



Draft Work in Progress

State of Ohio

Summary of Selected Topics

CBTS Team
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Next Generation Telephone Service (NGTS) Overview

CBTS dynamic suite of fully integrated voice and data solutions consolidate a number of services such as Voice over Internet Protocol, (VOIP) unified messaging, collaborative email, wireless network integration, and Web-enables call centers as well as video conferencing and emergency mass broadcasting and paging services.

As the IT Managed Services partner of choice, CBTS and the State of Ohio are able to offer agencies a Managed VOIP Service. This innovative solution provides a 4-phase migration process that finally links business objectives with state of the art technology communications. More importantly, there is transparent single accountability to implement:

- A dedicated Plan/Build/Run team.
- An Integrated solution with OARnet.
- A Public/Private partnership.
- The shared commodities.

Migration to communications incorporates:

- Service Level Agreement (SLA) performance accountability.
- A scalable and architecture.
- Tier III data center infrastructure.
- Greater transport capacity.
- Simplified technology refresh.
- Reporting at the Agency level.
- Immediate access to information though 24/7 Veramark.
- A standardized and itemized invoice.



<p>Problems</p> <ul style="list-style-type: none"> • The State has multiple aging phone systems. • The Centrex Contract is due to expire. • Cost predictability • There is a one-time cost for deployment. • There is a recurring cost for support and refresh Service. • Additional functionality • Agencies have limited volume buying power. 	<p>Considerations and Questions</p> <ul style="list-style-type: none"> • What is the Service Activation Partnership? • When does agency level planning occur? • Who determines Site Level Readiness? • When is the User Level Data Collected? • Is Call Center Cost Customization included? • What is meant by Co-managed Deliverables? • What is customized communication? • How does the solution transition to operations? •
<p>Benefits</p> <p>VOIP Managed Services:</p> <ul style="list-style-type: none"> • Offers service accountability. • Includes Volume Utility Pricing. • Escalated Discounts with Adoption • Demonstrates Basic and Enhance Features Profile flexibility • Contains budget predictability. • Provides for Intrastate / MACD Inclusive • The Long Distance (LD) price reduction is \$.012 per minute. • Includes scaled SIP pricing. • Introduces a Technology Glide Path • Includes survivability and currently uses PSTN flexibility. • Offers Call Center Cost Customization. • Provides an End Point Lease Option. • Provides a Video End Point with each Basic Profile 	<p>Limitations</p> <ul style="list-style-type: none"> • Embraces a paradigm change.



Billing and Reporting

<p>Current State and Concerns</p> <ul style="list-style-type: none"> • DAS receives and consolidates approximately 900 telecom accounts monthly and rebills charges to Agencies. • Approximately 47 Agency receive their Telecom invoices directly and are responsible for payment. 	<p>Considerations and Questions</p> <ul style="list-style-type: none"> • Are invoices accurate? • Can any accounts be consolidated to reduce the number of invoices? • One of the NGTS objectives is to simplify Telecom Services billing by reducing the number of invoices and accounts that are being managed? •
<p>Process</p> <ul style="list-style-type: none"> • CBTS provides a consolidated NGTS invoice for the following services: Profile Charges, MOU overage, SIP trunking, Monthly Add on Features, Site / Location Survivability Options, Hardware Purchases, Professional Services and Training. • CBTS Finance provides invoicing for any Lease or Lease to Own equipment. • The billing hierarchy offers two (2) levels of detail (account and sub account) and can organized according to each agencies requirements • Reporting is available for Managed Services through three portals – VeraMark for CDR (Call Detail Recording), Service-Now for managed inventory, performance metrics and CBT for Managed Services • Payment can be made electronically through the States OAKS system via EDI. • Local Number Port Order is submitted to Level 3. 	<p>Outputs</p> <ul style="list-style-type: none"> • Subscribing Entity receives an invoice directly from CBT (on behalf of CBTS) for Managed Services charges and/or CBTS Finance for Lease/Lease to own charges • Billing will be in arrears for all charges. • Call Detail Reporting (CDR) will be available to State identified administrators • Agencies will receive invoices electronically as PDF files with .CSV files available for reporting purposes. • Agencies will have a simplified billing hierarchy that can be organized and reported on based on multiple criteria example - location, division, cost center • The billing period will be the 10th of each month through the 9th
<p>Benefits</p> <ul style="list-style-type: none"> • Agencies have all Managed Services consolidated on a single invoice. • All Leasing charges are consolidated on a separate CBTS Finance invoice. • Reduction in paper archiving storage. • Reduced expense compared to current Centrex environment. 	<p>Limitations</p> <ul style="list-style-type: none"> • CBT / CBTS is not providing paper invoicing. Agencies can print a hard copy of the invoice at their discretion. • The NGTS invoice provides summary information with details available through various reporting tools. • Call Detail is not provided on the NGTS invoice but is available via the VeraMark.



