

# Confidential Solutions Proposal

## Migrate CS1k to Avaya Subscription

Quote # 002712

Version 1

TIPS Contract 210303 TELEPHONE AND COMMUNICATIONS DATA SYSTEMS

Prepared for:

**Jefferson County Texas**

Prepared by:

**Bill Rogers**

Annual Subscription and Hardware Support		MSRP	Price	Qty	Ext. Price
405416	UC BASIC LICENSE FIXED SUBS ADJ LP	\$55.32	\$13.82	311	\$4,298.02
405418	UC CORE LICENSE FIXED SUBS ADJ LP	\$81.84	\$37.58	1500	\$56,370.00
405787	CC BASIC VOICE LICENSE FIXED SUBS ADJ LP	\$641.52	\$292.61	1	\$292.61
405793	3RD PARTY CTI LICENSE FIXED SUBS ADJ LP	\$23.64	\$0.00	271	\$0.00
230170	SA PARTS NBD SUPT CM MEDIUM GATEWAY 3YR AN PREPD	\$600.00	\$471.60	3	\$1,414.80
230140	SA PARTS NBD SUPT CM SMALL GATEWAY 3YR AN PREPD	\$504.00	\$396.14	3	\$1,188.42
230020	SA PARTS NBD SUPT CM SMALL SERVER 3YR AN PREPD	\$396.00	\$311.33	1	\$311.33
351655	SA PREFER SUPT AVAYA MSG R11 ADV ST 3YR AN PREPD	\$14.64	\$10.66	1000	\$10,660.00
3 Year Avaya Software Subscription hardware replacement (excludes stations) billed annually.					
Subtotal:					\$74,535.18

Courthouse		MSRP	Price	Qty	Ext. Price
405362641	POWER CORD USA	\$23.00	\$10.58	4	\$42.32
700394661	MM711 ANALOG MEDIA MODULE RHS	\$1,600.00	\$736.00	1	\$736.00
700394703	MM716 ANALOG MEDIA MODULE 24 FXS RHS	\$3,000.00	\$1,380.00	8	\$11,040.00
700506955	G450 MP160 MEDIA GATEWAY	\$10,525.00	\$4,841.50	2	\$9,683.00
700507394	G450 R2 POWER SUPPLY	\$1,000.00	\$460.00	2	\$920.00
700512394	J159 IP PHONE	\$370.00	\$121.48	1500	\$182,220.00
Subtotal:					\$204,641.32

Jail		MSRP	Price	Qty	Ext. Price
405362641	POWER CORD USA	\$23.00	\$10.58	2	\$21.16
700394661	MM711 ANALOG MEDIA MODULE RHS	\$1,600.00	\$736.00	1	\$736.00
700394703	MM716 ANALOG MEDIA MODULE 24 FXS RHS	\$3,000.00	\$1,380.00	3	\$4,140.00

Jail		MSRP	Price	Qty	Ext. Price
700506955	<b>G450 MP160 MEDIA GATEWAY</b>	\$10,525.00	\$4,715.20	1	\$4,715.20
700507394	<b>G450 R2 POWER SUPPLY</b>	\$1,000.00	\$460.00	1	\$460.00
700508924	<b>S8300E SERVER</b>	\$3,600.00	\$1,656.00	1	\$1,656.00
Subtotal:					\$11,728.36

Sub-Courthouse		MSRP	Price	Qty	Ext. Price
405362641	<b>POWER CORD USA</b>	\$23.00	\$11.11	1	\$11.11
700394661	<b>MM711 ANALOG MEDIA MODULE RHS</b>	\$1,600.00	\$736.00	1	\$736.00
700394703	<b>MM716 ANALOG MEDIA MODULE 24 FXS RHS</b>	\$3,000.00	\$1,380.00	1	\$1,380.00
700512173	<b>G430 MP40 MEDIA GATEWAY GSA</b>	\$2,100.00	\$966.00	1	\$966.00
Subtotal:					\$3,093.11

Juvenile		MSRP	Price	Qty	Ext. Price
405362641	<b>POWER CORD USA</b>	\$23.00	\$11.11	1	\$11.11
700394661	<b>MM711 ANALOG MEDIA MODULE RHS</b>	\$1,600.00	\$736.00	1	\$736.00
700512173	<b>G430 MP40 MEDIA GATEWAY GSA</b>	\$2,100.00	\$966.00	1	\$966.00
Subtotal:					\$1,713.11

Adult Probation		MSRP	Price	Qty	Ext. Price
405362641	<b>POWER CORD USA</b>	\$23.00	\$11.11	1	\$11.11
700394661	<b>MM711 ANALOG MEDIA MODULE RHS</b>	\$1,600.00	\$736.00	1	\$736.00
700512173	<b>G430 MP40 MEDIA GATEWAY GSA</b>	\$2,100.00	\$966.00	1	\$966.00
Subtotal:					\$1,713.11

Avaya Messaging Upgrade		MSRP	Price	Qty	Ext. Price
403221	<b>AVAYA MESSAGING MODEL UPG ADDS</b>	\$0.00	\$0.00	1	\$0.00
410019	<b>AVAYA MESSAGING R11 CONSOLIDATED SERVER TRACKING</b>	\$0.00	\$0.00	1	\$0.00

Avaya Messaging Upgrade		MSRP	Price	Qty	Ext. Price
410041	<b>AVAYA MESSAGING R11 CONTENT SYNCH ENGINE TRACKING</b>	\$0.00	\$0.00	1	\$0.00
410705	<b>AV MSG R11 ADVANCED SEAT ENTITLEMENT ENSA MIGRATION LIC:NU</b>	\$0.00	\$0.00	1000	\$0.00
Subtotal:					\$0.00

