

TEAMS Partner Service Support Process

V2.3

3.13.2023

External Partner Document

Table of Contents

1.0	Introduction	3
2.0	Submitting a Service Support Tickets	4
3.0	Contact Response Times and Priority.....	12
4.0	Support Ticket Management and Expectations.....	14
5.0	Billing Support	15
6.0	Escalation Contact Matrix.....	15
7.0	Root Cause Analysis	16
8.0	Change Management Process.....	17

DOCUMENT HISTORY

Name	Description	Date
Rebecca Young	Initial Documentation	11/19/2021
Rebecca Young	Final Draft	1/19/2021
Rebecca Young	Document Updates	2/5/2022
Rebecca Young	Document Updates	8/4/2022
Rebecca Young	Document Updates	3/13/2023

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.

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 Tickets

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 technical 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

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. Sales Partners and Resellers

Identifying Cause for Submission

Partner shall be responsible for direct delivery and L1 support to their End Users, and 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.

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
- Hosted Platform related issues
- Faxing related issues

NOC UC Engineering Queue:

- Dynamic 911 Issues
- Teams User Provisioning Issues
- Teams DR or OC Tenant Validation Issues
- Teams calling issues (that have been determined to be Teams related not network)
- Teams Call queue or auto attendant issues
- Teams Conference Phone/Room Phone issues
- Teams PowerShell related questions or issues
- iPilot help site set up or access

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

2.3. 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. 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 partner/customer accounts or tenants. 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
- 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
- Platform connectivity issues
- Inventory moves
- Inventory display or function errors
- Feature display or function errors
- Partner/Customer iPilot account support
- Carrier management support

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 customer. If 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 steps taken to troubleshoot. Partner name and customer 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 as needed to troubleshoot and assist in configurations. Should all of this take place and 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 steps taken to troubleshoot. Partner name and customer name should be provided so we can review the specific customer/partner issue in depth.

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 resource will work with customers and partners as needed to determine what the issue is. Should all of this take place and 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. Partner name and customer name should be provided so we can review the specific customer/partner issue in depth.

2.4. Exceptions

Exceptions and Professional Services

If 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 - \$250 an hour.
- Partner is responsible for providing all required information by 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 Partners customer is to be involved with Nuwave at any time via a call or email, Partner shall notify Nuwave in advance of either, that customer will be a part of the communication.
- Partner will lead in all calls or emails.
- Partner will ensure that their customer is aware of who Nuwave is in advance of Nuwave involvement. If Partner wishes for Nuwave to stay unknown or anonymous, they will inform Nuwave on how to identify to the customer

2.5. How to Submit a Support Ticket

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

SIP Trunk or IP Connectivity Issues:

- Partner IP
- Received errors

Teams 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.

Teams Tenant Validation

- Description of error
- Stage of tenant validation error occurred

Teams User Provisioning

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

Teams Calling

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

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

- Description of connectivity

Inventory or Feature Display

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

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. Internal Monitoring, Event/Alert Identification and Notification Tickets

NUWAVE has implemented full network and connection monitoring and proactively notifies customers when any Sev-1 event occurs. A ticket will be opened internally, and any affected customer/partner will be documented and notified.

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 Type	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

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 Type	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.

SEV-3 Minor Incident / Low Impact

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

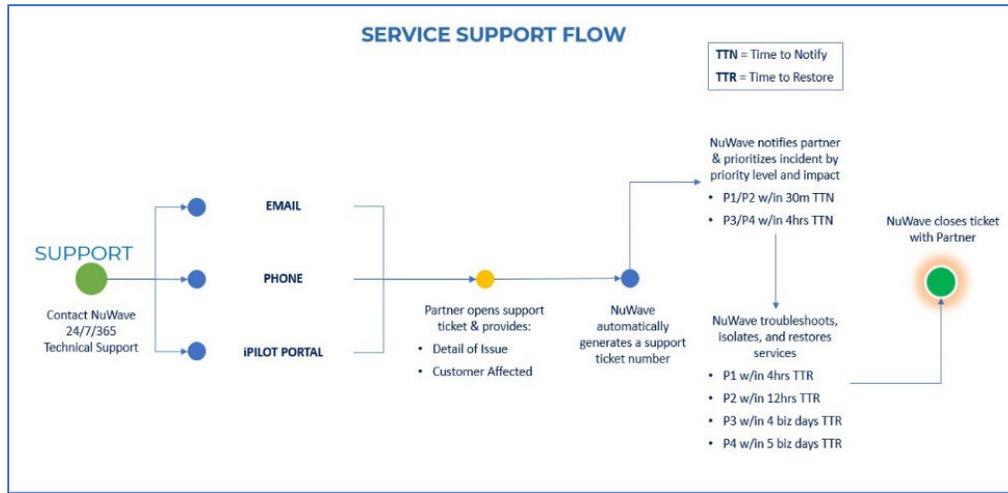
SEV-4 Non-Essential

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.