Contact Center Solution

These *Monthly Add-On Features* are available options for agencies with a local Contact Center.

Automatic Call Distribution (ACD) refers to a supplemental feature that routes calls based upon caller identification, dialed number, time of day, and custom defined parameters established in an IVR (Interactive Voice Response) program script.

Interactive Voice Response (IVR) is a telephony technology service in which someone uses a touch-tone telephone to interact with a database to acquire information from or enter data into the database. [Webopedia.com]

Outbound Dialer Per Port refers to an automatic dialing service to establish a connection.

Quality Monitoring per Agent - This refers to the supplemental service for verifying and maintaining a desired level of quality in a product or process by careful planning, use of proper equipment, continued inspection, and corrective action as required.

Note: Contact Call Centers are treated as projects since they may have unique requirements.

Controlled Introduction

This is a managed service VOIP environment to a limited audience. It is restricted testing (Controlled Intro) to insure the viability of the NGTS service to apply any corrective actions prior to operational deployment.

<p>How do I participate?</p> <ul style="list-style-type: none"> • Determine the number of subnets, and size, that are needed to support the number of users in the Controlled Intro. • These subnets remain. For instance if only 3 users are on the Controlled Intro, but there are 200 users on the floor who eventually use the service, then deploy a /24. • Conduct a design connectivity session to extend the voice VLAN to the site. • Identify the Access Layer: <ul style="list-style-type: none"> ○ Who owns voice VLAN configuration updates? ○ Is PoE implemented? ○ Who owns QoS configuration? • Identify DHCP Manager. • Identify who can update new subnets for the site? 	<p>What else needs to be considered?</p> <ul style="list-style-type: none"> • Has the site completed a Business Requirements and Technical Assessment Document to determine site readiness? • Has the site decided which Service Phone Option is best for them Buy vs. Lease? • Which phone models are preferred for the trial? <p><i>Refer to Frequently Asked Questions.</i></p>
<p>What is the process?</p> <ul style="list-style-type: none"> • Contact Eric Schmidt at the State of Ohio, • Read the <i>Site Engagement Guide</i> and schedule a meeting with CBTS to answer questions. • Complete the <i>Business Requirements and Technical Assessment Document</i> and return it to CBTS via AskNGTS@cbts.cinbell.com for completion of the evaluation. • Make certain to select an <i>Service Phone Option</i>. • Make certain to complete all Tabs in the <i>Technical Data Assessment workbook</i>. • Mr. Schmidt updates and send the list to CBTS. 	<p>How much does it cost?</p> <ul style="list-style-type: none"> • Group participants use VOIP for free. • CBTS closely matches models preferred by Lease customers depending upon availability for the trial. • Purchase customers buy preferred models to use for the trial. <p>Enhanced Features Plan items:</p> <ul style="list-style-type: none"> • Cabling (CAT 5 recommended) • Power over Ethernet (POE) switches. • Routers (LAN/WAN) • Circuit capacity and redundancy • Selection of Phone models • Telecom Coordinator (develop a long term role and responsibility position). • Survivability

Are there benefits?	What are the limitations?
<ul style="list-style-type: none"> • The majority (80%) are included under the Basic Features Plan. • Parallel Testing - The analog phone remains on the desk beside the new IP Phone. • There are use cases already prepared for testing most popular items. • Cisco 6900 Series - Ideal for the typical office-based worker - 6945 Recommended • Cisco 8900 Series - Designed for users who support applications or on phone video conferencing, superior voice communications - Administrative Assistants / Mgrs. • Cisco 9900 Series - Advanced collaborative endpoint. Bells and whistles - Senior Leaders. <ul style="list-style-type: none"> ○ 4.7925G/7926G - Handheld Wi-Fi (802.11) ○ 7937G-High quality conference room bridge ○ Users refer to a quick reference job aid to get acclimated on the trial basis. ○ The trial is a free service, for purchase to own phones. ○ The trial is also free to leasing candidates; however, phone models are closely matched to client needs. 	<ul style="list-style-type: none"> • <i>The agency determines the exact cutover effective date to port the numbers from analog (old phone) to new IP Phone service.</i> • <i>Once the numbers are ported to CBTS all long distance calls (LD) received from other agencies outside the CBTS network are subject to charges.</i> • <i>VOIP does not support 5-digit dialing.</i> • <i>Non VOIP caller incur long distance (LD) charges.</i> • <i>Inbound/outbound calls</i> <p>The Basic Features Plan is the focus of the test.</p> <ul style="list-style-type: none"> • Complicated trials simulating SIP trunking and Enhanced Feature Plan options may not be available. • Details for billing simulation are out of scope. • The Site is ineligible and requires hardware or software Remediation before a trial is implemented.

