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Windstream Enterprise service delivery overview & expectations

Thank you for choosing Windstream Enterprise! We look forward to working with you to help your organization reach its goals. Windstream Enterprise is committed to providing you with the best service experience possible. To ensure your onboarding activities are transparent and straightforward, see the roadmap below.

We also encourage you to take the time to review the Windstream Enterprise Terms & Conditions.



Order phase overview

During the order phase, Windstream Enterprise's sales, account and solution design teams will work with you to finalize your solution requirements and complete the necessary paperwork. Gathering complete and accurate information at this phase will help us deploy and install your solutions quickly and efficiently. Here's what you can expect:

Windstream Enterprise responsibilities: During this initial phase, Windstream Enterprise engineers and onboarding specialists will be aligned with your designated team. An order package will be created upon acceptance of the Windstream Enterprise quote.

+ Your responsibilities:

- Collaborate with sales to provide a complete, accurate scope of your needs and required outcomes
- Provide preliminary technical and configuration details
- Confirm assembly of the project team, to include:
 - Client team project manager
 - o Technical site contact for each location (this contact should be local, and able to be onsite, as required)
 - Subject matter expert(s), as required
 - One or more security contacts that are authorized to make firewall policy change requests, as required
 - o Technical resource for each test and turn up
 - Operations contact(s)
 - Billing contact(s)
 - Scope change management contact(s)

Process phase overview

During the process phase, Windstream Enterprise's team of technical and solution experts will review all components of the order(s), including the products and services. Windstream Enterprise team member(s) will collaborate with your team to begin designing a solution. Your partnership during this critical phase will help ensure a seamless, positive experience for your organization. Please take the time to review the details required. If changes are needed later in the process, it could introduce complications, delays or additional costs. Here's what you can expect:

Windstream Enterprise responsibilities: An enterprise sales coordinator will review the order package to ensure it is complete, including signed agreements for services, along with other supporting configuration and enrichment data. In parallel, technical design engineering will review the solution and work with your team to ensure all details are complete and accurate.



+ Your responsibilities:

- Prepare to be an active participant in the collection of information
- Supply all configuration and programming information in the Windstream Enterprise-requested format
- Provide the following details:
 - Project team members' contact information and role(s)
 - Address (floor, suite and equipment placement)
 - o Installation date
 - o Related disconnects, if applicable
- Supply all telephone number information for voice services:
 - o Telephone number and assignment (DID, Analog, Fax, etc.)
 - o If porting, provide:
 - Customer signed Letter of Authorization (LOA)
 - Customer Service Record (CSR) from current carrier (if requested by Windstream)
 - Desired action for all numbers with current carrier (port, remain with carrier, disconnect)
 - VoIP remote locations host account number (or main site trunk group or BTN)
 - Questionnaire for Secure eFax, if applicable

Install phase overview

During the install phase, a Windstream Enterprise project manager will be assigned to your order, and design and provisioning teams will begin building your solution(s). Here's what you can expect:

- Windstream Enterprise responsibilities: Service delivery project managers are assigned to oversee and coordinate the successful delivery of solutions. The project manager receives solution orders in Windstream Enterprise's order management system and reviews all the solution documentation to ensure data and order integrity. The project manager oversees the entire project lifecycle throughout the service delivery provisioning process through to activation and will communicate with you on an on-going basis.
 - Provisioning: Solutions cycle through Windstream Enterprise provisioning teams to design, build and
 configure. Provisioning teams specialize in engineering functions to ensure each product and service is built
 to specification and configured as required.
 - Access loop placement: If applicable, the Local Exchange Carrier (LEC) may be dispatched to your site to
 place the access loop. The access loop will be placed in the location identified by you during the 'Process'
 phase. A customer contact will be required to be onsite to meet with the LEC technician during this step.
 - **Equipment installation:** Your project manager will work with you to determine the best date to dispatch a field services technician to install your device(s).
 - Billing: Once the install phase is completed, your order will be sent to billing to begin invoicing.

