

A primary goal for most IT departments is effectively utilising the network to achieve the company's business objectives. While Class of Service (CoS) supports this goal, global companies also need control over each individual business application. Application Centric VPN (AC VPN) allows the entire VPN to act as a distributed intelligent system that dynamically changes the network behaviour to meet client defined application performance objectives. Application optimisation is out-tasked to BT Infonet but the client maintains control with unmatched network and application visibility through management tools.

INTERNET SERVICES

AC VPN Offers:

- » Network Transport using a private IP network for secure, reliable and consistent performance
- » Secure IP VPNs based on native MPLS in 57+ countries
- » MPLS-based VPN creation for flexible and scalable any-to-any VPNs
- » Discovery of all applications running on the customer's VPN network
- » Management and Control of individual applications for each application session
- » Web-based reporting on individual applications

APPLICATION INTELLIGENCE, VISIBILITY AND CONTROL

AC VPN allows multinational enterprises to manage the performance of their applications:

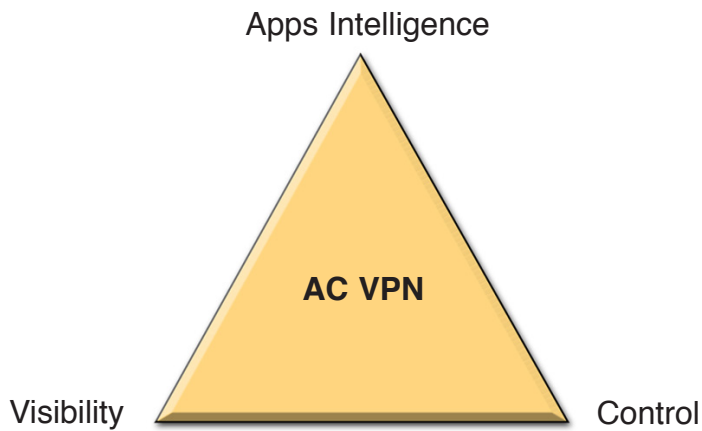
Application intelligence refers to the dynamic optimisation of each application at each site - based not only on local conditions, but also on the conditions of other communicating sites. A centralised system, the Network and Applications Management Centre (NAMC), controls the prioritisation policies for all sites.

Visibility starts with the automatic detection of all applications on the Wide Area Network (WAN). Each application is identified using a dictionary of applications. The client can further split or bundle applications into classes for which performance objectives can be defined and reporting provided. The reports show easy-to-read dashboards with a status overview, as well as detailed reports per application and per site. An intelligent planning report shows the impact of bandwidth changes on the performance of highly critical applications.

Control allows clients to change performance objectives per application and per site. Parameters like criticality, throughput, delay and jitter can be defined for each application and each site. This client-defined policy is

stored in the NAMC and the AC VPN devices are re-configured to achieve the newly defined performance objectives. The result is immediately visible via the AC VPN reports.

A Unique Application-driven VPN Combining:



SERVICE COMPONENTS

AC VPN consists of the following components:

The network: AC VPN uses BT Infonet's private IP network; a high quality native MPLS network.

The IP Application Engine (IAE): Each location is provided with a customer premise router, an access line and an IAE premise appliance. The IAE is installed between the client's LAN and the premise network router. The IAE dynamically conditions traffic and avoids congestion using adaptive queuing technologies. The IAE engines are centrally managed by the NAMC.

The Network Applications and Management Center (NAMC): consists of a set of centrally hosted and site related software applications that control and manage all IAEs, and provide reporting and bandwidth planning tools. A domain is configured for each customer. The NAMC allows for a VPN-wide cooperative system to optimise performance. The Client Provisioning Centre (CPC) provides online tools to change network and application parameters. The Virtual Network Operations Center (VNOC) shows a graphic overview of the VPN topology with real time failure alerts and root cause analysis.

Customer Service and Maintenance: All components of the AC VPN service are fully integrated in the standard customer support, network management and fault resolution processes of BT Infonet. Local engineers have been trained to guide and support each new customer in identifying applications, setting performance objectives and interpreting the reports.

FEATURES OF AC VPN

Application Intelligence features:

- » **Application discovery:** All active applications are automatically identified and can be further fragmented and named.
- » **Automatic optimisation:** Dynamic distributed prioritisation of incoming and outgoing traffic to achieve application performance objectives.
- » **Network rightsizing:** Recommendations to up- or downgrade bandwidth of connections for optimised costs and maintaining acceptable performance.
- » **Out-of-domain control:** Traffic to and from non-AC VPN directions, such as the Internet, is identified and managed.

VISIBILITY FEATURES

- » **Application performance reporting:** Web reports on application performance across the network and on application performance per site.
- » **Helpdesk:** Reporting tool to support end users at application level with online details for every single group per origination or destination.
- » **Network visibility:** Visual VPN network map with real time alarms on performance and outages with root cause analysis.