Endpoints

This refers to a destination and termination points such as a *telephone* endpoint that can call and be called. It generates and terminates the information stream. It also refers to a SIP or H.323 terminal or gateway.

<p>Current State and Concerns</p> <ul style="list-style-type: none"> • Procurement Options • Phone/Endpoint Options • End Point Support (Smartnet) • Warranty Ownership • Repair/Replace Engagement • Self Sparring 	<p>Considerations and Questions</p> <ul style="list-style-type: none"> • What are the IP phone equipment options? • Purchase IP Phones from a 3rd party vendor*. <i>*Note: Refer to the IP Phone Model Feature Price List Catalog to insure these are supported.</i> • Purchase directly from CBTS • Lease / Lease to Own (LTO)** <i>Note: Leasing agreement is between State of Ohio agencies and CBTS Leasing.</i>
<p>Process</p> <ul style="list-style-type: none"> • State completes a TSR for all MACD requests. • Specify the IP Phone options on the TSR. 	<p>Outputs</p> <ul style="list-style-type: none"> • Plan, build and run implementation. • Utilization reports
<p>Benefits</p> <ul style="list-style-type: none"> • Review the authorized <i>IP Phone Model Feature Price</i> Catalog located under VOPI Documentation Attachment F https://trello.com/card/ip-phone-catalog-user-guides-training-center/501986a891dc514237655e9b/23 • • The Hardware elements and the purchase prices in the Hardware Catalog are accurate and reflect exact cost to the purchaser at the time of TSR submission. • Catalog for both elements and price are governed, monitored and approved by the State of Ohio DAS/OIT designee. 	<p>Limitations</p> <ul style="list-style-type: none"> • Pricing does not include Smartnet.

FAX

Fax machines, fax servers and fax services continue to evolve towards a Fax over IP (FoIP) strategy (sometimes referred to as VoIP Fax), and eventually FoIP become the future of fax communications.

What dramatically differentiates FoIP technology from VoIP technology derives from the fact that faxes are already digital (black and white dots), and by definition a facsimile "is an EXACT copy or reproduction." By contrast, VoIP only needs to be audibly reproduced to get the job done, and thus not an exact replica. IP Faxing therefore needs to be quite resilient to preserve data without information loss, and at the same time smart enough to communicate with unsophisticated fax machines around the world. *Note: The older the FAX device the less reliable the performance when used with the analog port and ATA solution.*

- The monthly add-on charge for an Analog Port is \$7.27 per port.

There are several items to consider when using Fax over Internet Protocol (FOIP).

- Agencies have the option to maintain the current analog line.
- The State has not made an official recommendation for the FAX solution.

Analog Telephone Adapter (ATA) is a device that converts analog telephone signals into another format (such as digital Internet protocol). These adapter boxes may provide a single function such as providing Internet telephone service or they may convert digital signals into several different forms such as audio, data, and video. When adapter boxes convert into multiple information forms, they may be called multimedia terminal adapters (MTAs) or integrated access devices (IADs). Refer to the figure below. *Note: The ATA is provided at no charge.*

Cisco Analog Telephone Adapter (ATA) Example



Hunt Groups

This refers to a service of distributing phone calls from a single telephone number to a group of several phone lines. Every incoming call (irrespective of the dialed number) is rotated through the pool of lines until a free line is found and the caller is connected. The caller hears the busy tone only when all lines (not just the dialed number) are engaged. This is included in the *Basic Features Plan*.

