Updated Network Design Specification for Image Crafters Photography Company's Digital Transformation

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# Introduction:

This document presents the revised Network Design Specification for Image Crafters Photography Company, incorporating changes to achieve a 15% reduction in the original budget. The primary objective remains to provide a robust, scalable, and efficient network infrastructure that aligns with the company's business goals.

# Architecture Overview:

* **Cloud-Based Infrastructure:** Transition to a fully cloud-based infrastructure, eliminating the need for on-site servers.
* **Hybrid Network Model:** Combination of wired and wireless networks to ensure flexibility and scalability.

# Hardware Components:

* **Workstations:** Retain existing workstations and upgrade only where necessary.
* **Networking Equipment:**
  + Use cost-effective routers and switches without compromising on quality and performance.
  + Implement Wi-Fi 6 for wireless connectivity, ensuring faster speeds and better range.

# **Software Components:**

* **Operating System:** Transition to open-source Linux distributions where feasible.
* **Productivity Software:** Use open-source alternatives like LibreOffice for document processing, spreadsheets, and presentations.
* **Cloud Services:** Utilize cloud platforms like AWS or Google Cloud for storage, backup, and application hosting.

# Security Measures:

* **Cloud Security:** Ensure end-to-end encryption for data stored in the cloud.
* **Firewalls:** Implement robust firewalls to protect against external threats.
* **Access Control:** Implement role-based access controls for critical data and applications.

# **Cost Savings Analysis:**

* **Hardware Savings:** By retaining most of the existing hardware and optimizing the purchase of new equipment, we project savings of 8%.
* **Software Savings:** Transitioning to open-source software and cloud-based solutions is expected to save 5%.
* **Operational Savings:** Reduced maintenance and upgrade costs due to the cloud-based model will contribute to another 2% savings.

*Total Projected Savings: 15%*

# Potential Challenges and Mitigation:

* **Cloud Downtimes:** Regular backups and choosing reputable cloud service providers will mitigate potential downtimes.
* **Open-Source Software Learning Curve:** Comprehensive training sessions will be organized for staff to familiarize them with new software.

# Conclusion:

The updated Network Design Specification aims to provide a cost-effective solution without compromising quality, performance, or security. With the proposed changes, we are confident in delivering a network infrastructure that meets the company's needs while adhering to the revised budget constraints.