

C A S E S T U D Y

The Challenge

Various options of connectivity were proposed to bring together the wide spread network of our client; these included

1. V SAT
2. Dedicated leased lines
3. MPLS based VPN connectivity
4. IP VPN

V SAT was considered as an option for point to point connection but in multiple location connectivity it turns into a costly affair whereas leasing a dedicated line would push-up the cost of hardware required and the cost of set-up at the head office. IPVPN was not recommended since the application requires dedicated bandwidth. Hence we finalized on a mix of MPLS based VPN connectivity, as it was the best alternative considering the cost factor and also with regards to bandwidth.

Fourth Dimension

The project phases.

Our client is planning to connect 35 locations across India in multiple phases.

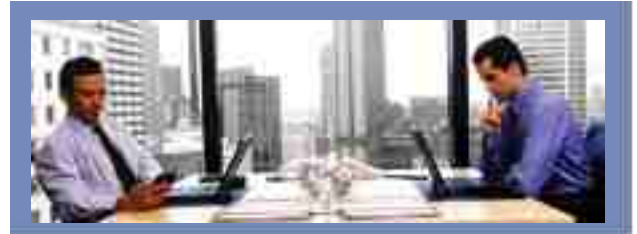
Phase I

Our client being spread across various locations in India, with their head office located at Chennai and regional offices at Bangalore and Hyderabad were planning a centralized communication where their regional offices would be connected to the head office at Chennai. As part of their expansion program leased line connectivity between Chennai and Poonamalle was facilitated. The branch offices in Karnataka (Rajaji nagar, Jayamahar) were also to be connected to the regional office at Bangalore. The branch office at Andhrapradesh (Jubli hills and Sanath nagar) was to be connected to the regional office at Hyderabad. Their office at Peenya Industrial Estate, being a very sensitive centre where crucial data is processed required dedicated MPLS connectivity for future branch office connectivity. In Chennai 3700 Series Cisco Routers were deployed. In branch offices 2600 series Routers were used and in all other locations 1700 series Routers were used.

Phase II

In phase II fifteen locations were connected to the MPLS cloud. These locations included two places at Hubli and two each at Mysore and Belgaum. The other locations were Delhi, Pune, Mumbai, Mangalore, Goa, Kolhapur, Ahmedabad and Cuttack. 1700 Series Routers were used at all these locations to connect to the MPLS cloud.

MPLS Connectivity



Client Profile

Our client is one of the leading automobile retailers and distributors of cars and other commercial vehicles. Started in the year 1945, they have today acquired dealerships for distribution of vehicles manufactured by Honda, Fiat, Ford, Mercedes Benz, General motors and Ashok Leyland. They are also distributors for premier Ancillary manufacturers whose products are fitted as original equipment by certain vehicle manufacturers. These distribution centres are located in Delhi, Goa, Cuttack and several cities and towns in Tamilnadu, Karnataka, Andhra Pradesh, Gujarat and Maharashtra.

Prevailing IT Infrastructure

They were earlier using tape media in all their locations and as a result all reports were given in a CD and floppy disk. They were also developing an internal ERP package- Sunsoft and this requires connectivity across all locations to enhance online transactions. Connectivity also ensured that VOIP solutions were provided across major branch locations.

Phase III

In the final phase of this project 10 locations were connected. These include Cuddaph, Vellore, Vishakapatnam, Shimoga, Rajamundari, and Bellary with the addition of Yeshwantpur, Gulbargh and two locations at Vijayawada. Cisco 1700 series Router were used in all these locations to connect to the MPLS cloud.

Fourth Dimension Technologies' Role

The Scope of the work included

- Ø Follow up with BSNL for getting the lines up and running within the stipulated time and Co-coordinating with BSNL to provide MLLN wherever possible and to persuade them in other regions also.
- Ø Deputation of engineers on a day to day basis to co-ordinate with BSNL for immediate restoration of the link.
- Ø A dedicated engineer deputed at the head office to monitor the performance of the WAN connectivity.

Annual Maintenance of Line

- Ø In an intranet network where a centralized server is located it is very essential to have 100% uptime without any severance in the link, this was accomplished by Co-ordination with BSNL officials on a day to day basis to avoid any down time.
- Ø Immediate revival of the link in case of a rare break down.
- Ø Dedicated engineers to restore the link in case of failure.