<p>Problems</p> <ul style="list-style-type: none"> • Agencies, Boards and Commissions use telecom to service their customer base. • Call or Contact Centers are core to supporting day to day business functionality. • Complexity varies from Call Center to Call Center. • Complexity may increase cost. 	<p>Considerations and Questions</p> <ul style="list-style-type: none"> • Define requirements to most basic elements required to achieve Objectives • Internal team functional naming may not equate to technology consumption requirements • Consider cost and time to deploy as factors in business decision making • Work with Call Center OIT/CBTS contacts to determine technology consumption requirements for your organization •
<p>Benefits</p> <ul style="list-style-type: none"> • It is part of the Basic User Profile. • Basic ACD functions • Basic UCD functions • Minimal Reporting • Call Center / ACD Profile • Requirements • Agents in a single queue • Full time supervisors • Full time call recording • / quality management • E-mail queuing • Web chat • Detailed reporting 	<p>Limitations</p>



Leasing

This arrangement is a separate master service agreement presently under negotiation between the State of Ohio and the CBTS Finance Services Group (CBTS FS).

Problem

- Existing phones do not work in Next Generation Telephony Service.
- High Tech Phones have life cycles and typical refresh cycles of 5 years.
- Favorable leasing rates require volume.
- Phone procurement supports MAC activities
- IT HW Leasing is not renting.

Enterprise Approach

- OIT/DAS is the consolidation point.
- OIT is the owner of Master Equipment Financial Agreement (MEFA) = MSA for Leasing.
- There is a certificate of Incumbency – Agency has Empowerment to leverage MEFA.
- The legal obligation is between OIT and the Agency.
- Procurement of lease arrangement or purchase is ordered through TSR.
- CBTS FS invoices to the Agency.
- Agency, Board, Commission, University, City, K-12 Own MEFA
- CBTS has no legal obligation to OIT.
- Link Volume Rates to OIT MEFA.
- Agency Owned specific T&C.
- CBTS FS invoices the Agency.

Lease to Own (LtO)

- This is generally a higher monthly lease payment.
- The URL provides budgetary lease payments on telephony equipment.
- Rates are locked when leases commence.
- Leasing is based on a 60 month term.
- Leasing agreement is between the State or the Ohio agencies and CBTS FS.
- Equipment purchase is for \$1.00 at end of term.
- End of Lease is to be determined by the agency contract.
-

SmartNet

Cisco SMARTnet helps resolve critical network issues with fast, expert technical support, flexible hardware coverage, and smart, personalized business services.

SmartNet is also an online platform giving users access to communicate with friends not only within the SmartNet network but also to other social networking sites like Facebook and Twitter.

Note: This feature is excluded in the all monthly lease options.

Fair Market Value (FMV)

- This is generally a lower monthly lease payments.
- URL provides Budgetary Lease Payments on telephony equipment.
- Rates are locked when the leases commences.
- Leasing is based on 60 month term.
- Leasing agreement is between the State or the Ohio agencies and CBTS Financial Services (FS).



- End of Lease is to be determined by the agency contract.
- Return of FMV equipment is available.
- Extension is available with reduced lease payments.
- Purchase is available at FMV.

Initial Services

- Here is a brief of the process:
- CBTS provides CBTS FS a detailed quote of equipment & services for lease.
- CBTS FS Provides Lease Proposal.
- State or Agency Approves Lease Proposal.
- CBTS FS sends Lease Docs.
- After the receipt of an executed Lease Agreement, Purchase Order (PO) is created, equipment is purchased and delivered and standard leasing is approved and available.
- Final lease agreement is sent after installation is complete.
- Lease commences after final lease signatures and MACs are assigned.
- Minimum sizes (TBD) are required for add-ons to existing leases.
- Add HW for a 60 month term
- Lower lease payments are available on the new hardware.
- Add HW co-terminus.
- Lease payments are higher for the new HW but easier to manage at the end of the lease term.
- There is an option to add equipment and extend all hardware 60 months.

Refresh and Deletes

- Refresh is available with FMV.
- Complete or partial arrangements are available.
- Remaining lease payments are added to refresh equipment lease payments.
- A refresh for a sixty month term receives the lowest lease payments
- Early cancellation of leases is available.
- If there is a downsize, by contract, agency is only obligated to pay remaining lease payments owed in current fiscal year.
- Returned equipment is eligible for the manufacturer maintenance.

IP Phones

- IP Phone Model Feature Price List Catalog is available online as Attachment F of the Site Engagement Process Guide.
- The purchase price for hardware is exact.
- Lease payments are budgetary and fluctuate with rate changes in the market place.
- Catalog for both elements and price are governed, monitored and approved by the State of Ohio DAS/OIT designee.