+ Your responsibilities:

- Prepare to be an active participant to collaborate with your project manager. When necessary, provide onsite contacts to be present during access loop placement. Ensure your room/telco closet is accessible for loop and equipment installation:
 - The backboard should be 1.2m x 2.4m x 19mm (4' x 8' x 3/4") fire-rated plywood fastened to studs, and able to support 23 kilograms (50 pounds)
 - The backboard should be within 2m (6') of a dedicated power outlet
 - The circuit must terminate within 6m (20') of the wall-mounted equipment; the use of power strips and/or extension cords is not permitted
 - o The equipment must be mounted no less than 1m (3') from the floor and leave 25cm (-10") clearance above
 - o The relay rack should be 58cm wide x 2.1m tall (23" x 7")
 - Power and distances required for wall-mounted equipment also apply to rack-mounted equipment



Activate phase overview

During this phase of ordering, your Windstream Enterprise project manager will collaborate to activate services.

 Windstream Enterprise responsibilities: Your project manager will work with you to determine scheduling for number porting, if applicable, and service activation.

+ Your responsibilities:

- Prepare to be an active participant in the provisioning, configuration and scheduling aspects of the install process
- Provide project timing constraints for the development of the implementation plan (i.e., holidays, after hours, blackout dates, contractual commitments and implementation resources)
- Coordinate with your phone system and IT or data vendor/contacts to work with the service delivery activation technician

Complete phase overview

After activation of your products and services, your account will be transitioned into a maintenance and support status. Windstream Enterprise's Service Assurance and Customer Care team will care for all your needs. You will also have access to the WE Connect customer portal, delivering a revolutionary self-service experience, combining network management, analytics, reporting, location visibility and customer support features into a single view, helping customers quickly and easily execute their digital strategy.

+ **WE Connect on-boarding—support & portal (support/maintenance):** You will be transitioned to the WE Connect Portal for a real-time view of your products, services, network and billing.

WE Connect Features:

- Visibility and control of all services, anytime, anywhere, from any device
- Customizable dashboards, reports and notification settings
- Security features to protect personal information
- Service and feature management tools
- Multiple support channels, including:
 - Live chat
 - Chatbot
- Online requests
- Community forums

+ Your responsibilities:

- Access the WE Connect customer portal
- Become familiar with the layout and functions available
- Monitor network, products, services and billing



Service-specific responsibilities for service installation

To ensure a successful service implementation, it is vital that information exchange happens in a timely way. To assist in this process, below is a summary of our solution-specific information requirements. Get started by reviewing and confirming that your organization can support the following elements for the pending installation. If any of the items outlined below will be challenging to fulfill throughout the duration of the project, Windstream Enterprise may be able to provide additional resources via our Professional Services team.

General responsibilities for all solutions

Project Management team

- + Identify implementation team members, including your:
 - Project manager
 - Technical site contact for each location
 - Subject matter expert(s), as required
 - One or more security contacts that are authorized to make firewall policy change requests, as required
 - · Technical resource for each test and turn up
 - Operations contact(s)
 - Billing contact(s)
 - Scope change management contact(s)
- + Provide project timing constraints for the development of the implementation plan (i.e., holidays, after hours, blackout dates, contractual commitments and implementation resources)
- Supply all configuration and programming information in the Windstream Enterprise format
- + Prepare to be an active participant in the collection of information and complete implementation process
- + Provide a change control window for maintenance

LAN

- + Confirm information for each location to is up to date
- Provide location, space, power, lighting and environment suitable for Windstream Enterprise managed devices
- + Provide inside wiring, extensions and cross-connections, as needed
- + Provide information about the hand-off to Windstream Enterprise managed devices:
 - Physical media and ports
 - Layer 2 specification for VLANs
 - Layer 3 protocol details and IP subnets addressing (public/private)
 - o DHCP details (provided by you and Windstream Enterprise)
 - DNS details (i.e., provider, target IP, etc.)
 - Connectivity and access through customer-managed LAN environments
- + Disable SIP ALG (typically fixed wireless or modem)

