recording using DMCC, Avaya Application Enablement Servers for NICE and IC.

**Future proofing design elements:**

- Avaya Session Manager to reduce complexity and management
- Integration of AACM with Centralized SIP trunking
- Integration with Modular Messaging and Audio Conferencing apps
- Integration of Social Media into Call Center Technology
- SIP end points to replace Digital end points at 500 branch locations

**Results/Transaction loads:**

- Transitioned and added over 2,000 digital handsets to support the customer branches.
- Centralized Call Recording was implemented at all the branches, allowing customer to meet and exceed regulatory requirements.
- Prior to implementation of new communication technology, branches were handling only 3,000 calls per day.
- After implementation, the customer now handles over 30,000 calls per day.
- RTS has provided communications to over 450 new branches and that growth is continuing.

## Description

Customer operates in a flat consolidated and extended network to reach their more than 500 locations. Their core systems reside in a self-operated data center and consist of three instances of **Avaya Aura Communication Manager 5.2.1**. The main AACM operates all of its corporate facilities (**eight local survivable ESS**) and operations plus some of the retail branch locations while the remaining two AACM's solely support their remaining retail branches. They also maintain a **fully redundant active-active data center** that has near identical replication of all systems and **Core Survivable Enterprise Communication Manager** of the three core systems. To take Customer to the next level in communications and active-active failover, Avaya Aura **Session Manager SIP integrates** their AACM's both in their data centers and a designated tertiary location as well as the **Centralized SIP trunking from the PSTN, Modular Messaging and Aura Audio Conferencing Applications**. Their branch locations consist of either **G350** or **G430 Media Gateways** with S8300 LSP, digital 64xx endpoints with **analog trunking for failover**.

They rely heavily upon enterprise applications to assist in their productivity and compliance of their business. The telephony applications used include Avaya Call Center 5.2, Avaya Modular Messaging 4.0 with SIP integration to Session Manager using **Mutare Message Mirror for replication** to secondary, Avaya Aura **Conferencing 5.2** with SIP integration to Session Manager for Audio Conferencing, **Avaya Interaction Center 7.0** with **Seibel** integration for CRM and CTI, Avaya IQ 5.0 Analytics (soon to be Survivable IQ 5.x), Avaya Call Management System R14, **NICE Call Recording using DMCC**, Avaya Application Enablement Servers for NICE and IC.

## Upgrade Options

Customer has a number of ways to grow the architecture as well as the load capacity.

### Architecture can be enhanced by:

- Integration with SIP Centralized Trunking, saving estimated at 25-30% on carrier costs
- SIP end points and connectivity could reduce Branch startup costs by 50%

### Capacity could be increased to handle:

- 36,000 end points