Call Recording Upgrade		MSRP	Price	Qty	Ext. Price
INST-UPG-10	<b>Engage Professional Services Remote Installation New Engage VM</b>	\$4,500.00	\$3,300.00	1	\$3,300.00
INST-UPG-12	<b>Admin training for Major Software Upgrade</b>	\$2,400.00	\$1,320.00	1	\$1,320.00
INST-IVR-100	<b>Engage Upgrade and Data Migration Prof Services</b>	\$3,800.00	\$1,980.00	1	\$1,980.00
INST-IVR-101	<b>Voice Platform Migration Prof Services</b>	\$4,500.00	\$3,300.00	1	\$3,300.00
INST-UPG-10	<b>Engage Professional Services Remote Upgrade - Cust 911 Radio Interface</b>	\$2,950.00	\$1,980.00	1	\$1,980.00
INST-UPG-12	<b>Admin training for Major Software Upgrade 911 Radio Interface</b>	\$2,400.00	\$1,320.00	1	\$1,320.00
Subtotal:					\$13,200.00

Services		MSRP	Price	Qty	Ext. Price
INS-HRLY	<b>System Installer</b>	\$125.00	\$100.00	838	\$83,800.00
SP-HRLY	<b>System and Software Programmer</b>	\$150.00	\$120.00	390	\$46,800.00
SSP-HRLY	<b>Special Applications Programming</b>	\$225.00	\$180.00	250	\$45,000.00
PM-HRLY	<b>Project Management</b>	\$150.00	\$120.00	145	\$17,400.00
TR-HRLY	<b>Administration and End User Training</b>	\$150.00	\$120.00	120	\$14,400.00
Subtotal:					\$207,400.00



## Project Management

### Project Organization

The Enterprise Systems Corp (ESC) Project Management Team is charged with leading the project implementation for the solution that the customer has purchased from start to finish. The ESC Project Manager (PM) will bring additional ESC Resource Teams into the project and assign tasks as required by this SOW. These additional team members will report to the ESC PM for this project and report all updates to the ESC PM weekly.

### ESC Project Manager Responsibilities

ESC will assign a Project Manager (PM) who is responsible for overseeing the project from start to finish. The PM will be the single point of contact (SPOC) for the customer from SOW signing forward regarding system implementation. The PM will direct the implementation team to ensure the milestone dates and the requested upgrade date are met. Project Management activities may be completed remotely via teleconference. These activities may include, but are not limited to:

- Project kick-off meeting with Customer's Single Point of Contact
- Project Plan and Milestone Schedule
- Environmental Specifications provided to Customer
- Equipment delivery and inventory coordination
- Managing change requests with the ESC Account Executive
- Project Status Updates
- Cutover Support
- First Day of Business Support

### Customer Responsibilities

The Customer will be required to assign a person who will be the single point of contact (SPOC) for the project from start to finish. Customer responsibilities will be as follows:

- Assign a SPOC as project coregister the system and ordinator to work with ESC PM to be responsible for customer activities, milestone responsibilities, and project planning
- Accept shipment of equipment and provide secure location for storage
- Provide equipment room and power to meet specifications
- Provide rack space and shelves for equipment or server installation according to specific hardware specifications
- For converged systems with IP endpoints, complete a Network Readiness Assessment, or signed Network Assessment Waiver
- Provide facility and system access for ESC resources
- Notwithstanding any provision in the Agreement to the contrary, the Services representing the Project shall be invoiced in accordance with the payment milestone schedule specified in the proposal.

### Project Change Control

Project Change control will be the responsibility of the PM to work with the customer, ESC Account Executive (AE) and other ESC associates to facilitate and obtain approval of the change(s) to the project. No new work will begin until a signed copy of the Change Control Form is received by the ESC PM with all the appropriate sales documentation completed.

### Project Escalation

The ESC Project Escalation Process is a clearly defined internal and external process. The Customer Escalation document will be provided to you by the assigned Project Manager and contains all names, telephone numbers and e-mail addresses of all ESC personnel in the management escalation. If the customer requires an escalation based on an issue, Customer's first contact should be with the ESC PM. If

Customer feels that further escalation is necessary, it is the Customer's right to escalate as Customer sees appropriate.

### **Project Communication Plan**

The Project Communication Plan that is followed by the ESC PM is meant to give clear and concise updates to the customer on all aspects of the ongoing project. On a weekly basis the ESC PM will update the customer SPOC on all activities that are going to occur and the expected outcome. If the project is a larger and/or longer-term project the agreed method of communication and the frequency of the project updates will be agreed upon by both parties.

## **PROJECT STAGES**

### **PLANNING AND DESIGN**

#### **Project Kickoff**

**Internal Meeting** - The purpose of the ESC Internal Project Kickoff Meeting is to have a detailed review to understand all aspects of the project for a clean handoff to the implementation team.

**External Meeting** - The purpose of the Customer Project Kickoff meeting, held via conference call unless otherwise specified, is for ESC PM and the Customer to initiate the project, review scope, milestones and schedule, and to understand the roles and deliverables of each project team member. ESC and Customer will review the required tasks and responsibilities of the Customer and of ESC that will be necessary in order to achieve a successful implementation.

#### **Project Work Hours**

Most of the ESC implementation activities will be completed during working hours, between 8 am and 5 pm, local time of the site location, Monday through Friday, excluding ESC designated holidays. Cutover activities will be performed after hours. Any work performed Saturday or Sunday may incur overtime charges. Any activities requested during or on ESC designated holidays will require prior approval and will incur premium charges.)

#### **Site Requirements**

ESC will provide the customer with the appropriate site requirements, including power, grounding and HVAC requirements for the equipment that ESC is providing. The customer will be responsible for meeting these site requirements. The customer will be responsible for determining and meeting the appropriate site requirements for all customer provided equipment.