WAN

- Provide circuit details (contracted bandwidth, provider, and hand-off details).
- Perform test and turn up of circuit from carrier prior to implementation of Windstream Enterprise services to ensure connection is functional



Inside wiring + demarcation extensions

- Windstream Enterprise is responsible for wiring up to the installed Network Interface Device (NID). (Our NID
 is normally installed on the inside of the customer premises.)
 - In a scenario where you are located in a multi-tenant building, you and/or your landlord are responsible
 for ensuring the appropriate wiring is installed between the building's Main Point of Entry (MPoE) and
 office or suite. (You would be responsible for the wiring that runs through inside walls or underneath the
 building.)
- + A large percentage of delays in installation of new services and trouble reports for existing services are caused by inside wire, jacks and customer-owned equipment.
- If you are unsure if the wiring or point of demarcation is sufficient to support Windstream Enterprise services, our Professional Services team can provide a quote to assess.

Battery back-up devices

Uninterrupted Power Supply (UPS) devices, purchased from Windstream Enterprise, are your property and responsibility to manage and maintain, including corresponding directly with the manufacturer for warranty replacement. Should the price of the UPS be amortized over the contract term and included in the MRC, you will be responsible for remitting payment to Windstream Enterprise even if the UPS should fail before the end of the contract term.

Service-specific responsibilities

Software Defined Wide Area Network (SD-WAN)

- + Provide test and turn-up application policies:
 - Application name
 - Hosting location (i.e., premises, cloud, SaaS, etc.)
 - Match criteria details (i.e., source, destination or application group)
 - Action criteria details (i.e., priority, rate limit, dedicated path or steering)
- + Provide remote VPN access details:
 - Protocol (IPsec/SSL)
 - User authentication server details:
 - Type (i.e., local, LDAP, etc.)
 - Target (i.e., IP address, port and distinguished name)
- Confirm NAT or PAT policies, as needed

Managed Network Security (MNS)

- Ensure your technical resource attends pre-deployment planning calls to answer questions regarding your networking and security requirements, including:
 - Existing network topology, including existing firewalls and IP addressing
 - Internet outbound/inbound traffic filtering policies
 - · Confirm NAT or PAT policies, as needed
 - DMZ (demilitarized zone) sub-network requirements
 - Web and application filtering
 - Site-to-site VPN configuration details
 - Remote access VPN and user authentication requirements (e.g., active directory integration)



- Convert any existing firewall configurations to practical firewall rules/security policies
- Provide estimated log volume and/or average events per second per device when threat monitoring is purchased with MNS Premium
- Review additional requirements for MNS customer premises equipment (CPE) and Virtual Network Function (VNF):
 - Provide LAN ports for trusted MNS firewall (e.g., FortiGate) interfaces
 - Obtain any permits, licenses or authorizations required to deploy MNS CPE
 - Allocate a secure location with sufficient connectivity, power, space and ventilation (e.g., locked room or cabinet)
 - Provide Windstream Enterprise field technician access to the location where the MNS CPE will be placed
 - Securely store and promptly provide MNS CPE (i.e., FortiGate devices) sent to your site for Windstream Enterprise field technician(s) during scheduled installation
 - Ensure the Windstream Enterprise Cyber Security Operations Center (CSOC) can remotely use SSH and HTTPS to securely access FortiGate firewalls and SNMPv3 (read-only) for polling and traps
 - Provide "Smart Hands" when needed to assist the CSOC in troubleshooting a service-disrupting event
- Provide routable IP address and desired port for Syslog server when this external logging method is required, as needed
- Use the WE Connect Firewall/MNS Dashboard for web filtering, application control and remote access VPN user management
- Present a private passcode to the CSOC for authentication when requesting a change to the MNS service
- Notify CSOC at least 24 hours in advance of the following events:
 - Network or security architecture configuration changes that may impact the operation of the MNS service
 - Uncommon network traffic that could generate false alerts (e.g., unscheduled backups, an anticipated increase in legitimate inbound web traffic)
- + Install Fortinet Single Sign-On (FSSO) for active directory integration, as needed
- + Provide end-user remote access VPN client support for computers and mobile devices
 - Client software installation
 - End-user identification and authentication:
 - Maintain users' list and passwords
 - Configure and maintain any external authentication technologies, including, but not limited to, RADIUS,
 TACACS, Active Directory and Multi-factor Authentication (MFA) servers or cloud-based services

xCaaS + OfficeSuite UC® (general)