Moves, Adds, Changes Deletions (MACD) Process

<p>Problems</p> <ul style="list-style-type: none"> • There is a current expense for MACD. • Agency staffing to support required activity • Voice Over IP (VoIP) and TDM hardware solutions) • End users contact State Telecom staff directly. (Bypassing the TSR/reporting process.) 	<p>Considerations and Questions</p> <ul style="list-style-type: none"> • How many State Telecom staff resources does this impact? • How much money does it save the organization? • In addition to standard features, how many special features are needed? • Complex MACD features are grouped under project category and priced on an individual case basis. • How long does it take from order to implementation? • What kind of training is required?
<p>Inputs</p> <ul style="list-style-type: none"> • State completes a TSR for all MACD requests. 	<p>Outputs</p> <ul style="list-style-type: none"> • Order is processed by CBTS. • Reports are generated for ordered/completed requests.
<p>Benefits</p> <ul style="list-style-type: none"> • State resources no longer need to focus on MACD activity. • All requests require a Transaction Service Request TSR that provides the State with a true picture of MACD activity. • End users retain control of administrative functions for their phones e.g. display, ringer preferences and soft key assignment. • NGTS contract provides for MACD at no cost for standard activity. 	<p>Limitations</p> <ul style="list-style-type: none"> • State has no direct access to the Core functionality. • End user learns a new technology.



Miscellaneous Phones

Miscellaneous phones (usually associated as with a *simple profile*) are described as basic IP Phones used in common areas by more than one user and are typically assigned a Basic profile. These may include:

- Hallway phones
- Break room phones
- Conference phones
- Designated phone for FAX (Refer to the separate section on this subject for more detail.)

Miscellaneous Phones

Miscellaneous Phones - Minimal Features	Monthly Service
1 - 1,000	\$9.78
1,001 and above	\$9.31

Projects and Special Team Requests

CBTS is available to assist customers with a various IT concerns such as:

- Security Assessment
 - In-depth security analysis of your network to identify security risks and vulnerabilities.
 - Identification of Data Leak and vulnerability break points.
- Hardware and Software Security Solutions
 - Certified Engineers provide complete installation of both hardware and software for uninterrupted implementation.
- Data Centers
 - Back-up and disaster safe reconstruction
 - Disaster recovery
- IT Audits and Documentation Assessments

Application Services

Take advantage of our managed services and on-premise support

- IP Telephony
- Virtual Data Center
- Virtual Desktop Infrastructure
- Oracle
- SAP and more



Infrastructure Services

Choose state-of-the-art technology that grows with your business

- Voice
- Security
- Servers and Networking
- Storage and Data Backup



This section provides an example below for a project TSR requested by an agency. Refer directly to the *Service Attachment 1 Exhibit G Rate Card* that corresponds to the *Labor Category Position Title* and hourly rates. These are the costs associated for a particular professional and technical level of expertise assigned to a CBTS Special Team Request.

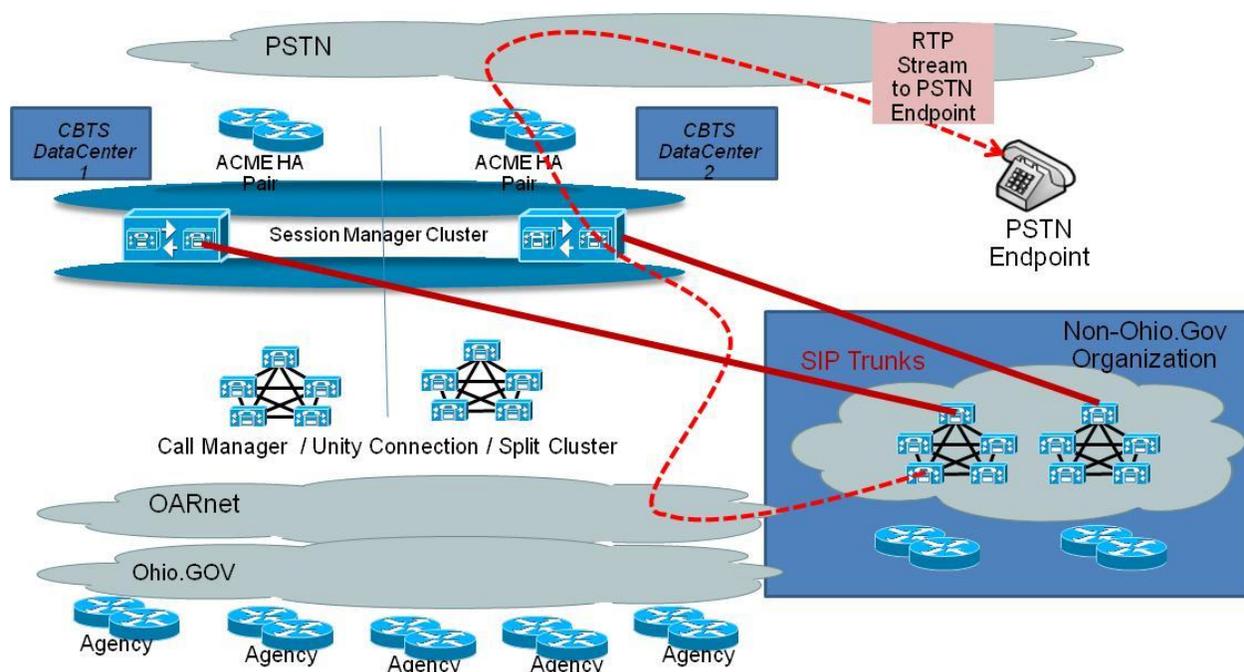
All *Special Projects* require the following:

