DCT

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DCT Telecom Group Hosted PBX Solutions

Product Delivery Guide

*What to expect when receiving your new
best-in-class voice solutions*

Contents

Introduction To Our Solutions

In order to receive the best possible experience in the installation and use of your DCT telephony, network, voice or computing solutions, please refer to this document throughout your relationship with DCT. The details here are essentially in 4 sections:

- **Pre-Sales**. These are items that will have impact on your order and contract with DCT, and play a major role in determining the timeline and costs.
- **Order Confirmation**. These are items that will finalize your order details to ensure effective provisioning and deployment. Changes to some parts of the solution can be made during this time, with varying cost implications.
- **Implementation**. These are items that are part of rolling out your solution.
- **Ongoing Support**. This explains what you can expect after your solutions are up and running.

Throughout this document there are references to DCT personnel visiting your location(s). Within the state of Ohio, these visits are included in the fees documented on the sales order. Items at sites outside the state of Ohio can be arranged for a fee.

Pre-Sales

The following items will be chosen prior to contract signing, after discussions with you and your account team, to ensure the right solution is designed for your needs. All items should be documented on a per location and/or group basis.

- **Key Personnel.** Identify your company's Solution Administrator and any Site Administrators. Your solution administrator will work directly with the DCT Project Management Office (PMO) in regards to design and implementation of your solutions. In addition, these designated administrators will be the on-site coordinators for implementation and training, and will be the designated contacts to make changes to, and report issues with, any solutions.
- **Seat Count**. The number of seats needed, what type of seat, and what phone will be used on that seat all need to be identified prior to contract signing. Note that changes to these items are usually possible after contract signing, however, changes after contract signing will normally affect costs. Note that any accessories for phones should also be chosen at this time (e.g. mounting plates, power bricks, etc.).
- **Phone Numbers.** All phone numbers currently under the control of your company must be identified. These numbers include fax numbers, Direct Inward Dials (DIDs) and any other current services including alarm lines. Copies of your current bills, Letters of Agency (LOA) and Customer Service Records (CSRs) will be required.
- **Physical Considerations**. Knowledge of the demarcation point (demarc) prior to contract signing is helpful in understanding all of the costs and time involved for system installation and who will be responsible. For example, is the demarc accessible to your company's personnel at all times? Is it located in a room suitable for housing electronic equipment? Will an extension of the demarc be necessary to reach your network?
- **Circuit Type**. This will be chosen prior to contract signing to meet all voice and data requirements for your business. Note that changes made to circuit type after contract signing will incur significant cost and timeline changes.
- **Router**. Typically, if DCT is providing a network connection, we will also provide a router. This router will be configured for the type of circuit purchased, and for any additional services (DCT Hosted PBX, for example). If this router needs to operate in the context of an existing network, or if you will be providing the router, the requirements need to be understood by both DCT and your Network Administrator.

- **Switches**. Typically, if DCT is providing Hosted PBX, we may also provide distribution switches. These switches will be configured for the solutions purchased (DCT Hosted PBX, for example). If this switch needs to operate in the context of an existing network, or if you will be providing the switches, the requirements need to be understood by both DCT and your Network Administrator.

- **Cabling**. Cat 5e or better cabling needs to be available between switching gear and phones. If additional cabling is required, DCT can provide specific quotes for this work during site surveys (see below).

- **LAN and WAN configuration items**. While the configuration of the remainder of your LAN is your responsibility, DCT has some recommendations that will provide for the best possible experience and can offer assistance in setup. Some things to consider are:
  - The ability to support separate VLANs for data and voice.
  - PoE on all distribution switches.
  - Correct settings for duplex and speed.
  - DHCP scope and settings to support existing and new services.
  - VPN needs.
  - Router ACL configuration.
  - External IP addresses needed for existing configurations.

- **Training.** Multiple training packages are available with implementation of your Hosted PBX service. You will work with your account team and the PMO to determine the right package for your organization.

- **Voice Prompts.** As a part of the system you will have the ability to record your own voice prompts, have DCT record the voice prompts for you, or you can contract with a third party to have your voice prompts recorded. Voice prompts include auto attendants, music on hold, call center queues, and IVR prompts. DCT provided recordings can be arranged for a fee.

Order Confirmation

Within 7 working days of contract signature your account team will contact you to schedule a set of meetings to finalize all specific items that make up your order.

- **Site Surveys.** DCT personnel will visit each site at which services are to be deployed. The intent of these visits is to confirm all information identified in the pre-sales process in regards to equipment count, location and necessary access to all parts of the building. In general, site surveys take between 30-60 minutes per site.

- **LAN/WAN Design Meeting.** The purpose of this meeting is for DCT engineers to work with your network administrator to determine how to configure the specific interfaces between our network equipment and yours. In general, this meeting will take between 30 – 90 minutes depending on the complexity of your network.

