Dandy vBNG v6.1.26 Checklist

New Features:

- **Routing :**
  - BGP, OSPF, IS-IS using Free Range Routing (FRR).
- **DNS Server :**
  - Build in power full, ultrafast Caching DNS.
- **Speed Test Server :**
  - Ookla Speed test server.
- **Kernel Compatibility :**
  - Verify that the Dandy vBNG is compatible with the latest kernel version (6.x).
  - Confirm optimal performance on the latest kernel.
- **Performance Enhancements :**
  - Ensure high-speed, reliable performance using eBPF-XDP for optimized packet processing.
- **Debugging Tools :**
  - Confirm the addition of new debugging tools, and test their functionality for accuracy and stability.

Filtering (Low Latency) DPI :

- eBPF-XDP filtering is configurable via CLI to manage packet prioritization with low latency.
  - **WAN Interface:** Prioritize packets like DNS, VPN, HTTPS, etc.
  - **LAN Interface (PPPoE):** Block unwanted traffic, such as DHCP and MAC flooding.
  - **LAN Interface (IPoE):** Block unwanted packets, including PPPoE, DHCP, and MAC flooding.

NetFlow v9 Logging:

- Implement eBPF-XDP to generate NetFlow v9 logs without impacting system resources.
- Ensure high-performance, low-latency logging with minimal overhead.

Carrier-Grade NAT (CG-NAT) with XDP:

- Verify ultra-fast, low-latency, high-performance CG-NAT for effective handling of network address translation at scale.

Miscellaneous:

- **Documentation:**
  - Ensure comprehensive documentation of new features, including user manuals, online help, and technical guides.
- **Backward Compatibility:**
  - Confirm that the new version is backward compatible with previous configurations and setups.
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Hardware Requirements:

- **Processor:**
  - Dual Intel Xeon E5-2600 series v4 or higher.
- **Network Interface Card (NIC):**
  - Intel X520 (10G) or XL710 (40G) dual-port NIC.
  - Separate physical Interface for WAN, PPPoE and IPoE.
- **Storage:**
  - Metal-body SSD or NVMe SSD.
  - **Note:** RAID configurations should not be used.
- **Memory:**
  - 32 GB DDR4 RAM or higher.
- **Server Preference:**
  - Dell server recommended for optimal compatibility and performance.