- 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.

6.0 Escalation Contact Matrix

ESCALATION MATRIX- NOC NETWORK ENGINEERING

LEVEL	Priority 1	Priority 2&3	CONTACT	ROLE	CONTACT DETAILS
LEVEL 1	Immediate	Immediate	NOC Support	Support Desk	EMAIL : Support@nuwave.com
					DIRECT : US +1 (888)-368-9283 DIRECT: EU +44 20 7153 6040
LEVEL 2	After 1 HRs	After 2 HRs	Chris Harris	Network Operations Manager	EMAIL : charris@nuwave.com
					DIRECT: +1 (541)-951-6993
LEVEL 3	After 4 HRs	After 6 HRs	Kyle Thomas	Chief Technology Officer	EMAIL : kyle@nuwave.com
					DIRECT: +1 (732)-719-8046
LEVEL 4	After 8 HRs	After 10 HRs	Mark Bunnell	Chief Operations Officer	EMAIL : Markb@nuwave.com
					DIRECT: +1 (702)-820-5997

ESCALATION MATRIX – NOC UC ENGINEERING

LEVEL	Priority 1	Priority 2&3	CONTACT	ROLE	CONTACT DETAILS
LEVEL 1	Immediate	Immediate	NOC Support	Support Desk	EMAIL : Support@nuwave.com
					DIRECT : US +1 (888)-368-9283 DIRECT: EU +44 20 7153 6040
LEVEL 2	After 1 HRs	After 2 HRs	Shane Dunnivant	Senior UC Engineer	EMAIL : sdunnivant@nuwave.com
					DIRECT: +1 (505)-510-7936
LEVEL 3	After 4 HRs	After 6 HRs	Monica Salazar	Engineering Director of UC Solutions	EMAIL : msalazar@nuwave.com
					DIRECT: +1 (505)-398-7979
LEVEL 4	After 8 HRs	After 10 HRs	Mark Bunnell	Chief Operations Officer	EMAIL : Markb@nuwave.com
					DIRECT: +1 (702)-820-5997

ESCALATION MATRIX – IPILOT SERVICE SUPPORT

LEVEL	Priority 1	Priority 2&3	CONTACT	ROLE	CONTACT DETAILS
LEVEL 1	Immediate	Immediate	NOC Support	Support Desk	EMAIL : Support@nuwave.com
					DIRECT : US +1 (888)-368-9283 DIRECT: EU +44 20 7153 6040
LEVEL 2	After 1 HRs	After 2 HRs	Sierra Hammond	Provisioning Manager	EMAIL : Shammond@nuwave.com
					DIRECT: +1 (541)-393-9243
LEVEL 3	After 2 HRs	After 4 HRs	Mark Bunnell	Chief Operations Officer	EMAIL : Markb@nuwave.com
					DIRECT: +1 (702)-820-5997

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.

7.3. 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.

- (a) 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.

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

- (d) Perform changes in NUWAVE's IT environment pertaining to CMS, including changes to individual components and coordination of Changes across all components.
- (e) Make all changes in accordance with Change Management Procedures as approved by CAB.
- (f) Review and close all changes.
- (g) Coordinate with the NUWAVE stakeholders over the change life cycle of all changes for all Communications Managed Components.
- (h) 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
- (i) Summarize the Changes made, and report results to the NUWAVE stakeholders.
- (j) 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.
- (k) 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.

8.3. 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 the change needs to be reviewed to determine its 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

8.5. 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 change freeze window – a period where no changes are allowed except exceptional circumstance

- NUWAVE will adhere to Partner's blackout or change freeze periods

8.6. Change Advisory Board (CAB)

NUWAVE has change advisory who reviews all the proposed changes, The Change Manager will chair the CAB, and potential members include:

- Applications developers/maintainers/engineering
- Specialists/technical consultants
- Services and operations staff, e.g., service desk, management, ITSCM, security
- Facilities/office services staff (as Applicable based on impact)
- NUWAVE Stakeholders