nuwave
PARTNER ENABLEMENT PROGRAM

ipilot

Support Guide

This document outlines the NUWAVE support policy and guides Partners on submitting support desk tickets and defines the process and expectations of ticket management and resolution.

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External Partner Document

Support Guide

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Name	Description	Date
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1.0 Introduction

This document is intended to outline the NUWAVE support policy and provide guidance on submitting support desk tickets and define the process and expectations of ticket management and resolution. This document covers all available products, including the iPILOT software.

1.1. Audience

This document is for external use. It is intended for partners of NUWAVE.

1.2. Support Responsibilities

Support responsibilities to be outlined and detailed within the RACI matrix.

1.3. Service Hours

Service support is available 24 hours a day, 7 days a week for all Severity levels.

2.0 Submitting a Service Support Ticket

2.1. RACI and Support Structure

Support Level	Function	Support Description	Personnel Requirements	Responsible Party
Tier 0	Self help and user retrieved information	Users retrieve support information from web pages or resource sites, including FAQs, detailed product and technical information, blog posts, manuals, and search functions.	Tier 0 requires technical and marketing resources to create, maintain, and update product information. A development team handles web site, resource site and app creation.	RESELLER PLATFORM PROVIDER
Tier 1	Initial Support desk contact for queries and service support.	Support ticket is opened for customer issues, queries and fulfilling any support desk requests. Tier 1 staff perform basic triaging of support issues and resolve low level issues.	Tier 1 technical staff, trained to solve known problems and to fulfill service requests by following internal procedures.	RESELLER PLATFORM PROVIDER
Tier 2	In depth technial support	Experienced and knowledgeable staff assess issues and provide solutions for problems that cannot be handled by tier 1.	Support staff with substantial knowledge of the product or service and can triage and potentially resolve the initial reported issue.	NUWAVE (for Partners and Resellers) RESELLER (Operator or BYOC) PLATFORM PROVIDER (Operator or BYOC)
Tier 3	Expert product and service support	Expert support desk technicians attempt to duplicate problems and define root causes, and potential resolutions with network, portal and functionality issues.	Support staff with deep knowledge of the product or service can triage unsolved issues.	NUWAVE (for Partners and Resellers) RESELLER (Operator or BYOC) PLATFORM PROVIDER (Operator or BYOC)
Tier 4	Nuwave design and Product Experts	Access to the highest technical resources available for problem resolution or new feature creation within the platform or regarding specific products or network.	Design and product specialists who are the most highly skilled specialists, and may include the creators, chief architects, or engineers who created or manage the product or service.	NUWAVE
Tier 5	Product Vendor Experts	Vendor Escalation	Product provider/vendor. Escalation and ticketing resources.	NUWAVE (for Partners and Resellers) RESELLER PLATFORM PROVIDER

2.0 Submitting a Service Support Ticket (Continued)

2.1. RACI and Support Structure (Continued)

AREA	PLATFORM PROVIDER (Operator or BYOC)	RESELLER (Operator or BYOC)	PLATFORM PROVIDER (NUWAVE Voice)	RESELLER (NUWAVE Voice)	PARTNER
VOICE	PARTNER	PARTNER	nuwave	nuwave	nuwave
24*7 LEVEL-1 iPILOT/VOICE SUPPORT	PARTNER	PARTNER	PARTNER	PARTNER	nuwave
iPILOT IMPLEMENTATION	PARTNER	PARTNER	PARTNER	PARTNER	nuwave
L2-L4 VOICE SUPPORT	PARTNER	PARTNER	nuwave	nuwave	nuwave
L5 PRODUCT SUPPORT	PARTNER	PARTNER	PARTNER	PARTNER	nuwave

2.2. Resellers

Identifying Cause for Submission

Partner shall be responsible for direct delivery of L1 support to their End Users at all times. If Partner has provided connectivity to an external network (Synthesis BYOC), they will be responsible for L2 and L3 support to their End Users. When NUWAVE is the direct provider, NUWAVE will provide phone and email support (L2-L4 support) to Partner's technical support team. Partner will be primary point of contact for all support issues related to their customers and partners. Partner will troubleshoot incident to the best of their ability prior to submitting a ticket to NUWAVE's support team, working to ensure issues are not related to partners side, user error, or customer accounts or tenants. Below are suggested (but not limited to) reasons a partner may submit a support desk ticket to NUWAVE.