- A completed TSR with details and/or a special request emailed to AskNGTS@cbts.cinbell.com for review.
- CBTS provides a *Statement of Work* that includes a project plan with scope of work, projected milestones, build of materials, and cost summary. Special Projects are then coordinated and scheduled through the CBTS Program Manager.

SIP Trunking

Session Initiation Protocol, it is an application-layer control protocol; a signaling protocol for Internet Telephony. SIP establishes sessions for features such as audio/videoconferencing, interactive gaming, and call forwarding to be deployed over IP networks, thus enabling service providers to integrate Basic IP telephony services with Web, e-mail, and chat services. In addition to user authentication, redirect and registration services, SIP Server supports traditional telephony features such as personal mobility, time-of-day routing and call forwarding based on the geographical location of the person being called.

CBTS SIP Trunk Call Flow



5.3 SIP Trunk Service

SIP Trunk Service*	Monthly Service	One-Time Equip & Setup
SIP T1 Port & Access	N/A	N/A
SIP T1 Call Path	\$23*	\$600.00
* Price is based on one (1) Concurrent Call Path with 6000 Minutes of Use Per Month, A \$.008 per min rate apply for minutes over 6000		

<p>Current State and Concerns</p> <ul style="list-style-type: none"> • Current VoIP Solution is not standardized. • Intra-Agencies Production • Asset depreciation schedule and maintenance contracts • Agency Cost Recovery • Telco Contracts • Resources and training • Glide path to shared service 	<p>Considerations and Questions</p> <ul style="list-style-type: none"> • Leverage the existing Cap / Op expense. • Continue to support customer base • Utilize IT Resources Short and Long Term • Connect existing telephony infrastructure to the NGTS SIP Cloud • Extend the agency's infrastructure by leveraging SIP trunking to the NGTS Session Management layer • Refer to Frequently Asked Questions.
<p>Process</p> <ul style="list-style-type: none"> • State completes a TSR for all MACD requests. • Specify equipment options: • Purchase from CBTS • Lease agreement or Lease to Own (LTO) • Use identify existing devices • Purchase from 3rd party vendor 	<p>Outputs</p> <ul style="list-style-type: none"> • Plan, build and run implementation. • Utilization reports
<p>Benefits</p> <p>SIP provides:</p> <ul style="list-style-type: none"> • Flexible service. • Free and unlimited calls between enabled sites. • Pay-as-you-grow scalability. • Keep existing phone numbers, phones and phone system. • Use existing high-speed Internet connection. • Inbound/Outbound service. • Toll-free numbers with the ability to pool minutes. • Award-winning digital voice network. • Fully E-911 compliant access. 	<p>Limitations</p> <ul style="list-style-type: none"> • The present network cannot sustain data and VOIP traffic without packet loss, jitter, and delay from end-to-end, that impact quality issues. (Bandwidth and codec requirements) • How secure is transmission among private office-to-office connection, a private connection to the SIP trunking provider, or a public Internet connection between sites or to the SIP trunking provider?

Site Readiness

As part of the IT Managed Services CBTS uses a standard criteria to evaluate and review the *Agency Business Requirements and Technical Assessment Document* to determine Site Readiness. This inventory and analysis of physical and operational business environment allows CBTS to make recommendations for the agency to satisfy the basic pre-requisites of the VOIP solution for deployment at the local site.