- + Provide PoE switches or order power supplies for IP phones
- + Provide make, model and specs for any third-party devices
 - **Note:** All devices must have been discussed in pre-sales conversations for proper integration into the Windstream Enterprise solution.
- + Ensure each phone has a cable back to the switch
 - Note: There can be no daisy chained phones.
- + Ensure your switches have GigE to support any GigE phones
- + Provide the following information if you have unified communications (UC) solutions:
 - Locations broken down by users
 - Locations that will have hardware



- Dial plan review
- Remote/telework users/agents
- + Provide the following information for all contact center agents:
 - Names of individual agents
 - Contact center supervisor information
 - Shift information for contact center staff
- + Identify contact center line of business owners:
 - Review contact center integrations
 - Provide detailed contact center call flows with documentation
 - Identify application ownership for points of integration
- + Provide secure location for delivery of onsite hardware (i.e., IP phones, gateways, etc.)
- + Tag the following devices, such as, but not limited to:
 - Door boxes
 - Overhead paging
 - Fax lines
 - Alarm lines
 - Modems
 - WAN devices
- Confirm all numbers, including toll-free, for porting and directory listings, and provide the recent bill required for these numbers
- Have at least 100 Kbps LAN/WAN bandwidth per call capacity per site for voice; more will be needed for additional functions
- + Confirm video conferencing recommended bandwidth:
 - For high-quality 1:1 calling: 600Kbps (up/down) and 1.2 Mbps (up/down) for HD video
 - For high-quality group calling: 600Kbps/1.2Mbps (up/down) and 1.5Mbps/1.5Mbps (up/down) for gallery view

OfficeSuite UC

- + Have any necessary public static IP addresses
- + Support OfficeSuite UC services on your network by enabling the necessary port and IP ranges:
 - OfficeSuite port and IP ranges
 - OfficeSuite HD Meeting port and IP ranges
 - OfficeSuite Live IP and port info

OfficeSuite UC Local Survivability Gateway

- Provide a robust WAN with backup. Windstream Enterprise recommends SD-WAN with multiple, diverse IP connections to ensure continuity.
- To allow necessary traffic to/from the Ribbon EdgeMarc 2900A (LSG device), follow the 'Important: Customer Responsibilities' section on Community for local firewall port permissions.
- + Ensure only VoIP traffic traverses the OfficeSuite Local Survivability Gateway. Send all data traffic through a separate switch port.
- Notify Windstream Enterprise at least two weeks in advance if you plan to change your ISP and/or public, routable IP addresses from those used at initial configuration.
- Notify Windstream Enterprise if you want to change the extensions identified as the target 911 call-back numbers from those defined at initial configuration.



- Manage all protected power (UPS) on premises, especially for those components in the critical path for communications, including, but not limited to: OfficeSuite IP phones, routers, LAN switches (PoE preferred), the LSG itself, OHP interfaces and amplifiers, SD-WAN boxes, ATAs for analog extensions, etc. Consult with your Windstream Enterprise representative to engage our Professional Services team for UPS support.
- Provide two POTS lines for outbound 911 dialing while the LSG is in Local Mode. Traditional POTS, which will withstand failure of power and IP network connectivity, are required but Windstream Enterprise Digital Voice Lines (DVLs) with UPS and 4G/5G wireless backup is a satisfactory replacement. Protect all DVL components with UPS.

xCaaS (Avaya)

- + Review statement of work (SOW) with your Windstream Enterprise project team
- + Review any third-party API requirements as a part of the SOW

Digital Voice Lines (DVLs)

Digital voice lines (DVLs) allow use of analog phones and other voice lines over Broadband, Cellular Broadband, Ethernet, or Fiber connections. Windstream will install equipment required to support this service and connect it to your existing analog voice lines with the provision that the site readiness requirements listed below are fulfilled.