#### **System IP Requirements**

The ESC Engineer will hold an engineering meeting with the customer's SPOC to review the IP Network if required per Solution Description Statement. The customer will be required to provide the necessary IP Networking schema. Enterprise Systems will be available to answer questions regarding recommended network configurations during Pre and Post Installation.

Customer is responsible for providing the network design for approval before the scheduled implementation date. Upon review of the design, Enterprise Systems may require customer to change certain things in order to properly support VoIP. Customer is responsible for making those changes.

- An accurate, current Network Diagram is required.
- Due to the wide variety of firewalls, customer will be responsible for configuring firewall(s) to allow communication between IP Equipment and Network.
- Due to the wide variety of routers and switches, customer will be responsible for configuring router(s) and switch(es) to allow communicate between the IP Equipment and Network. Customer will be responsible to ensure routing equipment is provisioned to prioritize the voice IP packets over any network medium.
- Customer will ensure all network equipment has been upgraded to the recommended software/firmware level to support the implementation.
- Best practice calls for voice equipment to reside on a separate VLAN or dedicated network. Customer should ensure VLANs are provisions using 802.1p and 802.1q to prioritize voice over application data.

- Customer's routers and switches should be manageable to allow proper configuration of Quality of Service (QoS).
- Customer is responsible for providing a qualified contact person to assist with remote access issues and configuration/hardware remediation where necessary.
- Customer is responsible for Domain Name Server (DNS) administration.
- When required, or preferred, customer will provide third party security certificates.

## PROJECT IMPLEMENTATION

### Site Survey

The ESC PM will work with the customer's SPOC to determine if a site survey is required. If one is required, a local technician resource will complete a site survey prior to equipment delivery. Activities may include, but are not limited to:

- Equipment room inspection
- Verification of power requirements
- Verification of electrical grounding requirements
- Verification of environmental specifications
- Validating wiring MDF and IDFs/type of terminations/telecommunication demarcations

### Solution Staging Process

ESC stages most provided equipment, hardware, servers and applications prior to installation. If staging cannot occur within a reasonable time due to an expedited order, the equipment may be configured and installed directly on customer site.

### System Network Translations

The ESC PM will coordinate with the customer and ESC Resources to schedule time for system reviews so that ESC Resource Teams can gather all the required information for the implementation.

Documentation may be collected via workbook, spreadsheet, or other electronic method. Customer agrees to fill out and return information as expeditiously possible to meet schedule milestones.

### Installation

Hardware and Software Installation will be in accordance with Solution Deployment Statement

### Hardware Installation

The ESC Technician will complete the following tasks during installation:

- Unpack, inspect, and inventory hardware
- Install hardware and connect all adjuncts included in the associated Service Descriptions
- Install any software and/or firmware included in the associated Service Descriptions
- Install UPS (if applicable and included in the associated Service Descriptions)
- Observe units upon power up and verify successful completion of self-test diagnostics

### Remote Access

If remote access is required for alarming, administration, and/or provisioning, ESC will verify connectivity to a remote access modem or remote access server. It is the customer's responsibility to provide remote access lines or network access, as required.

## TESTING

Upon completion of the installation of the solution, the system will be tested with the customer and the required ESC Teams. ESC will provide a test plan based upon the components of the solution provided. Functionality testing specific to the customer will need to be provided by the customer and agreed upon by the project team. The customer will be required to participate in the functionality testing.

**KNOWLEDGE TRANSFER**

Training for end-users and Administrators in accordance with Solution Deployment Statement. Training may be delivered remotely and will be conducted on consecutive days, Monday through Friday during standard business hours.

**SOLUTION CUT-OVER**

ESC will cut over the customer solution at a time that is mutually agreed upon by the Parties. ESC will provide the required resources via remote access or onsite, as detailed in this SOW. Prior to this, the customer and the ESC PM will agree on a "freeze" for any changes that need to be made to the existing system, if upgrading, or migrating to a new system. During the cutover no major changes will be made to the configuration of the system.

**PROJECT CLOSURE****Final Registration**

The ESC PM will coordinate final registration with the manufacturer to register the system and its remote access. This will be conducted during the initial setup of the solution or during cutover of the solution.

**Customer Documentation**

Upon completion of the project, a complete set of all applicable customer documentation, drawings, spreadsheets and any other pertinent information that was utilized during the system implementation will be e-mailed to the customer.



## SDS - Avaya Aura

### SOLUTION DELIVERY STATEMENT- CS1000 MIGRATION TO AVAYAAURA IN CUSTOMER VM ENVIRONMENT

Conduct a platform migration of CS1000 to Avaya Aura CM Main duplex server Release 8.1.x release in customer virtualized environment. Existing call routing and stations be rebuilt in new platform. The migration will be performed with a phased approach with location and timeframes to be negotiated during project planning.

The following application servers are included in this migration:

- Avaya Communication Manager (Duplex) - Courthouse
- Avaya System Manager - Courthouse
- Avaya Session Manager - Courthouse
- Avaya Branch Session Manager - Jail
- Avaya Enablement Services Server - Courthouse
- Remote Survivable Server - Jail
- Avaya Session Border Controllers - Courthouse and Jail
- Upgrade Avaya Messaging - Courthouse
- Upgrade Call Recording Server - Courthouse
- Media Gateways - As identified

#### Project Scope:

#### Enterprise Systems (ESC) Deliverables

ESC will:

- Conduct a system review with customer.
- Gather required information to be prepared for the migration process.
- Install application software on customer provided VM Servers Avaya Product Licensing and Delivery system and authentication files.
- Rebuild current call flows and update them to the new software and server platform.
- Install media gateways, media modules and handsets.
- Test hardware, software and applications as defined during Planning and Design Stage.
- Support customer with activating the new system.