<p>Problems</p> <ul style="list-style-type: none"> • Some agencies may not have technical expertise on site to complete the <i>Business Requirements and Technical Assessment Document</i>. • Site readiness involves: <ul style="list-style-type: none"> ○ Call Center Planning ○ Dial Planning ○ Capacity Planning ○ Wiring Readiness ○ Hardware / Protocol Readiness ○ Site Certification ○ Wall jack to computer, computer to phone. ○ Normally one central termination point. 	<p>Considerations and Questions</p> <ul style="list-style-type: none"> • How much bandwidth does the agency require? • Given the recommendations of the Site Remediation what is the best place to start? <ul style="list-style-type: none"> ○ How long will it take? ○ What are the responsibilities of the local Helpdesk? ○ Can deployment be completed in phases? •
<p>Process</p> <p>To prepare for Site Readiness, the State of Ohio agency provides CBTS with the following:</p> <ul style="list-style-type: none"> • A <i>Business Requirements and Technical Assessment Document</i> that is completed and returned to CBTS for evaluation. (CBTS provides the document) • A signed <i>Statement of Work (SOW)</i> describes the project plan and milestones that guide each customer through the project life cycle to insure delivery of services. (CBTS provides the document.) • A Telecommunications Service Request (TSR). 	<p>Limitations</p> <ul style="list-style-type: none"> • There are already multiple known deficiencies.



Site Remediation

A Site Remediation refers to the outcome of an assessment that an environment does not satisfy all the business and technical requirements including any structural or physical constraints present in the local site that require additional work before VOIP deployment.

Under this circumstance there are still options:

- The Site can request a separate Statement of Work from CBTS to make the location site ready by entering a special Service Request as a Site Remediation Project.
- The SR request may prioritize and divided the total scope into phases under a single project.
- The Site contracts with a third party vendor to develop a Request for Proposal (RFP) to solicit bids from external sources.
- The Site enters an internal Service Request (TSR) to engage that State of Ohio Facilities.
-

Benefits	Limitations
<ul style="list-style-type: none"> • CBTS provides an analysis and makes recommendations at no charge to the Agency. • Upon Agency request, CBTS is ready and available to provide a separate Statement of Work to satisfy the VOIP solution requirements. • Business Requirements reviewed by CBTS that pass Site Readiness are scheduled for deployment. 	<ul style="list-style-type: none"> • Site remediation is an additional cost. Site expenses include: <ul style="list-style-type: none"> ○ Fixed pricing per port charge or volume pricing by quantity (25, 50 ports) ○ Pricing cable per foot. ○ LAN readiness and testing. ○ CAT 5E recommended or CAT 6 /10/100/1000. • Site Remediation is required before deployment.

State of Ohio LAN/WAN Access and Distribution Layer Switches Standards

Technical Area	Website location
State of Ohio LAN/WAN Access and Distribution Layer Switches Standards	http://das.ohio.gov/LinkClick.aspx?fileticket=ZgSXHwjbulk%3d&tabid=108
State of Ohio LAN/WAN Routers Standards	http://das.ohio.gov/LinkClick.aspx?fileticket=srjtgTnCom4%3d&tabid=108
ITS-NET-02 Attachment A and ITS-NET-03 Attachment A for the State of Ohio IT Standards	http://das.ohio.gov/Divisions/InformationTechnology/StateofOhioITStandards.aspx
NGTS VOIP Engagement Questions	AskNGTS@cbts.cinbell.com
Site Certification Consulting*	Advocate Consulting Group, Ltd - http://acgltd.com/

**This is an external consulting firm under contract by the State of Ohio to provide specific services.*



Supplemental Monthly Add-On Features

These charges apply to a Basic or Enhanced Profile. Refer to *Section 5.4 of Service Attachment 1* for details.

Agent – This term refers to any user with a service.

Meeting Place per Coordinator – This refers to the conference feature and accommodates up to 500 meeting places on a conference bridge. This is centrally administered by OIT and there is no extra cost to the agency. This is also sometimes referred to as a *reservation list bridge*.

Exhibit F International Calling provides the rate per minute charge for each country.

- Example: Bermuda Country Code: 1-441 US \$0.17

Interstate Long Distance – This is the rate charged per minute for all long distance calls placed within the State of Ohio.

- There is a \$0.012 per minute charge.



Smartnet vs. Self Maintenance Cost Comparison

Number of Phones	Cost of Phone	Failure Rate	Annual Cost of Smartnet
1000	\$204.45	3%	\$9.48

	\$	
Total cost of Smartnet*	47,400.00	
Total Cost of Replacement Phones	\$ 6,133.50	
Number of Spare Phones over 5 years**		30
	\$	
Savings by self maintaining	41,266.50	
Savings Percentage		87%

Please complete the information that is appropriate for the agency on the boxes above.

