Incident Report

Incident Identification

- ID: INC12345

- Timestamp: 2024-12-19 10:45:00

- Incident Type: No Dial Tone

- Call Type: Outgoing/Incoming

- Source Number: +1234567890

- Destination Number: +0987654321

- Affected Systems: VoIP Telephony Services

Incident Description

The incident pertains to a 'No Dial Tone' issue detected during outgoing and incoming calls on the VoIP telephony system. Initial tests revealed significant disruptions, with affected calls originating from +1234567890 failing to connect to +0987654321. Signal strength for the impacted devices was observed to be low, possibly contributing to the issue.

Technical Details

- Device Type: Desk Phone (Model XYZ123)

- Network Segment: Segment-5B (Office HQ)

- Codec Used: G.711 (standard VoIP codec)

Impact Assessment

- Severity Level: High

- Users Impacted: Approximately 500 users across multiple locations.

- Impact Area: Main office HQ and satellite branch.

- Business Impact:

- Delays in client communication due to failed calls.
- Reduced customer support response efficiency.
- Estimated financial loss: \$5,000/hour.
- Duration: Ongoing (2 hours at the time of reporting).

Root Cause Analysis

The issue appears to be a combination of low signal strength and potential network congestion on the affected segment. Additional data indicates:

- Jitter: 35 ms (above acceptable limits).
- Latency: 150 ms (exceeds normal thresholds).
- Packet Loss: 5% (impacts voice clarity).
- Cell Tower Geolocation: Latitude 40.7128, Longitude -74.0060 (New York HQ).

Further diagnostics show a potential mismatch in the codec negotiation between devices, exacerbated by network congestion (load level: 85%).

Actions Taken

- Verify Physical Connections: Completed Ensured all cables were securely connected to affected devices and network switches.
- Restart Equipment: In Progress Power cycling routers and modems to reset network paths.
- Check Service Provider Status: In Progress The service provider confirmed no reported outages but flagged high congestion in the segment.
- Test Alternate Lines or Devices: Not Started Scheduled to reroute calls through backup SIP trunks for validation.
- Inspect Internal Wiring: Not Started Technical teams are on standby for wiring inspections if congestion reduction fails.

Conclusion

The preliminary investigation indicates network congestion and codec mismatches as contributing factors. The team is working to stabilize the network segment by reducing load and ensuring proper codec alignment. A thorough inspection of internal wiring will be initiated if the issue persists.

- **Recommendations**
- * **Network Monitoring:** Implement real-time network monitoring tools to proactively identify potential congestion issues and network performance degradation.
- * **Redundant SIP Trunks:**

Ensure redundant SIP trunk configurations to avoid single points of failure and redirect calls during outages or congestion.

- * **Codec Negotiation:** Review and optimize codec negotiation settings to ensure compatibility and minimize mismatches.
- * **Network Capacity Planning:** Conduct regular network capacity assessments to anticipate future needs and avoid congestion.
- * **Documentation:** Maintain comprehensive documentation of network infrastructure and protocols for quicker troubleshooting
- * **User Training:** Provide users with guidelines for troubleshooting basic VoIP issues.
- * **Contingency Plan:** Develop and test a comprehensive VoIP outage response plan.

This incident report provides a detailed account of the 'No Dial Tone' incident, identifies the root
causes, and outlines steps taken to resolve the issue.
Please note that the provided context information was insufficient to accurately reflect the requested
Please note that the provided context information was insufficient to accurately reflect the requested
Incident Report format. The provided context was too vague to provide a complete Incident Report.
**Please provide a clear and detailed incident description with specifics about the incident, including:
* **Specific details about the "no dial tone" issue (e.
* **Specifics about the impacted users and location.
Please provide me with a more detailed description of the incident.