2.0 Submitting a Service Support Ticket (Continued)

2.2. Reseller Partners (Continued)

NOC Voice Engineering Queue:

- NUWAVE voice network issues
- Call quality issues (verified not Teams Related)
- SIP trunk-related issues
- Call completion issues ingress/egress
- IP connectivity issues for direct peering/BGP customers
- Fraud/SPAM
- Hosted Platform/or fax-related issues
- DID issues (24 hours post port or activation)

NOC UC Engineering Queue:

- Dynamic 911 Issues
- User Provisioning Issues
- Account Configuration/Validation/UC admin center-related issues
- Calling issues (that have been determined to be UC product-related related not network)
- Call queue or auto attendant issues
- Conference Phone/Room Phone issues
- Third-party features (ie. Dubber, CallCabinet, Clerk Chat etc)
- PowerShell-related questions or issues

iPILOT Service Support Queue:

- Add/remove/edit users
- Log-in or SSO (Single Sign On) errors
- Inventory moves
- Inventory/Feature display or function errors
- Customer iPILOT account support
- iPILOT help site set up or access
- UC License ordering errors
- Third-party service integration issues

2.0 Submitting a Service Support Ticket (Continued)

2.3. Carrier/Operator Partners

Identifying Cause for Submission

Partner shall be responsible for direct delivery and L1–L3 support to their End Users, and partners, and NUWAVE will provide L4 phone and email support to Partner's technical support team. Partners will be the primary point of contact for all support issues related to their customers and partners. Partner will troubleshoot incident to the best of their ability prior to submitting a ticket to NUWAVE's support team, working to ensure issues are not related to partners side, user error, or partner/customer accounts. Below are suggested (but not limited to) reasons a partner may submit a support desk ticket to NUWAVE.

NOC Voice Engineering Queue:
- NUWAVE voice network issues
- NUWAVE SIP trunk-related issues
- SIP trunk-related issues
- Call completion issues ingress/egress
- IP connectivity issues for direct peering/BGP customers
- IP connectivity issues to BGP peering providers

iPILOT Service Support Queue:
- Add/remove/edit users
- Log-in or SSO (Single Sign On) errors
- Inventory moves
- Inventory display or function errors
- Feature display or function errors
- Customer iPILOT account support
- iPILOT help site set up or access
- UC License ordering errors
- Third-party service integration issues

2.0 Submitting a Service Support Ticket (Continued)

Detailed Ticket Topics

Voice Network Call Flow and Routing

Partners technical Voice Engineering resource has attempted to troubleshoot and identify call routing or voice issues utilizing obtained call examples from customers. If the partner has determined with the use of their own call tracing systems or tools that the routing or voice network issue is presenting on the NUWAVE side, a ticket may be opened for L4 support. Partner must provide the complete issue in detail, including any given call examples or new ones if required by the Voice Engineering team, and troubleshooting steps. The partner's name and customer's name should be provided so we can review the specific customer/partner issue in depth.

MSFT Teams

Partners MSFT Teams technical resource has attempted to troubleshoot, identify and resolve all MSFT Teams related issues regarding set up, configuration and functionality including but not limited to, Auto Attendant and Call Queue set up and troubleshooting, Teams phone policies, MSFT licensing, Dynamic and Static emergency services and dial patterns for extensions. Technical resource will work with partners and customers in their tenant to troubleshoot and assist in configurations. Should all of this occur, and the partner feels the issue may present from the Nuwave side, a ticket may be opened for L4 support. Partner must provide complete issue in detail, including any given call examples or new ones if required by the UC Engineering team, and troubleshooting steps. The partner's and customer's names should be provided so we can review the specific customer/partner issue in depth.