*This is calculated by Smartnet cost multiplied by five years multiplied by the number of phones.

** Recommended - Keep only a small percentage of spares on hand and replenish stock as needed.

To determine phone and Smartnet cost, use the phone catalog.

<http://www.cbts.cinbell.com/docs/924/NGTS-IP-Phone-Matrix>



Survivability

Site Remote Site Telephony (SRST) is a Cisco term that refers to the Enhanced feature to ensure business continuity and customer satisfaction by providing reliable communications to branch offices, teleworkers, and cloud telephony deployments. Specifically,

SRST* provides:

Automatic failover to local SRST gateway in case of WAN failure. (Automatic failover without manual intervention.)

- Phone registration and display preservation.
- Ability for local phones to call other phones at the site.
- Ability for local phones to call outbound to the PSTN.
- Ability for local phones to call 911.
- Multi-feature redundancy for the NGTS telephony during an Agency WAN link failure.
- Business resiliency through localized call processing from an on premise gateway
- And maintains phone displays and call control*
- Preserves class of service and rule restrictions

* Dependent upon Power-over-Ethernet begin preserved - does not make sense.

SRST cannot provide:

- Preservation of active calls.
- Re-routing of inbound DID calls.

Site Survivability Strategy

As with any disaster recovery model, the agency's strategy depends on the agency's Service Level Agreements (SLA) specific site requirements identified for levels of survivable telephony, and financial implications of available solutions.

The options provide a SRST capable gateway router (with lease-to-own option) and / or a subscriber server, depending on the quantity of endpoints at the site needing survivable telephony.

Pricing includes the hardware but does not include the primary rate interface. PRI is a type of ISDN service designed for larger organizations. Also, analog circuit or any MRC fees for the circuit are excluded. CBTS provides the PRI and/or analog circuit at an additional cost.

Each site can have a different solution, depending on the requirements of the particular site.

Solution	Site Size	Monthly Service	*Monthly Least to Own (LTO)	One Time Configuration /Service	LTO Period
Small	1 – 50	\$210	\$74.93	\$631	60 Mnths
Medium	51 – 250	\$375	\$141.98	\$927	60 Mnths
Large	251 – 1350	\$720	\$201.47	\$1,518	60 Mnths
Enterprise	>1350	\$945	\$283.92	\$2,462	60 Mnths



Training Options

This refers to is a formal organized activity aimed at imparting information and/or instructions to improve the performance of participant to master a required level of knowledge or skill. CBTS offers four standard training alternatives as described below.

Type	Description
Self-Paced Guides	Easy to read step/action instructions with print screens. The Self-Paced <i>Quick Start Guides</i> are provided in PDF softcopy.
CBTS Training Center (self-paced)	This is a free website that provides video and audio training on the various IP phone models. It is located at: http://supportandtraining.com/stateofohio . Self-Paced Quick Start Guides for easy reference and instruction are provided for each IP phone type.
Web Ex Conference (Instructor)	Instruction is delivered virtually by using simultaneous share desktop capability, and the instructor is present to answer questions via on a conference all bridge.
Computer Based Training (CBT) or Classroom with instructor)	This is usually conducted as a hands-on computer activity led by an instructor (15-20 per group). Each trainee has a workstation or his/her own laptop or other workstation device. Devices are connected to simulate the work environment. Instructor demonstrates new features. Exercises include hands-on activities to perform tasks.
Train-the-Trainer (T3)	Instruction is delivered as CBT with instructor to include tips for troubleshooting in addition to phone set-up and demonstrating feature content.

Note: All training materials are provided in softcopy. Production of training materials is excluded in the costs below but is available upon special request.

Cost

Training Type	Classroom	Train the Trainer	Web Conf.	CBT / Self-Paced*	Printed Materials
Administrator	\$151.20	\$134.40	\$100.00	Included	Cisco.com
Help Desk	\$151.20	\$134.40	\$100.00	Included	Cisco.com
End-User	\$151.20	\$134.40	\$100.00	Included	Cisco.com
Specialized User	\$151.20	\$134.40	\$100.00	Included	Cisco.com

*Self Paced is available for 1 year after installation. Please use the URL for a demo view of the site:
<http://supportandtraining.com/resellerdemo.php?e=joe.putnick@cbts.cinbell.com>