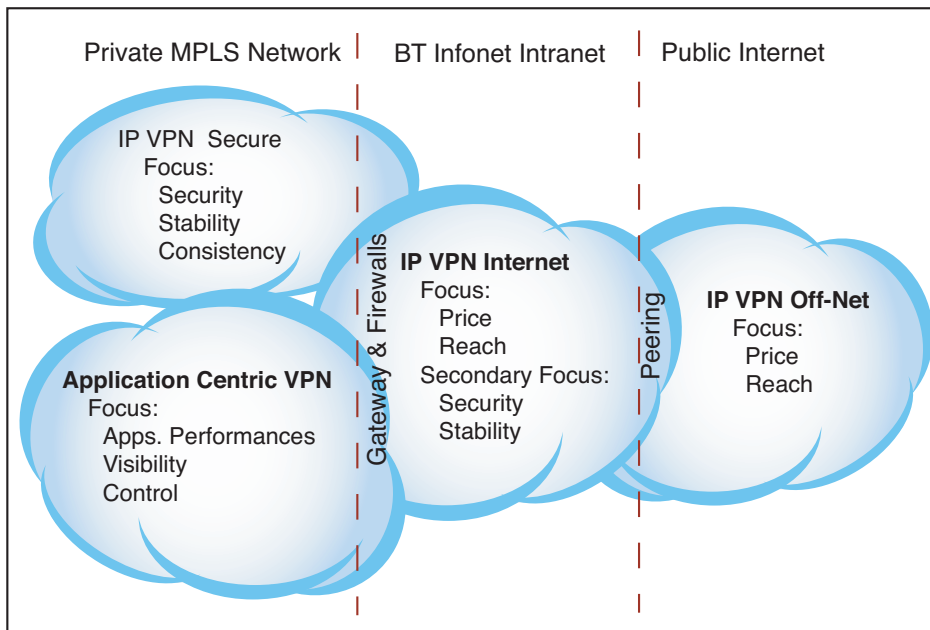
CONTROL FEATURES

- » **Performance objective specification:** Real time tools to change priorities and performance settings of applications at each location.
- » **Customer provisioning of network resources:** Enables the client to request changes on-line, e.g. temporarily or permanently increase the port speed, add a Class of Service, change Class of Service allocations and modify the configuration of the VPN.

OTHER SERVICE CHARACTERISTICS

- » **MPLS VPN:** AC VPN runs on an MPLS network with built-in Classes of Service, end-to-end Service Level Agreements and real time reporting.
- » **Predictable pricing:** Fixed monthly fees per site and for the management of the domain.
- » **Service & Management:** All components of the service are actively managed and monitored. Trained engineers support the client for the initial set up. Customer employees are trained to manage their domain and interpret the reports.
- » **Provisioning:** Installation and management of the AEI engines, the CPE routers, access lines and network ports.
- » **Local support:** The standard BT Infonet client support entities and processes are available in all countries.

AC VPN: a VPN on the Private IP Network



BENEFITS

Better service to end-users with less interruptions: For each application the required network latency, throughput and bandwidth usage can be achieved by changing the objectives and criticality on-line. The adaptive nature of AC VPN reduces the risk that critical applications will be impacted in near congestion situations.

Increased control to adhere to internal IT policies: All applications running on the network are visible and can be identified and controlled. The network resources that each application consumes can be used to adapt company internal IT policies. Easy to read dashboard reports show the status of the network and the application performance for each site.

Optimised Costs: Rightsizing of connections whilst maintaining an acceptable performance level for all applications is achieved by using the AC VPN Capacity Planning tool. Fixed monthly pricing allows for predictable budgeting.

Easier provider management: Managing AC VPN is out-tasked to BT Infonet, but the company stays in control. There is no need for investments and expertise to install and maintain the various components and licenses. AC VPN provides hands-on tools for the company to make changes to application performance objectives, assigning network resources and adapting the VPN topology.

ABOUT BT INFONET

Infonet Services Corporation, a member of the BT Group PLC group of companies, known for its quality of service, is a leading provider of managed network communications services for multinational entities.

Employing a unique consultative approach, BT Infonet offers integrated solutions optimising the complex relationship between enterprise applications and the global network. Extensive project management capabilities are the foundation for the services and solution offerings (broadband, Internet, intranet, multimedia, videoconferencing, wireless/remote access, local provisioning, application and consulting services) positioning BT Infonet as a single-source partner for multinational entities. In particular, BT Infonet IP VPN solutions offer multinationals a unique combination of Private and Public IP services as well as a full set of Managed Security and Mobility Services.

Rated “Best in Class” overall in Telemark’s survey of Global Managed Data Network Services, Infonet Services Corporation has also won “Best Customer Care” and “Best Carrier” at the World Communication Awards. Founded in 1970, Infonet Services Corporation owns and operates The World Network®, accessible from more than 180 countries, and provides local service support in over 70 countries and territories.

Additional information about Infonet Services Corporation is available at www.bt.infonet.com.

BT Group PLC is a public limited company registered in England and Wales under registration number 4190816 with listings on the London and New York stock exchanges. Additional information about the company is available at www.bt.com/aboutbt.

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