Site readiness checklist

If you answer 'No' to any of the following questions, please see the 'Your action needed' section.

- + Will analog voice lines be moved/ported to the Windstream DVL?
- + Do all analog voice lines terminate in the same telco area?
- Are all analog voice lines labeled with their phone number at the 66 blocks/main telco?
- + Are all analog voice lines working at the designated workstations?
- + Do we have available ports on the existing data switch?
- + Is there an adequate amount of power outlets for the DVL(s) being installed?

Your action needed

- + If you have more than 12 analog phone lines to be moved to the Windstream DVL:
 - Your project coordinator or manager can work with a 3rd party vendor to provide a single-site quote for 13 or more analog connections
 - Or, for multi-site projects, you may have the option to contract with Windstream Enterprise Professional Services to connect your analog lines
- + If your analog voice lines terminate to more than one telco area or room:
 - You can use your existing voice vendor or a 3rd party vendor to complete these connections.
 - Or your assigned project coordinator or manager can order a site survey to determine if Windstream Enterprise can cross-connect our DVL equipment to your voice lines
 - Depending on the scope, you may have the option to order a custom install or contract with Windstream Enterprise Professional Services
- + If all analog voice lines are not labeled with their phone number at the 66 block:
 - You can use your existing voice vendor or a 3rd party vendor to tone-out/label the lines ('Tone & Tag')
 - Or your project coordinator or manager can work with a 3rd party vendor to provide a single-site quote for Tone & Tag services
 - Or, for multi-site projects, you may have the option to contract with Windstream Enterprise Professional Services to perform Tone & Tag activity, subject to engagement criteria

Note: To complete Tone & Tag requests, analog lines must be labeled at the MPOE (initial point of line entry into the facility). You can contact your current voice provider (ILEC) to request a Tag & Locate of these lines or, if Windstream Enterprise is the ILEC for a location, your project coordinator or manager can open a Tag & Locate ticket.

If any analog voice lines are not working at their designated station:

You can open a trouble ticket in the WE Connect portal—this will not delay installation

If there are no available ports on your data switch:

Contact your project coordinator or manager to review your order for equipment needs

If there are insufficient power outlets for the new DVL(s):

Install an uninterruptible power supply (UPS) to provide additional outlets or work with your project coordinator or manager to add this device to your order



Secure eFax

- The Service Delivery team will send you the <u>Customer Questionnaire</u>, which will be used throughout the implementation process as the master datasheet.
- + The <u>Letter of Authorization (LOA)</u> needs to be completed for every solution even if Windstream Enterprise owns the numbers. This will be a port, regardless of carrier.
- + As a requirement to maintain security in transport to/from email providers, the <u>TLS Request Form</u> must be completed.
- + eFax Domain Send is a service that allows anyone, anywhere in your organization to send a fax even if they do not have a Secure eFax number or account. Completing the eFax Corporate Domain Send Request Form is a requirement for all multi-function devices.

Professional Services

Review statement of work (SOW) with your Windstream Enterprise project team.

Additional resources

For support, please consult with your dedicated Windstream Enterprise project team. To learn more about Windstream Enterprise services, visit our <u>Terms & Conditions</u>.

About Windstream Enterprise

Managed cloud connectivity, communications and security—guaranteed.

Windstream Enterprise drives business transformation through the convergence of our proprietary software solutions and cloud-optimized network to unlock our clients' revenue and profitability potential. Our end-to-end IT managed services modernize technology infrastructure, optimize operations, eliminate resource constraints and elevate the experience of our clients and their end users, while securing their critical data and brand reputation. Analysts recognize Windstream Enterprise as a market leader for our product innovation, and clients rely on our first-in-the-industry service guarantees and best-in-class management portal. Businesses trust Windstream Enterprise as their single-source for a high-performance network and award- winning suite of connectivity, collaboration and security solutions—delivered by a team of technology experts whose success is directly tied to our clients' complete satisfaction.

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