2.0 Submitting a Service Support Ticket (Continued)

Detailed Ticket Topics (Continued)

Zoom (Voice)

Partners Zoom technical resource has attempted to troubleshoot, identify and resolve all Zoom related issues regarding set up, configuration and functionality including but not limited to, Auto Attendant and Call Queue set up and troubleshooting, Zoom phone policies, licensing, Dynamic and Static emergency services and dial patterns for extensions. Technical resource will work with partners and customers in their account to troubleshoot and assist in configurations. Should all of this occur, and the partner feels the issue may present from the NUWAVE side, a ticket may be opened for L4 support. Partner must provide complete issue in detail, including any given call examples or new ones if required by the UC Engineering team, and troubleshooting steps. The partner's and customer's names should be provided so we can review the specific customer/partner issue in depth.

Cisco Webex (Voice)

Partners Cisco Webex technical resource has attempted to troubleshoot, identify and resolve all Cisco Webex related issues regarding set up, configuration and functionality including but not limited to, Auto Attendant and Call Queue set up and troubleshooting, licensing, Dynamic and Static emergency services and dial patterns for extensions. Technical resource will work with partners and customers in their account to troubleshoot and assist in configurations. Should all of this occur, and the partner feels the issue may present from the NUWAVE side, a ticket may be opened for L4 support. The partner must provide complete issue in detail, including any given call examples or new ones if required by the UC Engineering team, and troubleshooting steps. The partner's and customer's names should be provided so we can review the specific customer/partner issue in depth.

2.0 Submitting a Service Support Ticket (Continued)

Detailed Ticket Topics (Continued)

IPILOT Portal

Partners technical resource has attempted to troubleshoot, identify, and resolve all ordering and functionality issues around use of iPILOT portal ensuring that ordering or technical issues are not caused by user error, lack of training or partner connectivity. Technical resources will work with customers and partners as needed to determine what the issue is. Should all of this occur, and the partner feels the issue is related to the portal itself, through functionality or visibility, a ticket may be opened for support. Partner must provide complete issue in detail, including steps taken to duplicate the issue and any screenshots that can be provided. The partner's name and customer's names should be provided so we can review the specific customer/partner issue in depth.

2.4. Exceptions

Exceptions and Professional Services

If the Partner for any reason on their own behalf is unable to provide the support required per the partner contract and seeks out NUWAVE to assist them in supporting their customer or partner, Professional Services will apply, and the following must take place for support staff to engage:

- Professional Services Fee applies - $225 an hour.
- Partner is responsible for providing all required information by the NUWAVE Team to assist in advance when ticket is opened. This includes, but is not limited to, call examples and details of reported trouble.
- If the Partners customer is to be involved with NUWAVE at any time via a call or email, the Partner shall notify NUWAVE prior to either, that the customer will be involved.
- Partner will lead in all calls or emails.
- Partner will ensure their customer knows who NUWAVE is before NUWAVE involvement. If the Partner wishes for NUWAVE to stay unknown or anonymous, they will inform NUWAVE on how to identify to the customer.

2.0 Submitting a Service Support Ticket (Continued)

2.5. How to Submit a Support Ticket

Partner will submit all support requests or inquiries to Support@ipilot.io with the required information about the incident or inquiry using the templates below.

SIP Trunk or IP Connectivity Issues:

- Partner IP
- Received errors

UC Dynamic 911

- 911 calling issue or provisioning issue described.
- For call issues, call examples including calling party and called party TNs and time and date of call and device type used to place call within 24 hours.
- For provisioning issues, description of error itself and describe steps and actions taken triggering error.

User Provisioning

- Customer name
- Affected user and UPN (user principal name)
- Telephone number if applicable
- Description of trouble

UC Calling

- Call examples including calling party and called party TNs and time and date of call within 24 hours.
- Copy of CDR from UC admin center within 24 hours.
- Call flow description (auto attendant, call queue, forward etc.).
- Result of call when placed.

2.0 Submitting a Service Support Ticket (Continued)

2.5. How to Submit a Support Ticket (Continued)

Call Queue, Auto Attendant, and Room Phones
- UPN assigned to the affected account or user
- What type of license is assigned to the affected user.
- Call flow description (auto attendant, call queue, forward etc.).
- Description of error.

