

# ASIC Offloading & VoIP Quality Issues

## Problem Description

Real-time VoIP applications (Discord, Teams, Zoom) exhibit high latency (>200ms) and packet loss, forcing a fallback to low-quality TCP relays. Audio input appears "damped," robotic, or near-silent to other participants, despite sounding perfect in local monitoring or DAW software.

## Fix

1. **Disable Hardware Offloading:** Prevents the NPU from dropping fragmented UDP return traffic.
2. **Enable Fixed Port:** Forces the firewall to use the same internal source port for the external connection, allowing the upstream router to maintain the session.

```
config firewall policy
edit <POLICY_ID>
    # Force traffic to main CPU (Software Processing)
    set auto-asic-offload disable
    set np-acceleration disable

    # Prevent Port Translation
    set nat enable
    set fixedport enable

    # Disable Deep Inspection for Real-Time Traffic
    set utm-status disable
    set ssl-ssh-profile "no-inspection"
next
end
```

*After applying, clear active sessions to force a fresh handshake*

```
diagnose sys session filter dport 50000 65535
```

```
diagnose sys session clear
```

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