- **Hosted PBX/SIP Call Flow Meeting.** A detailed description of all call flows will be documented at this meeting, including how all DIDs should be routed; all auto-attendant operation and scripts; all call center queue definitions, scripts and routing; and all hunt group routing. In addition you should provide the definition of your working hours and any holiday schedules. A complete user list will also be created. In general, this meeting will take between 30 – 90 minutes depending on the number of seats being deployed.

- **Timeline.** Upon completion of all above items a tentative timeline will be established and communicated. Though not all dates will be firm at this point, a process for communicating the confirmed dates, as well as dates for any additional required meetings, will be established. The major milestones include: circuit installation, circuit activation, service/system activation, phone/software installation and activation, training, and existing service transfer. At this time, DCT will initiate the order entry and provisioning process and any one-time charges will be assessed.

Implementation

Step 1: Circuit Installation

The first activities will center on delivering your new network. Note that there are often lead times associated with these activities. The PMO will keep you informed of progress throughout the project lifecycle.

- A date and time window for installation of the circuit is typically available 30 days after order entry, and will be communicated by the PMO.
- Throughout the circuit installation process, multiple site visits may be required. At these visits technicians will need access to the site, in the demarc area, typically for 2-4 hours.
- Other technicians may be working at the same time off-site to install the circuit. DCT will coordinate any required meetings between you, on-site technicians, and off-site technicians.
- Any routers will be installed by DCT personnel, as well as any demarc extensions purchased by the customer.

Step 2: Circuit Activation

After the circuit is installed, there is often still work to do before the circuit is ready for traffic. Typically, this work will not require actions on your part, but the PMO will keep you informed regarding progress.

- DCT will continue to configure items required for service, after installation. These could include:
  - Monitoring features
  - Port configuration
  - Maintenance updates
  - Additional specific router configurations
- The PMO will inform you when the circuit is active and ready for traffic.
- Billing for the circuit and associated on premise equipment will commence as of the circuit activation date, and this will be the beginning of your circuit service term.

Step 3: Service / System Deployment

Work will be ongoing, in parallel with the circuit install, to bring up your hosted PBX server platform. When the provisioning effort is complete, the PMO will coordinate with you for onsite deployment including the following items:

- If you have contracted for voice prompts from DCT, they will be available at this time. If you are providing your own prompts, they must be available on the deployment date. Remember that in this case, you are responsible for any appropriate royalties / licenses for copyrighted content.
- If you are providing your own phones, make sure they arrive prior to deployment date.
- Phones will be installed as per the information gathered at the site survey.
- Calls will be made out of each phone. Extension to extension dialing, as well as extension to external number calls will be tested.
- All hunt group operation, call center queue operation, and auto attendant operation will be tested as much as possible prior to number port.
- Routing for any new DIDs will also be tested at this time.
- If you are competing the wiring, it must be completed prior to deployment. If you have contracted with DCT to complete the wiring it will be completed during this step.

- All LAN configuration will be completed as part of the deployment phase.
- Analog devices will be temporarily connected for testing but will not be left connected at this time. Final connections will be made during *Step 5: Service / System Activation*.
- A location for onsite training classes will need to be identified as the equipment used for the training will be set up at this time.
- At this point, you will sign off on the system operation as implemented, and will be informed of any changes resulting from requests during the implementation phase.

Step 4: Training

After all implementation items have been completed, but prior to transferring away from your existing service, the PMO will arrange training of all elements of your solution.

- Hosted PBX training (as specified on the sales order) will be provided on all features purchased.
- All users will be trained on phone or soft phone operation, voicemail setup, paging through phones, overhead paging and personal portal operation.
- Receptionist users will additionally be trained on the expansion module or receptionist console software.
- Call center users will additionally be trained on call center agent software. Call Center Supervisors will be trained on supervisor software and dashboard/wallboard operations.
- System administrators will additionally be trained on the administrative portal.

Step 5: Service / System Activation

Once the circuits and Hosted PBX system have been verified to meet your requirements, DCT will make arrangements to port your existing phone numbers, as appropriate, to your new system.

- This will happen at a time scheduled by the carriers. The PMO will inform you of the date, and schedule all necessary resources coinciding with the port.
- Final testing, including verifying proper routing of ported DIDs, will be performed.
- All phone placement and remaining analog connectivity will be finalized at this time.
- After the port, the PMO will work with you to identify services no longer needed, and help you move to cancel those services as appropriate.
- At this point, billing for all items not previously addressed will commence.

Ongoing Support and Service

After we have verified that the system is installed to the agreed upon requirements, your main point of contact will shift from the PMO to our Customer Support Team.

The Customer Support Team can be reached at customerservice@4dct.com or 440-808-0800.