#### Customer Responsibilities

- Be available during the migration and upgrade process.
- Ensure that non-Avaya adjuncts which are connected to Communication Manager, are compatible with the target software version of Communication Manager.
- Back-up all system data to a server on the customer local area network (LAN) prior to Avaya performing the migration or upgrade.
- Provide a representative to support go-live.

#### Project Scope Assumptions and Exclusions

Phone: (713) 343-1212

Email: [brogers@enter-sys.com](mailto:brogers@enter-sys.com)

Web: [www.enter-sys.com](http://www.enter-sys.com)

- The following is excluded:
- Product training certification and installation training.
- Avaya AAEP Server (IVR) and EMC are not in production and not included in this project

## SDS - Avaya Media Gateways

### SOLUTION DELIVERY STATEMENT- AVAYAAURA MEDIA GATEWAYDEPLOYMENT

Provide physical installation and configuration of G430 AND G450 Media Gateways  
All Services are delivered during standard business hours.

### DESCRIPTION OF SERVICE

#### Implementation

Enterprise Systems will implement and/or configure the following:

- Implement media gateways and Power Supplies
- Verify connectivity to gateways or back-up servers, if required.
- Provide appropriate version of application software.
- Install Analog Circuit Packs
- Install firmware updates on gateways, circuit packs and media modules, as applicable.
- Connect 25 ft Cable Assembly and terminate to wall
- Perform station cross-connects

#### Validation and Testing

Enterprise Systems will:

- Validate Gateway Registration
- Port assignment program capability

\*\*Additional testing cases and UAT are the responsibility of the customer.

### Responsibilities

#### General Responsibilities - Customer

- Provide space for rack-mountable hardware.
- Provide and install main distribution frame (MDF) or wall field for station wire terminations.
- Provide all station, riser, feeder and inter-building cable and wire and verify that all meet industry standards.
- Ensure that the network circuits are fully extended, terminated, labeled and tested per industry standards.
- Coordinate network testing date and time and obtain signaling, framing and network programming information from network vendor
- Provide .wav files, if required.
- Provide a representative to support go-live
- Provide a USB keyboard, mouse and monitor during installation, if necessary.

#### General Responsibilities - Enterprise Systems

- Application Install and Configuration
- Create and download license file from PLDS, if applicable.

- Register/Update system with the Avaya Global Registration Tool.

## EXCLUSIONS

- Installation or testing of Customer-provided components.
- Product training certification and installation training.
- Resolving inter-operability issues with Customer's third-party vendors.
- Providing any engineering, or re-engineering, of existing equipment, whether previously supplied by Avaya or by third-party vendors.
- Resolve network issues, such as bandwidth, static, call quality, packet loss, jitter, delay, etc.
- Installation, configuration, tuning or any kind of troubleshooting of VMware provided technology and applications.
- Any additional functionality not mentioned in the scope

## SDS - Avaya Session Border Controllers

### SOLUTION DELIVERY STATEMENT- Avaya SESSION BORDER CONTROLLER SERVICES

Implement Avaya Session Border Controller supporting maximum licensed capacity for session initiation protocol (SIP) sessions for trunking in a High Availability configuration on customer provided virtual platform. Service affecting services are delivered outside standard business hours.

Session Border Controllers provides the following features:

- SIP Trunking
- Remote Worker connectivity
- Encryption
- High Availability Options

### DESCRIPTION OF SERVICE

#### Implementation

Enterprise Systems will perform the following services involved with implementing and/or configuring the following:

- Review high-level network topology and complete SBCE technical requirements with customer.
- Perform a test plan, to verify installation and basic functionality
- Generate and install Avaya license file for Session Border Controller.
- Configure Session Border Controller and provision system parameters based on planning forms.
- Configure the Element Management System Application
- Validate SBC connectivity to customer network, internet protocol (IP) data, signaling and management networks
- Provision Avaya System for SIP Trunking
- Review and consult with customer regarding additional trunk groups, dial plans and call routing
- Provision Trunk group and dial plan changes
- Perform test calls to validate basic call flows through the SBC Server(s)
- Conduct functional end-to-end testing.
- Perform any related required troubleshooting
- Verify functionality and communication from Element Management System application to the Session Border Controller
- Review basic system functionality and configuration parameters
- Decommission PRI Trunk Connectivity
- Provide up to two hours of implementation support next business day
- Work may be performed remotely
- Some work may be performed after local normal working hours

The following features or options are excluded:

- Deploying remote workers unless specified elsewhere

**\*\*Additional testing cases and UAT are the responsibility of the customer.**

#### Knowledge Transfer and Training

Enterprise Systems will provide up to two hours administrative overview of the included features for up to (2) two Administrators.



## Responsibilities

### General Responsibilities - Customer

- Provide accurate and current topology maps of wide area network (WAN) and LAND infrastructure, end-point internet protocol addresses, virtual local area network (VLAN) assignments for trusted and un-trusted networks, port assignments and gateway Internet Protocol addresses for the edge routers at each location.
- Provide dialing plans, numbering schemes and required call routing information.
- Provide network cabling to the Session Border Controller-terminated to Customer -designated switching platform (slot and port assignments to be provided by customer.
- Provide networking information requested via installation workbook, prior to deployment.
- Provide remote access capability, if required, via VPN or remote desktop

### General Responsibilities - Enterprise Systems

- Application Install and Configuration
- Perform Specific System/Session Manager Configuration.
- Software updated to the latest Patch level at time of install
- Patches made available to address issues discovered during installation will be applied at no additional cost
- Additional Patches after initial install may incur additional charges
- Apply License and configure connectivity to the licensing server
- SMGR changes specific to integrating applications that are part of this scope\*
- Generate SMGR certs if applicable
- Create and download license file from PLDS, if applicable.
- Register/Update system with the Avaya