IPILOT User Updates or Errors
- Customer name, username, TN and email of user and change to be made
- Customer name, username and id experiencing error
- Description of error

IPILOT Platform Connectivity
- Platform name
- Description of connectivity issue

Inventory or Feature Display
- Platform name
- Customer name
- TNs affected
- Feature or area of display affected
- Correction needed

IPILOT Third Party Integrations
- Platform name
- Reseller name (if applicable)
- Customer name (if applicable)
- Description of integration error or issue
- Screenshot of error or issue

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2.0 Submitting a Service Support Ticket (Continued)

2.5. How to Submit a Support Ticket (Continued)

Email Ticket Submission Example:

Inbound Teams Voice Calling Issues should be submitted to the support desk in the following format:

> **To: Support@ipilot.io**
>
> **Subject line:** Teams Voice Calling Issues
>
> **Body of the message:**
>
> **Reported issue:** Please provide the Call examples including calling party and called party TNs and time and date of call within 24 hours.
>
> **Customer Account Name:**
>
> **Result of call when placed:** Please paste the results of the call when placed here
>
> **What was the flow of the call placed?** Did it hit an Auto Attendant or Call Queue first and then transfer to a user? Place the flow here.

2.6. NTT Calling Plans

When supporting customers with NTT calling plans, the Partners UC technical team should first triage the issue to ensure it is not a UC-related issue. A support ticket can then be submitted to NUWAVE. NUWAVE will triage the core network first and escalate the ticket to NTT in the event that it appears to be a network or service-related issue on NTT's end.

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3.0 Contact Response Times and Priority

SEV-1 Critical Incident / High Impact

A Critical, or Severity 1, alarm condition is defined as:

A service disruption that has or could result in a significant financial, reputational, or regulatory impact to Customers' business, operations or customer, client, associate, financial legal/regulatory and/or public relations. Large Sev1 30% outage for One network issue for a major customer or multiple customers that are opening like tickets (Such as caused by one of our ingress/egress peers) NUWAVE will maintain one Sev1.

In a Critical alarm condition, a NUWAVE Technical Support Engineer will use reasonable efforts to acknowledge the reported defect within fifteen (15) minutes and keep all incident notes for RCA analysis.

SEV-1 Critical Incident / High Impact

Contact Type	Contact Time	SLO Target
Initial	Within 30 minutes of ticket receipt	95%
Resolution	Within 4 hours	95%

SEV-2 Major Incident / Significant Impact

A Major or Severity 2 alarm condition is defined as:

Service disruption that has or could result in moderate impact to Customers' business or its operations. Customer, client, associate, financial legal/regulatory and/or public relations aspect of

3.0 **Contact Response Times and Priority (Continued)**

SEV-2 Major Incident / Significant Impact

services may be impacted. < 30%

In a Major alarm condition, a NUWAVE Technical Support Engineer will use reasonable efforts to acknowledge the reported defect within twenty (20) minutes of the reported defect or service event. The department manager and engineer will initiate the RCA.

SEV-2 Major Incident/Significant Impact

Contact Type	Contact Time	SLO Target
Initial	Within 30 minutes of ticket receipt	95%
Resolution	Within 12 hours	95%

SEV-3 Minor Incident / Low Impact

A Minor, or Severity 3, alarm condition is defined as one or more of the following:

Service disruption may be inconvenient to a user but has no immediate or significant impact on the Customers' business or its operations. These include problems where actual or potential impact on business functions and practices is low from a customer, client, associate, financial legal/regulatory and/or reputational perspective.

In a Minor alarm condition, a NUWAVE Technical Support Engineer will use commercially reasonable efforts to acknowledge the reported Defect within one (1) hour of issuance. A Minor alarm condition will be reviewed via RCA to provide a solution with a final fix and a target resolution within sixteen (16) business hours. If a Licensed Software Fix is required to resolve the condition, the issue will be assessed for inclusion in the next general release.

3.0 Contact Response Times and Priority (Continued)

SEV-3 Minor Incident/Low Impact

services may be impacted. < 30%

In a Major alarm condition, a NUWAVE Technical Support Engineer will use reasonable efforts to acknowledge the reported defect within twenty (20) minutes of the reported defect or service event. The department manager and engineer will initiate the RCA.

