WIDE AREA NETWORKS STRUCTURAL ANALYSIS
APPLICABILITY IN CASE OF MERGERS

When two organizations merge their operations, telecommunications operational cost is, without a doubt, one source from where savings are expected. Traditionally in these situations the strongest IT/Telecom side of the merger takes over the process and usually regroup the new sites around its own. This strategy usually generates quick migrations and some savings.

The traditional approach however doesn't take full advantage of the savings achievable by really analyzing the new structure including both organizations points of presence. This moment (merge) is the perfect opportunity to re-evaluate the telecommunications network. Aggregation nodes, which were not feasible with only one organization's traffic, may become feasible now. Actual nodes may overlap each other and new patterns of traffic may appear in both organizations given interchange of applications. All these changes claim for a more detailed re-evaluation than the already overloaded IT teams usually are able to perform.

WANOPT provides the service to address this kind of situation. Through its exclusive analytical tool (Ariete®) it empowers clients allowing them to achieve the utmost in wide are networks optimizations.

Solutions for merging wide are networks (Ariete®)

Ariete® is an advanced tool for analyzing wide area networks; designed to help organizations analyze their telecommunications needs and identify their cost-optimized network. This is achieved through establishing the optimal correlation between the organizations geographical dispersion, its traffic volumes/flows and the tariff system. The tool itself (Ariete®) is the core of a methodology for identifying the ideal WAN structure. The process follows the following three stages:

- Data gathering/files preparation
- Ariete® deployment
- Results refining

Data gathering/Files preparation – phase 1

The first phase consists of identifying and formatting the data necessary to perform the analysis. The required information is grouped into seven categories:

- Applications
- Sources of traffic
- Destinations of traffic
- Interconnections
- Interconnection costs
- Hardware modularity and costs
- Potential clustering nodes.

Ariete deployment –phase 2

The second phase consists of deploying the tool. Based on the data identified in the previous phase, the tool generates all possible clustering scenarios (topologies), from a totally distributed wide area network to a totally centralized one, and calculates all possible combinations of access, backbone and hardware for each scenario and set aside the more cost effective ones.

Refining the results – phase 3

The third and last phase of the analysis refines the results, allows verification and client specific considerations. In this phase changes are implemented and the models adjusted, setting several scenarios taking in consideration several levels of services (adjusting parameters such as utilization rate, tolerable latency, loss rate etc).

With the resulting optimum structure, outputs produce project details of: topology, equipment, access circuits, backbone circuits, paths, maintenance and management.

Having the target infrastructure makes it possible to compare the results with the actual network. Consequently, it makes it possible to identify what needs to be implemented and/or changed and set the whole project plan, including phases and schedules. Knowing the effort necessary to adjust/implement the network, allows the company decide how, when or if the project will be implemented.

At this point, it becomes clear which cost factors in the actual structure could be reduced and possible to produce a very straightforward, high-level management report comparing the actual expenditures with the proposed ones. The necessary investments and potential savings can be clearly identified and the return over investment of the project calculated.

In addition, it becomes possible to properly analyze alternatives such as outsourcing or external management. It happens because knowing how much would be the cost to build an optimized structure, in house, becomes possible to fairly evaluate the cost benefits of various outsourced solutions.

Although the identification of an ideal structure to support a given traffic volume is in itself a huge benefit, more can be done. Having the ability to calculate these structures quickly allows the organization to perform many calculations using several traffic volumes and establish the correlation between volume and cost.

The possibility of setting many volume scenarios is extremely useful since it allows for a clear verification of how the infrastructure cost changes with the volumes transported.