When reporting an issue to the DCT Customer Support Center, please have the following information documented and available for the Customer Support Representative taking your call:

- Company name and location
- Name and telephone number of the user with the issue
- MAC address of the device experiencing the issue
- If a call failure or call quality issue, provide a call example that includes the following:
  - Date and time of the call
  - Calling and called numbers
  - Specific error messages received
  - Conditions or circumstances when an issue occurs
- If a call center issue, include the call center queue name
- If an application issue, include a screen shot showing the problem with the application

Support Center case severity is used to define the order and effort when handling inquiries and issues related to any open cases. This process is designed to prioritize issues that are service affecting. While all inquiries are important, our resources will address those that are most critical first. All cases are assigned one of four severity level classifications, as detailed on the following page.

Severity Level	Definitions & Examples	Updates to Cases (interval)
1	***DEFINITION:*** 100% COMPLETE failure of any Managed Service within a location; issues generally interrupt an End User's ability to do business OR a major security policy breach ***EXAMPLE:*** Internet and/or WAN is down, all phones at an End User location are down and the End User cannot make and/or receive inbound or outbound calls.	Minimum hourly updates until resolved
2	***DEFINITION:*** PARTIAL failure of any managed service within a location. An End User's ability to do business may be somewhat impaired but not completely interrupted because the service partially works or has a suitable workaround. ***EXAMPLE:*** Two or more phones are experiencing functional problems such as "no service", but others are OK; some users may not be able to access their email or email security filter; Web Defense services may be blocked for some users but not all; and End User's LAN Switch is down and affecting applicable users.	Minimum every two hours until resolved
3	***DEFINITION:*** The QUALITY of any managed service is impaired but the End User is still capable of conducting normal business. Issues may be quality (e.g. static, echo on voice, slowness on data) or feature related (e.g. service works but a particular feature is not working properly). ***EXAMPLE:*** Slow Internet services; slow response on email or web services; telephone calls are experiencing quality problems such as static or period of no audio.	Minimum every four hours until resolved
4	***DEFINITION:*** Move/Add/Change/Deletion or a request for information. Severity Level 4 issues are non-urgent. Note that changes that could have been performed by customer through normal portal access may be subject to consulting services fees. ***EXAMPLE:*** New user needs to be added; name change on an extension; router/switch ACL added/changes; firewall policy change unless critical; DNS adds, moves, changes; email security policy change.	As needed.

The DCT Customer Support Center is staffed from 8:30 a.m. EST to 6:00 p.m. EST, Monday through Friday ("Standard Business Hours"). Outside of these hours, as well as all day Saturday and Sunday ("Non-Standard Business Hours"), calls are handled remotely by the designated On-Call Customer Support Technician.

During Standard Business Hours, all cases are worked by our support staff in accordance with their severity level and the order they were received, and are escalated as necessary. For all Severity Level 4 issues, customers are directed to utilize the provisioning portal to make any necessary and applicable modifications. In the event that the ability to make a particular modification is not available via the provisioning portal, customers should email customerservice@4dct.com and their request will be worked in the order it was received.

Calls and alarms received during Non-Standard Business Hours will be handled by the on-call customer support technician. Severity 1 cases will be created within 30 minutes of DCT receiving a call and will be worked immediately. All other inquiries and subsequent cases will be worked starting the next business day and according to their severity level. Below is an explanation of how Non-Standard Business Hour cases are handled based on their severity level:

- Severity Level 1 ("S1") Cases
  - Existing S1 cases will continue to be worked during Non-Standard Business Hours
  - DCT will also open new S1 cases during Non-Standard Business Hours

- Severity Level 2, 3 and 4 ("S2", "S3", and "S4") Cases
  - At the close of Standard Business Hours, all existing S2, S3 and S4 cases will be placed on hold and not worked until the start of business the next day.
  - At the beginning of the next business day, all S2, S3 and S4 cases will be taken off hold and will continue to be worked based on their severity level.
  - DCT will open new S2, S3 and S4 cases during Non-Standard Business Hours, however, these cases will not be worked until the beginning of the next business day and will be handled in the order received.

Appendix A – LAN Requirements

- Customer to provide Proper 8 wire Cat 5e (or better) wiring to each handset location. Each run should be less than 100 meters.

- Customer to provide Proper Cat 3 (or better) wiring to each location with an analog device. Note that DCT will provide a 66 block for cable punchdown.

- DCT standard will be to set provided switches to Auto and Phones / Router to 100 / Full or 1000 / Full.

- Existing switches must be manageable and should be capable of supporting QoS, VLANs and full PoE. You will need any usernames and passwords to configure this equipment during *Step 3: Service / System Deployment*. DCT standard is to configure a VLAN for phones and another for the remainder of the network.

- A UPS on the router and switches is recommended.

- DCT standard is to provide NAT for voice traffic and DHCP for the phones from the DCT provided router. Other NATs and DHCP scopes are the responsibility of the customer, or can be arranged through professional services.

- DCT will keep backup configurations for DCT owned infrastructure equipment. It is recommended that customer owned equipment have backups as well.

- Any customer-owned firewall must allow SIP, TFTP, FTP and RTP.