## EXCLUSIONS

- Installation or testing of Customer-provided components.
- Product training certification and installation training.
- Resolving inter-operability issues with Customer's third-party vendors.
- Providing any engineering, or re-engineering, of existing equipment, whether previously supplied by Avaya or by third-party vendors.
- Resolve network issues, such as bandwidth, static, call quality, packet loss, jitter, delay, etc.
- Installation, configuration, tuning or any kind of troubleshooting of VMware provided technology and applications.
- Any additional functionality not mentioned in the scope

## SDS - Upgrade Avaya Messaging

### SOLUTION DELIVERY STATEMENT- AVAYAMESSAGING UPGRADE

Conduct a platform upgrade of One OfficeLync 10.5 Messaging Platform to Avaya Messaging Release 11 on customer provided VM Server

#### Project Scope:

#### Enterprise Systems Deliverables

Enterprise Systems will:

- Conduct a system review with customer.
- Gather required information to be prepared for the upgrade process.
- Install application on customer provided VM server and Operating System via Avaya Product Licensing and Delivery system and authentication files.
- Migrate the current translations and update them to the new software and server platform.
- Test hardware, software and applications as defined during Planning and Design Stage.
- Support customer with activating the new system.

#### Customer Responsibilities

- Be available during the upgrade process.
- Back-up all system data to a server on the customer local area network (LAN) prior to Enterprise Systems performing the migration or upgrade.
- Provide a representative to support go-live.

#### Project Scope Assumptions and Exclusions

- For security certificates, Avaya can install third-party certificates if provided by customer. Otherwise, Avaya will obtain the certificates from System Manager (SMGR) Certificate Authority
- The following is excluded:
- Product training certification and installation training.
- No addition for gateways, media modules, or more stations
- Loading of TLS certificates
- Configurations changes and new features enablement are not included.

## Call Recording Notes

Expansion Serial#: V2016101251

Licenses Quoted: None – Current License Count (88) Recording Seats

Current Platform: CS1000 (TDM & IP)

Migration: Avaya CM Release 8.1.3 (Single Step Conferencing)

Professional Services: *Jefferson County Sheriff's department is planning on migrating from the current CS1000 to an Avaya CM. This quote includes the necessary professional services required to complete the installation of 5.7.x on new Engage server, upgrade existing Engage from 4.2 to 5.7 required to support a slow migration.*

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**Note – In order to continue to use the existing Engage server, the current IP users on the CS1000 will be required to migrate at the same time to the Avaya CM. Engage can support both the CS1000 TDM phones and Avaya IP phones on the same platform, but will not support two IP Interfaces**

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### 1. Quotation Notes

Thank you for considering our TelStrat Engage WFO call recording and workforce optimization solution! Please take a moment to review key facts about the solution proposed below.

This Engage quotation includes the licenses listed on the cover sheet of this document.

### 2. Data / Server / Voice Platform Migration

This proposal includes migration of one or more Engage servers. TelStrat performs server migrations either on-site or remotely dependent on the purchased support. The TelStrat server migration procedures are listed below.

- Server Migration review
- Site specific detail and required service interruption duration
- Backup up all customer SQL databases
- Customer to copy all WAV files from recording cache to the new server
- Install Engage software on the new server.
- Reconfigure Engage to connect to the new voice platform
- Complete testing of all loaded applications

#### Customer/Distributor Requirements

- The Migration assumes that all required hardware meets the required minimum specifications

### 3. Maintenance

#### • Warranty and Maintenance Program (Existing System)

Co-terming of Maintenance Term for Expansion Orders. We are now co-terming the expansion order maintenance with the existing system maintenance end date. If this proposal is for an expansion of additional licenses on a current site, please note that the existing system maintenance end date is now provided in this quote as well as the expected order date which you so graciously provided to us. We are quoting Monthly Maintenance fees required to co-term this expansion with their existing system. This will also help ensure that your invoice will match your PO/Order Form and your agreement with your customer. Please be sure to inform your TelStrat Sales Manager of any changes to your expected order date so that we can revise this quote for you.

The Engage application must be under maintenance at the time of the installation and the existing system end date is: April 17, 2022.

## 4. Training for Major Upgrades

This quote includes training for the end user's staff to familiarize them with the operation of the system. The customer will be responsible for providing an available training / conference room, PC connected to network, projector, and speaker phone if training is provided remotely. The following is a summary description of the training provided.

### Administrator Training

**Course Summary:** In this session, Administrators will be trained on all aspects of the system. This includes:

- Basic User functions such as Logging In, Searching for calls, Playback/download/email .WAV and/or URL of calls, Live Monitor (if in use), Reports, Dashboards

**AUDIENCE:** TelStrat recommends a minimum of 2 System Administrators. Example Administrators could include IT/Recorder Support Personnel, Lead Call Center Managers, etc.

**ESTIMATED DURATION:**  
2-3 Hours

**LOCATION:**  
Online Web Conference

- Setup and User configurations such as setting of recording criteria, creation of accounts and users, management (addition/modify/deletion) of users, agents, ports, groups, dialed numbers etc. depending on site configuration.
- Maintenance activities such as database back-ups, archiving, SOA Services running on the server and all general knowledge of getting support should troubles or questions arise.
- Recorder/PBX Communication: For VOIP systems the administrators are shown how to add, remove and modify phones to be recorded. For systems including the TelStrat Application Line Cards (TALC), the system administrators are trained in the operation, configuration, and maintenance of these cards.

## 5. Server Recommendations

### 1. Operating Systems

Engage Record supports Windows Server 2016 Standard edition for new deployments; however, a minimum voice platform release may be required depending on your voice platform. Refer to the *Integration Requirements* section of this document for 2012 support. Some deployments support Windows Server 2016. The solution specific notes will note if this version is supported.

