**Assessment findings and outcomes**

* No edge router identified
* Purchase 2 X Cisco ISR 4331 routers for main office for ingress and egress of corporate network.
* Currently have 5 X Cisco 9400 base model with copper cards that has minimum 1GB/s ports
* Internet speed will need to be increased to 1 GB/s connection to ensure end users do not have network throughput issues.

**Calculating VPN Bandwidth requirements**

5 megabits per second / per user

5mb/s (per user) x 200 (remote users) = 1000 mb/s or 1GB/s

* End users have a minimum bandwidth of 25mb/s with a recommended 50mb/s for home internet.
* Create and configure Cisco VPN service (Cisco IPsec Easy VPN) on edge routers
* Upgrade all existing network cabling to be Cat6 for least 1GB/s to devices.

**Analyze current VPN usage and performance metrics.**

No current VPN solution is in user and remote users are using SharePoint/OneDrive.

Unable to provide performance metrics.

**Identify the maximum number of concurrent users supported by the existing infrastructure.**

All existing staff can access SharePoint/OneDrive but there is no internal access.

**Report detailing findings and recommendations for scaling remote access**

**Scalability Enhancement Plan**

**Immediate Actions:**

*Assess current network infrastructure*

* Review current internet bandwidth, internal network bandwidth
* Increase internet bandwidth to 1GB/s
* Review current hardware (looking at hardware and usability)

Timeline: 3 days

Budget: $0 due to internal staff to perform, $1,500 for contactor (15 hours)

*Purchase additional hardware*

* Purchase new hardware as agreed, this includes firewall with VPN service and network switches.

Timeline: 1 days

Budget: Price varies depending on budget levels but minimal is new firewall with VPN service $7000

*Incorporate VPN solution*

* Configure, install and implement firewall into network
* Configure and setup VPN service on firewall
* Set up and configure users end devices so they can connect to VPN

Timeline: 2 weeks. Mix of contract staff (15 hours) and internal IT (2 weeks)

Budget: $0 for internal, $1,500 for contract staff

|  |  |  |
| --- | --- | --- |
| Action | Timeline | Budget |
| Assess current network infrastructure | 3 Days | $1,500 |
| Purchase additional hardware | 1 Day | $7,000 |
| Incorporate VPN solution | 2 Weeks | $1,500 |
| TOTAL |  | $10,000 |

**User Communication Strategy**

Communication should be sent/posted at the start with an initial announcement and followed up by weekly updates and when any changes might affect staff.

**Email**

Initial Announcement

Subject: New Remote Access to corporate network - VPN

Message:

To all employees,

We are pleased to announce that we are enhancing and improving our network for remote workers and onsite staff. These changes will include improving the network performance, security, reliability, new onsite VPN capacity, and our enhanced security protocols.

We will keep you informed with further details in the coming weeks with weekly updates and when any changes might affect staff.

**Intranet Post**

Initial Announcement

Title: New Remote Access to corporate network - VPN

Message:

With the increase in remote users, we are upgrading our network infrastructure. You will notice over the next 4 weeks improvements in speed, reliability and performance. We will be installing and setting up in the next few weeks VPN access for users to be able to work remotely in a more secure and reliable network and experience for all users.

Our IT team will provide more details and guides on how to access these resources once available.

We will keep you informed with further details in the coming weeks with weekly updates and when any changes might affect staff.