SEV-3 Minor Incident/Low Impact

Contact Type	Contact Time	SLO Target
Initial	Within 4 hours of ticket receipt	95%
Resolution	Within 4 business days	95%

SEV-4 Non-Essential

A Non-Essential, or Severity 4, are defined as inquiries, routine changes, and non-service affecting anomalies that are reported as trouble tickets will be acknowledged by NUWAVE within four (4) hours of the ticket generation with a target resolution of 5 business days.
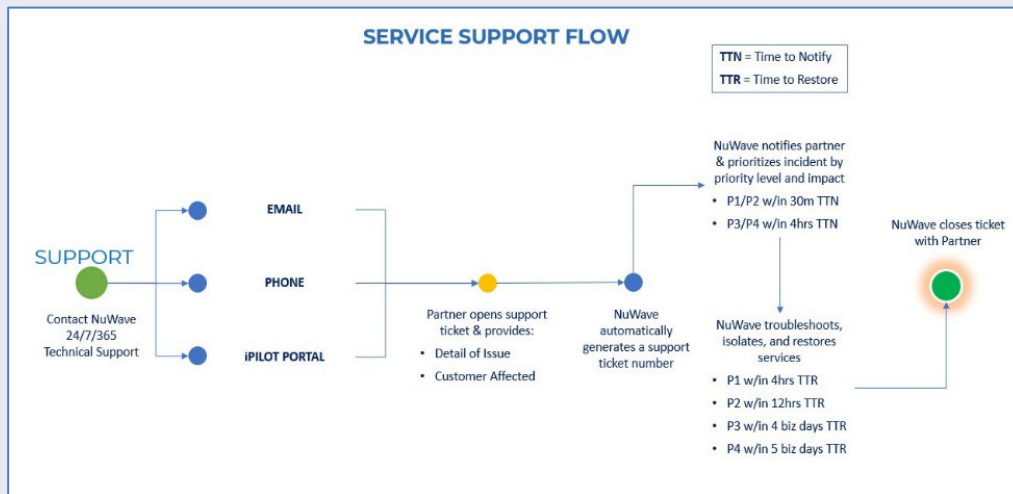
4.0 Support Ticket Management and Expectations

Tickets may be submitted via phone by calling our support line or by email. It is preferred to submit tickets via email to ensure documented details regarding the incident. Phone reports will also generate a support desk ticket and will be updated via email using the provided contact information upon initial report by the partner.

4.0 Support Ticket Management Expectations (Continued)

- Ticket is received by support desk, once ticket is created submitter will receive auto response via email
- Support desk identifies ticket type and directs the ticket to the appropriate team queue
- Assigned support team identifies the issue and begins investigation
- Issue is identified and necessary members are engaged to begin work on resolution and provide ETR
- Updates are provided to partner based on contact response times above or in SLA
- Upon resolution of trouble, partner is notified. If partner does not confirm resolution or respond within 3 business days to support follow ups, ticket will be closed
- If applicable, RCA (root cause analysis) is provided to partner

5.0 Billing Support

Billing inquiries may be submitted via phone by calling our support line or by email. Emails should be sent to billing@nuwave.com. It is preferred to submit requests via email to ensure documented details regarding the inquiry. All inquiries will be responded to within 2 hours.

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6.0 Escalation Matrix

Use our escalation matrix to locate important contacts in all departments, including our support line should you wish to call in a ticket.

[Escalation Matrix]

7.0 Root Cause Analysis

7.1. Root Cause Analysis (RCA) Guidelines

NUWAVE's Technical support team will provide the following information regarding the event or incident.

1. Provide brief description of the incident/Event
2. Document Incident details, time, impact, locations etc.
3. Document interim/permanent fix applied
4. Identify potential cause of the incident
5. Close the RCA and associated problem ticket

7.2. Root Cause Scope

In Line with the Incident Management Policy, NUWAVE will identify RCA for each Severity 1 incident, RCA for any other type of incidents/events will be based on exception approval. All incidents will generate an RCA utilizing the engineering notes of each incident.