### Virtual Machine

Virtual Server Compatibility: All installations of Engage come complete with virtual machine (VM) compatibility. Beginning with Engage 5.5 and newer, Engage supports the following virtual server and (Live Migration) environments

- Microsoft Hyper-V Server 2012 R2 or 2016
  - Hyper-V Live Migration
- VMware ESXi 4.0 and above
  - vMotion & SRM (Site Recovery Manager)
- Citrix XenServer
  - XenMotion

Engage Record is a real time application that records calls as they happen, and the VM / guest resources must meet the same minimum requirements as those of a stand-alone server.

- Cores - allocated to Engage Record VM / guest (Reservation – guaranteed minimum CPU allocation for the Engage VM and cores should be assigned from multiple sockets)
- Memory – allocated to Engage Record VM / guest (Private – backed by the host memory and not shared)

**Warning: Hardware Tap card recording solutions are not supported by VM servers. Spanning recording solutions are supported with VMware, Citrix XenServer or Hyper-V 2012 R2 and above. If spanning or port mirroring is required for call recording, a dedicated physical NIC on the virtual machine host shall be required.**

## SQL Server

Engage requires Microsoft SQL to store system data. If SQL is not available, Engage will be installed with the free of charge SQL Express edition; however only the most recent 2 million call records will be available when searching for calls.

Mass archive stores any number of call records limited only by available SQL database storage. Mass archive requires one of the following SQL editions (or better)

- SQL 2012 Standard or better
- SQL 2014 Standard or better
- SQL 2016 Standard or better

Customers with an existing SQL server that meets the above version and edition may use that server to host Engage data.

## Server Specifications

### 1 Call Recording Server(s) Required - 88 Seats

Component	Specifications
Operating Systems	Windows Server 2016 Standard ed.
CPU	4 Cores
Memory	12 GB RAM
HDD Partitions	C:\ 100 GB – OS D:\ 150 GB – SQL Database & Web Storage E:\ TBD GB – Voice Cache (Must exceed current space used to allow for voice file migration)
NIC	2

## 6. Storage



## 1. On Premise Call Storage (Cache)

When a call recording is created, Engage creates a call record in a MS SQL database and creates a .WAV file in a storage location. This initial storage is referred to as Call Cache, and it can be configured to keep calls for a maximum number of days if desired.

Archiving can be configured to store calls on an external File share such SAN or NAS that is UNC path accessible to Engage for long term retention. Multiple archives can be created to group related calls and each has a configurable retention policy.

- Storage Requirements
  - Cache must be a Local drive partition, Attached Storage, or Storage Area Network (SAN)
- Storage Retention
  - Storage estimates assume that each recorded device generates an average of 3.5 hours of call recording per business day with 5 business days per week
  - The following are basic guidelines when calculating estimated disk space:
    - G.711 with (GSM) disabled = 18.5 hours of talk time per GB
    - G.729 = 150 hours of talk time per GB
    - G.711 with (GSM) enabled = 180 hours of talk time per GB
    - Engage Capture stores (15) hours of screen recordings per GB
  - When calculating actual disk space required, the following is required:
    - Number of calls per device to be recorded per month
    - Average talk time rounded (up) to the whole minute
    - Desired retention period to keep call and screen recordings
- SQL Database
  - SQL 2012/2014/2016 Express is available for no charge and keeps up to 2M most recent call records. SQL Express cannot support mass storage archiving.
  - Customer Provided SQL 2012/2014/2016 Standard (or better) supports up to 7 Million of the most recent call records in cache. Mass archive can store an unlimited number of call recordings as long as sufficient storage is available.

**Note:** In the event that SQL is offline call records will be stored locally until connectivity is restored. The call records are then pushed to the SQL server.

## 2. Customer Provided SAN with Premise Recording

Calls will be archived to customer provided storage area network or Network Attached Storage. A storage location (UNC Path) must be available at time of installation so the mass archive can be setup and tested at time of installation

Customer must provide the following:

- Mass archive storage location (any UNC Path): Network Attached Storage (NAS), SAN, or folder on a remote server.
- Customer provided SQL 2012, SQL 2014, or SQL 2016 (standard or better).

If archiving is enabled, Engage will copy files from cache and store into one or more mass archive location(s). Each mass archive location can be configured with a retention policy in days or can be size limited. Archiving can be scheduled for off peak hours to conserve resources.

Customers may use mass archive to store calls in date ranges and then archive to a media type of their choosing such as DVD, Blue Ray, or Tape Backup if desired.

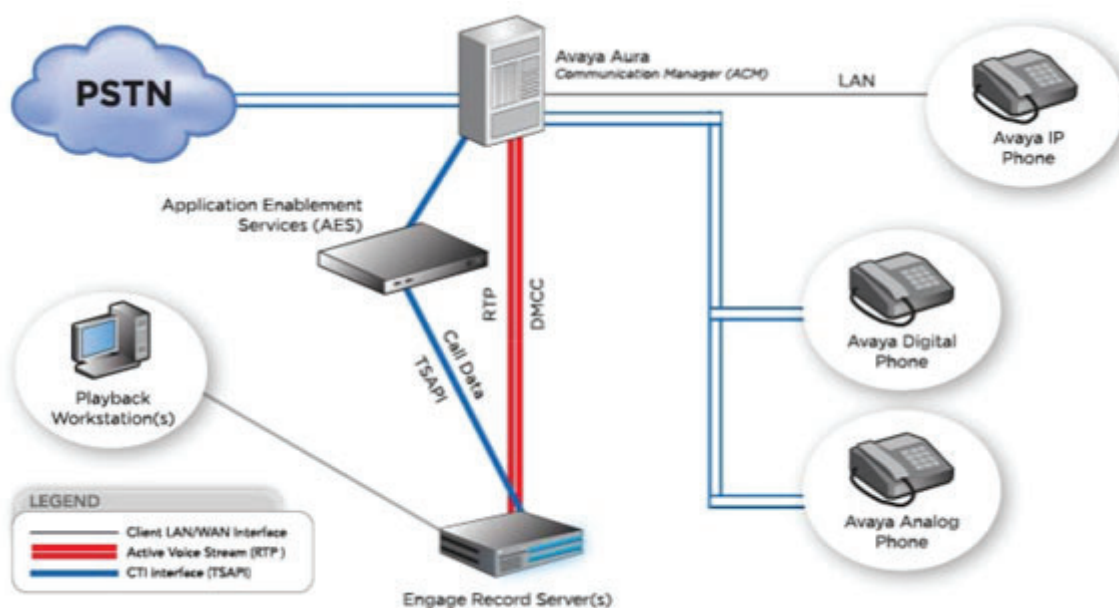
## 7. Integration to Voice and Contact Center Platform Requirements

