## Virtual Private Network Services

## Technology that enabled the government to work-from-home

virtual private network (VPN) extends a private network across a public network and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network. Applications running across a VPN may therefore benefit from the functionality, security, and management of the private network. In other words, it allows users to work from home like they were in office. The new WebVPN offering is easy to use even for non-tech savvy users and augments the security of the system by means of two factors of authentication.

NIC has been providing VPN services to users for over 15 years but never has been it used more than during the current pandemic. The idea was to provide secure access to critical internal applications like eOffice to government officers and staff working from home. The challenge was growth in the number of users who have to use VPN. Fortunately, we were prepared to scale up the resources and cater to the increased demands.

There were two major tasks that needed to be managed to achieve the aforementioned goals viz. scaling up the infrastructure and creating user accounts which came in deluges. The major challenges were to upscale without taking a downtime especially during business



hours (which were pretty long due to the emergency) and carry out all these activities with the existing resources as we couldn't hire immediately. The pressure of expectation of delivery was immense.

The entire team came together like family and worked days and nights for at least a month to get it under control. People were working shifts together without qualms or complaint. We added servers at late night and tested it till the early morning. The account requests came in thousands each day. The team worked tirelessly right from the early morning to late into the night till accounts for that day were made and sent. Now we realize it was no rocket science or master strategy but just the unwavering commitment of the team to do their bit in these times of difficulty. The unflinching faith, support and encouragement from the seniors made it easy.

A special mention and grateful appreciation have to be given to our extended team from Accops Systems, the supplier of WebVPN software. The commitment and support from their management and engineering staff has been extraordinary throughout and even more during the pandemic. They didn't work like suppliers but as a team. They were stretched as all their customers needed extra effort but never did it hinder their assistance to us irrespective of the day or time of day. Their contribution to the endeavour is unmatched.

1 lakh+ VPN accounts created during lockdown period

1000+ Accounts created per day

300+ Unique applications published 1000+ Ministries/ Depts/Organizations

6 hours Av. turnaround time for account creation during peak load

30,000+ Average number of users connected per day

## 4 hours

user per day

99.9% Uptime of service during the lockdown

10,000+ Number of VPN trouble tickets

resolved during lockdown



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