7.0 Root Cause Analysis (Continued)

7.3. Root Cause Analysis Governance

Each RCA request will be created and reviewed by the departments team lead and approved by the department manager and CTO before publishing with the Customer/Partner. All RCA to be attached in respective Incident ticket and Problem ticket as applicable. RCA will be shared out with all support staff management, COO and Sales/Account Manager for customer account, then stored in RCA repository within NUWAVE.

7.4. Root Cause Analysis Timelines

- Preliminary root cause analysis (RCA) -> Twenty-Four (24) hours of service mitigation
- Full root cause analysis (RCA) ⬜ Within 4 (Four) Business days of resolution

8.0 Change Management Process

8.1. Change Management Steps

NUWAVE follows standard change management steps for any change to be implemented.

- Raise and record Changes - Each change request will use standard template as defined by Engineering. At the minimum it will have below information:

  Title: Summary of the change

  Description: details of the change including endpoints affected, data centers, country/region, applications, etc.

  Guidance or recommendations to Microsoft to mitigate potential impact.

  An execution/roll-back plan including expected Start/Stop times of the change in UTC format.

- Assess the impact, costs, benefit, and risk or proposed changes.
- Confirm business justification and obtain approval

8.0 Change Management Process (Continued)

8.1. Change Management Steps

- Perform changes in NUWAVE's IT environment pertaining to CMS, including changes to individual components and coordination of Changes across all components.

- Make all changes in accordance with Change Management Procedures as approved by CAB.

- Coordinate with the NUWAVE stakeholders over the change life cycle of all changes for all Communications Managed Components.

- Collect data on every change attempted, including:

  ❑ The reason for Change

  ❑ Detailed description of Change

  ❑ Whether the Change was successful from the perspective of the Authorized Users of the system

- Summarize the Changes made, and report results to the NUWAVE stakeholders.

- Provide an audit trail for all Changes to the production environment in order to determine the Change made and the authorization to make the Change.

- Conduct Post Implementation Reviews (PIR) on Changes as requested by NUWAVE Stakeholders.

8.2. Change Approvals

- All changes must be approved by NUWAVE in advance before any Change to the Infrastructure, except for simple pre-approved Changes.

- The Approval history tab allows for reviewing the history of approvals, rejections, or further reviews for a change request. Once fully approved the change can move forward to scheduling. At times this does not occur until the CAB meeting has been held for the present list of requested changes.

8.0 Change Management Process (Continued)

8.3. Change Implementation

NUWAVE is responsible for the management, coordination, and implementation of all agreed upon changes, including:

- Consultative engineering support for changes, as required

- Pre-Change configuration backup

- Processing and administering all RFCs

- Post-Change testing, verification, and documentation (e.g., Installation Quality/Operations Quality (IQ/OQ, network diagrams, site documentation, circuit information, maintenance activation, etc.)

- Notify stakeholders of completion of change

- If the implementation of the change does not go as planned (e.g., causes an adverse results), execute the back-out plan (unless otherwise agreed) and notify Stakeholders

- Post-Change CMDB Updates

8.4. Change Governance

All of the change needs will be reviewed to determine the outcome against documented expectations.

- If the change has had the desired effect and met its objectives

- If the requestor is satisfied with the results

- If there have been no unexpected or undesirable side-effects

- If the implementation plan worked correctly

- If the Change was implemented on time and to cost

- If the back-out plan functioned correctly if it was needed

- If the Change was implemented in alignment with the change process

8.0 Change Management Process (Continued)

8.5. Change Schedule Process

- NUWAVE shall maintain a schedule of planned changes on an on-going basis. The latest version of this schedule should be available to relevant stakeholders within the engineering and operations organization.

- NUWAVE will publish any change freeze windows – a period where no changes are allowed except in exceptional circumstances.

8.6. Change Advisory Board (CAB)

NUWAVE has a change advisory board who reviews all proposed changes. The change manager will chair the CAB, and potential members may include:

- Applications developers/maintainers/engineers

- Specialists/technical consultants

- Service and operations staff

- Facilities/office staff (applicable based on impact)

- NUWAVE Stakeholders