Avaya Communication Manager can be recorded utilizing Single Step Conference or Port Mirroring.

### Avaya CM - Single Step Conference

In the Single Step Conference method, Engage Record's soft phones are conferenced into recorded calls and the Device, Media, and Call Control API (DMCC) routes the voice packets to the recorder. Call detail and control information is sent to the Engage Record Server from the Avaya Telephony Server API (TSAPI). Single Step Conference supports any VoIP, digital, or analog phone. Consider the lower cost Avaya CM port spanning with TSAPI which now supports DHCP phones and workstations for soft phones and does not require DMCC licenses.

All recorded streams are mono due to the conferencing feature, and port spanning may be preferred for speech analytics deployments desiring speaker separation.



### INTEGRATION REQUIREMENTS:

- **Avaya Aura Communication Manager 3.0 and higher**
- **Application Enablement Services (AES) Server 3.1 and higher** to provide call data and events.
- **Contact Center Support**
  - Avaya Elite Contact Center supported with agent ID, unique ID (UCID), UUI
  - SMS Interface supports VDI name and Skillset name (Engage Release 5.3 and higher)
  - AACC-SIP is supported with Engage Release 5.3.1 and higher.
  - "Nodal CCT Contact Centre Voice Terminals" licenses are required on Avaya for Engage to monitor the Agents (Agent ID) for events. One (1) license is required for each AACC agent (Agent ID) that is monitored by Engage.

- **On Demand Phone soft keys supported for phones that support XML applications**
  - **Start / Stop Recording**
  - **Conversation Save invoked during the call records the call from the beginning**
  - **Do not record key (Optional key to prevent recording during the call)**
- **Windows Server 2012 on Engage** requires Avaya CM Release 6.3.3 or later.
- **Windows Server 2016 on Engage** requires Avaya CM Release 7.1 or later.
- **Two (2) NIC ports** are recommended on the Engage Server to separate the voice network from the data network.
- **All phone types** are supported including VoIP, digital, or analog phones.
- **Avaya Recording Licenses** for each phone configured for recording:
  - One (1) TSAPI Basic license per Engage Server for the softphone conferencing.
  - One (1) TSAPI Basic license per monitored phone.
  - One (1) TSAPI Basic license for each concurrent voice stream.
  - One (1) TSAPI Basic license for each Hunt Group
  - One (1) Full DMCC license for each concurrent voice stream.

For example, recording 100 stations would require 201 TSAPI Basic plus 100 DMCC Full licenses.

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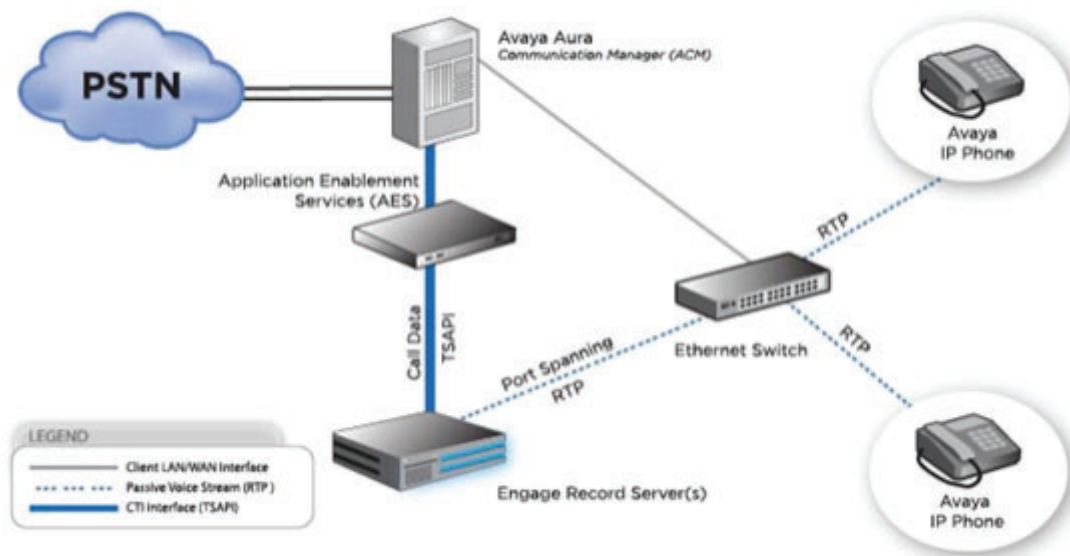
**Note:** Single Step Recording may require an **Avaya IP Media Processor** for older Avaya systems that do not already support IP phones. Systems that support IP phones already include this capability.

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#### Avaya CM - Port Spanning with TSAPI

For a high-quality lower licensing cost solution, Engage Record now supports recording of any IP station using port mirroring for DHCP or static devices (IP phones or softphones). All phones to be recorded are port mirrored to a single contact point on the network where the Engage Record Server connects. A second NIC in the Engage Record Server is connected to the Avaya Telephony Server API (TSAPI) for call detail information.