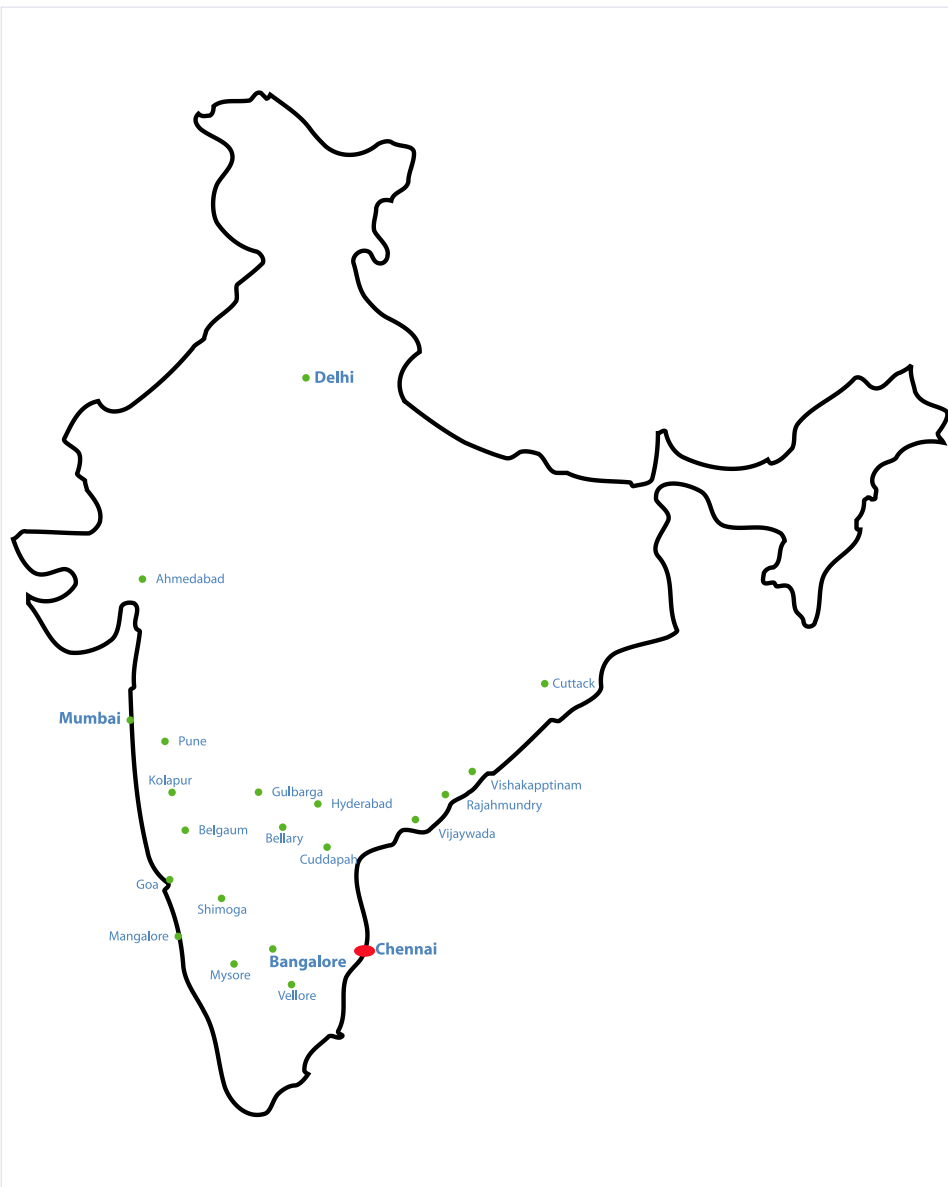
Complete Network Integration was achieved by

- Ø Configuration of all the Routers in 35 varied locations.
- Ø Installing all Routers in respective branches, termination of Routers with the modem and Local Area Network.
- Ø Ensuring data transfer between offices takes place without any data loss.
- Ø Providing full fledged training to IT staff at the head office.
- Ø First level Trouble-shooting training to Branch level staff.
- Ø Maintenance of the Wide Area Network for a year.

Post implementation benefits:

- Ø Our client's online transactions across locations have been greatly enhanced, with the help of the connectivity executed through MPLS.
- Ø They are in a position to refer to their Erp Tools with ease and quickly understand their inventory across locations and maintain customer satisfaction at the highest level because of the connectivity proposed by Fourth Dimension Technologies.
- Ø Service delivery which is a significant revenue churning for our client has increased tremendously because of this connectivity.
- Ø Centralized billing has been effectively achieved through this network.

- Ø Voip across their network has drastically reduced cost on STD bills.
- Ø They were able to perform video conferencing without any time delay. Live regional reviews happen across branches through videoconferencing and a permanent set up for videoconferencing across MPLS network is planned in the immediate future.
- Ø A drastic reduction in inventory costs pertaining to DAT tapes/CD-ROM/floppy disks which was earlier being sent to the respective branches on a day to day basis.
- Ø Our client's future growth and expansion across locations have been taken into consideration before proposing this solution. Hence, they are now in a position to open up their dealer outlets across remote locations and in turn be connected internally to their Head office and Regional offices.



Fourth Dimension Technologies Pvt. Ltd.

*Bali Towers, 5th Floor, No.1, Abdul Razack Street, Anna Salai,
Saidapet, Chennai 600 015. Ph: 91 44 2435 4000 Fax: 91 44 2434 3221*

*No.10, 1st Cross, Green Leaf Layout, 80 Feet Road, 4th Block,
Koramangala, Bangalore 560 034. Ph: 91 80 4121 7886 / 2563 1008*

*No.41/A, MIGH, APHB, S.R. Nagar, Hyderabad 500 038
Ph: 91 40 2370 1146 Fax: 91 40 2381 8178*

Email: 4d@fourdtech.co.in