Another benefit of this port spanning method is that the audio streams are recorded in stereo, providing speaker separation- which can be critical for speech analytics applications.



#### INTEGRATION REQUIREMENTS:

- Now supports dynamically learned DHCP IP addresses, Static IP, or MAC address configuration.
- **Avaya Aura Communication Manager 3.0 and higher**
- **Application Enablement Services (AES) Server 3.1 and higher** to provide call data and events.
- **System Management Service (SMS) web service** must be installed to support dynamic learning of DHCP endpoints (Engage Release 5.3 and higher). Static IP or MAC address can be supported without SMS interface.
- **Contact Center Support**
  - Avaya Elite Contact Center supported with agent ID, unique ID (UCID), UUI, VDI number, skillset number.
  - SMS Interface supports VDI name and Skillset name instead of VDI number and Skillset number (Engage Release 5.3 and higher)
  - AACC-SIP is supported with Engage Release 5.3.1 and higher.
  - "Nodal CCT Contact Centre Voice Terminals" licenses are required on Avaya for Engage to monitor the Agents (Agent ID) for events. One (1) license is required for each AACC agent (Agent ID) that is monitored by Engage.
- **On Demand Phone soft keys supported for phones that support XML applications**
  - Start / Stop Recording
  - Conversation Save invoked during the call records the call from the beginning
  - Do not record key (Optional key to prevent recording during the call)
- **Windows Server 2012 on Engage** requires Avaya CM Release 6.3.3 or later.
- **Windows Server 2016 on Engage** requires Avaya CM Release 7.1 or later
- **Three (3) NIC ports** are recommended on the Engage Server. One for administration, one for voice network TSAPI, and one for port spanning traffic.
- Any **Avaya VoIP** or remote phones.
- **Layer 2 Ethernet switch(es)** with switch port analyzer (SPAN) capabilities.

- **Avaya Recording Licenses:**

- One (1) TSAPI Basic license per Engage Server.
- One (1) TSAPI Basic license per monitored phone.
- One (1) TSAPI Basic license for each Hunt Group

For example, recording 100 stations would require 101 TSAPI Basic licenses plus one per recorded hunt group.



## Purchasing - TIPS

### PURCHASE VIA THE INTERLOCAL PURCHASING SYSTEM (TIPS)

Please reference TIPS Contract 210303 TELEPHONE AND COMMUNICATIONS DATASYSTEMS on all correspondence, including purchase orders. **Please submit TIPS Quote & PO (payable to the awarded TIPS Vendor) both referencing the TIPS Contract Number, to**

**TIPSP@TIPS-USA.COM**

More details regarding TIPS procurement procedures can be found at [https://www.tips-usa.com/assets/documents/docs/MEMBER\\_Purchase\\_Order\\_Processing\\_Procedure.pdf](https://www.tips-usa.com/assets/documents/docs/MEMBER_Purchase_Order_Processing_Procedure.pdf)

## Services and Deliverables - Enterprise Systems

### Project Overview

Jefferson County "customer" has a centralized Avaya CS1000 PBX system supporting multiple sites with IP, digital and analog devices, located at and known as The Courthouse (or Pearl Street). There are numerous sites located throughout the county that are also networked to The Courthouse. Jefferson County has a Telstrat Call Recording solution supporting call recording and the Sheriff's Office. Officelync messaging platform relocating office and needs to move network and voice equipment from current location to Cyrus One Data Center. The purpose of this statement of work is to outline specific responsibilities and deliverables required by Enterprise Systems to execute this objective.

Phone: (713) 343-1212

Email: brogers@enter-sys.com

Web: www.enter-sys.com

## Migrate CS1k to Avaya Subscription

Prepared by:

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Prepared for:

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 1149 Pearl St  
 6th Floor  
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 Jeff Ross  
 409-835-8447  
 ross@co.jefferson.tx.us

Quote Information:

**Quote #: 002712**  
 Version: 1  
 Delivery Date: 12/07/2021  
 Expiration Date: 01/31/2022

Quote Summary		Amount
Annual Subscription and Hardware Support		\$74,535.18
Courthouse		\$204,641.32
Jail		\$11,728.36
Sub-Courthouse		\$3,093.11
Juvenile		\$1,713.11
Adult Probation		\$1,713.11
Avaya Messaging Upgrade		\$0.00
Call Recording Upgrade		\$13,200.00
Services		\$207,400.00
Total:		\$518,024.19

Summary of Selected Payment Options		Amount
<b>Down Payment: 50%</b>		
<b>Total of Payments</b>		<b>\$259,012.09</b>

<b>Due Upon Delivery: 40%</b>		
<b>Total of Payments</b>		<b>\$207,209.68</b>

<b>Due Upon Completion: 10%</b>		
<b>Total of Payments</b>		<b>\$51,802.42</b>

Taxes, shipping, handling and other fees may apply. We reserve the right to cancel orders arising from pricing or other errors.

Phone: (713) 343-1212

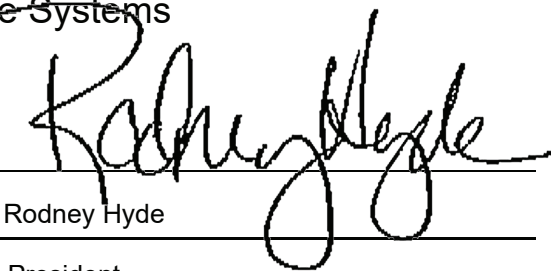
Email: brogers@enter-sys.com

Web: www.enter-sys.com

Enterprise Systems

Jefferson County Texas

Signature:



Name:

Rodney Hyde

Title:

President

Date:

01/13/2022

Signature:

Name:

Date: