

Buyers guide for WAN Optimisation as a Service

A Use Case Checklist

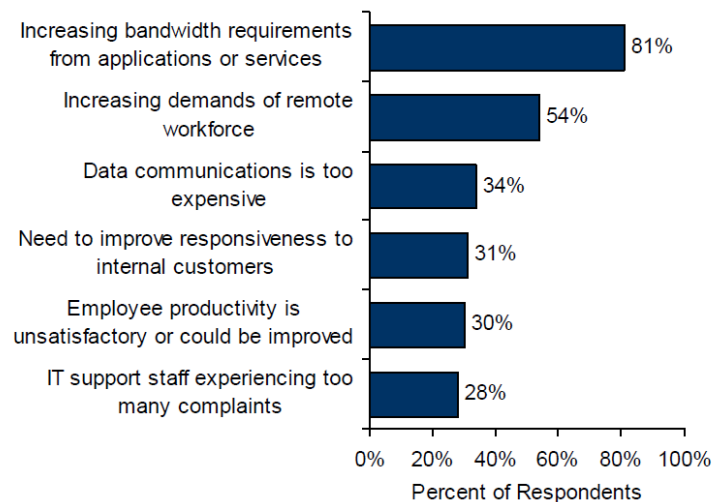
Abstract

This white paper is a short primer to understand WAN Optimisation as a Service and how it benefits your business. The paper will cover the drivers of WAN optimisation including its delivery as a Service, a checklist to understand the fit with your business and example Use Cases.

Business Drivers behind WAN Optimization

As companies' networks are stretched geographically, and more applications rely on network and central datacenters, companies are increasingly looking to improve their WAN. In their 2011 report, the Aberdeen Group found that performance of applications over the network was the main driver for WAN Optimisation.

Fig. 1. Business Drivers Compelling IT Managers to Consider WAN Acceleration Solutions



Source: Aberdeen Group Jan. 2011

Market penetration for WAN Optimization solutions is increasing. According to this year's report by Gartner, the market has grown from being worth \$700 million in 2006 to an expected \$1.9 billion in 2011. But the cost of implementing solutions across a company network is still very high, and often companies implementing

solutions will only be optimizing one or two links. For example one multinational Consultancy Company implemented Optimisation on their London to India link. However, they have 7 other sites that could also have benefited, but they are waiting for release of Capital Expenditure (CapEx).

The cost of bandwidth is decreasing, so calculating the return on investment is difficult when implementing a large Optimisation project. Appliance-based solutions can be a large investment and a company needs to dedicate time before implementing the solution to ensure they purchase the correct size and type of application hardware.

The value proposition around Optimization as a Service is easier for companies to accept. The ROI can be calculated more quickly and they can purchase as they grow:

1. Companies can start optimizing their network quickly. Implementing Optimisation can usually be done as quickly as 48 hours.
2. Companies can grow their optimisation capability as needed.
3. Large up-front capital expenditure is not necessary, companies can move forward using an OpEx model.
4. Increased flexibility of hardware and upgrade choices

Optimization as a Service

Optimisation as a Service moves CapEx expenditure to a more flexible, fully outsourced service. The business value proposition is that by reducing the amount spent on additional hardware, companies can use existing infrastructure and start seeing improved user experience more quickly. Optimization as a Service minimizes the risk of tethering your company to one kind of technology for a long time, you are free to quickly see the benefits, and prove them in a real environment.

Many of the benefits of WAN Optimization as a Service are delivered by the use of a virtual WOC. With the right solution for your organization, it can free up hardware selection and associated scaling, costs and upgrade timing, integrate seamlessly into virtualized infrastructures including branch office server consolidation.

Optimization as a Service does not mean that you need to outsource your entire network. Instead, a provider can manage the installation and management of WAN Optimization on the customer's network.

This process is usually in 5 stages:

1. Discovery
 - During this phase, the provider works to understand the customer's network and current network throughput. This helps establish a base-line on which to judge optimization.
2. Design

- Understanding the best places to implement WAN Optimization in the network
 - This can be at the Database, Branch or client level (See Fig.2)
3. Install and Pilot
 - An initial installation and small-scale trial. This can actually be the first step if the customer wants to fast-track the process. This also involves:
 - i. Ensuring the correct licenses are issued
 - ii. Ensuring the minimum specs of the hardware are appropriate
 - iii. Managing the Pilot Project
 - iv. Creating and presenting the final business case
 4. Production roll-out
 - Full installation across the network. This also includes support, training and deployment reporting.
 5. Ongoing management, support, optimization
 - Companies select the type of support they require across their network and locations. It could be simply moves, adds and changes or can extend to monthly performance reporting and optimization improvement. Second or third line support must be included.

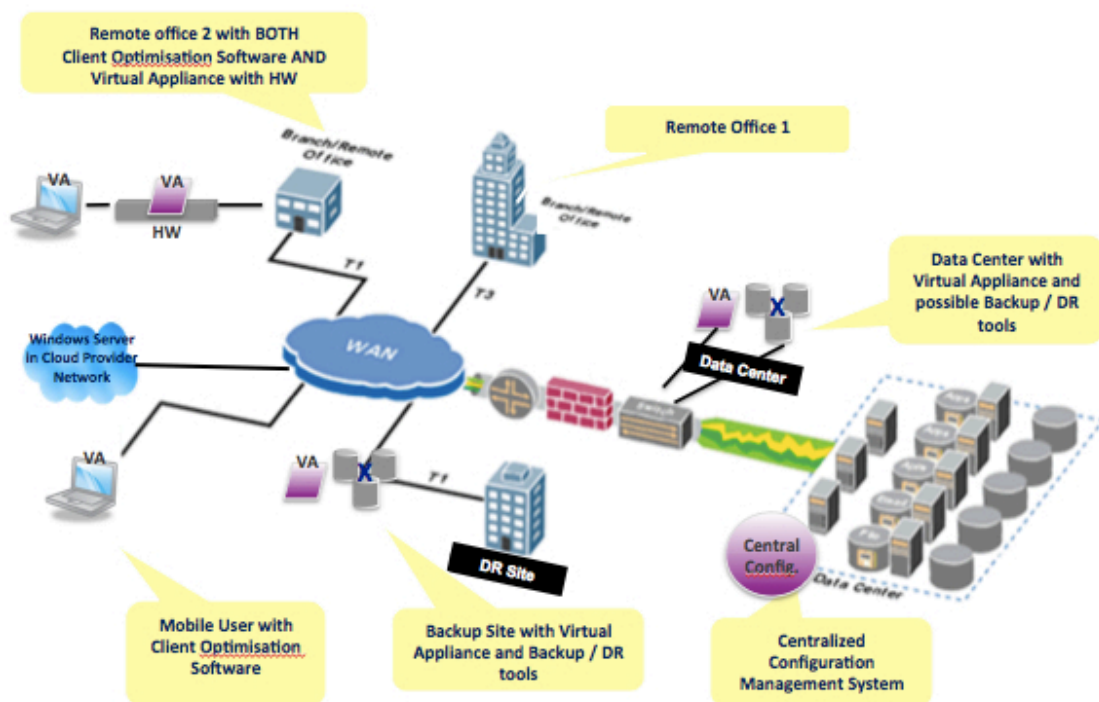


Fig. 2. Typical Network Design with WAN Optimization at different parts of the Network.

Is this right for me? Optimization as a Service Checklist

Factors affecting the application for your business of WAN Optimisation as a Service include geographic distribution, organization size, latency and security tolerances and business operating model. For example, if your business is expanding rapidly organically or through acquisition, WAN Optimisation as a Service gives you the ability to set up and support highly performing branches remotely and without the need for specialist staff on the ground.

Indicators for the most impactful application of WAN optimization as a Service are summarized in the following chart.

	Optimisation as a Service	WAN Optimisation	Minimal need for Optimisation
Single Office			Y
Multiple branches	Y	Y	
Int'l branches	Y	Y	
Int'l - no local support	Y		
Virtualization in place	Y		
Cloud-based SAAS			Y
Opex-centric business	Y		
Strong in-house support		Y	
Limited in-house support	Y		

Fig 3: WAN Optimisation as a Service Checklist

Customer Examples

WAN Optimisation supports performance, Back Up and Data Recovery and the consolidation of Data Centres. Following are real case study examples of the application of Optimisation in each of these scenarios.

International Branch Support and Performance

A large charity operating in over 30 different regions was struggling with slow access over their WAN. This was not improved by the fact that some countries had low bandwidth and increasing this was expensive or impossible.

The company considered hardware appliance-only solutions, but struggled with the capital outlay required, plus the difficulty of supporting remote hardware.

Eventually the company opted for Optimization as a Service. They were able to install an unlimited amount of end-point optimization solutions, from remote servers to clients on laptops.

They were able to accelerate their traffic, improve application access and user experience without a large capital outlay, and save money on bandwidth. Installation to other countries was done remotely.

Their total cost of ownership (TCO) was reduced by 80%, and optimization results were on par with hardware-based acceleration with application response over the WAN increased up to 95% on the second pass.

Back Up and Recover More Data

A large Telecom company in the US implemented Optimisation to improve its Data Replication times. The company needed to reduce its RPO (Recovery Point Objective) time. By implementing Optimization technology they reduced their replication time from 7.5 hours to 27 minutes.

Consolidate Data Centres

A legal firm in the UK decided to consolidate their Data Centres to reduce their facilities costs, simplify the datacenter management and abide by certain security and compliance issues. However, they found that in offices more than 100 Km from the central Data Centre, applications performance was reduced because of network latency.

The company implemented Optimization technology to improve links from their global offices to the Data Centre. After full rollout of the optimization, they found the following benefits:

- Savings of \$1 million per year from the Data Centre consolidation.
- 40% bandwidth reduction, resulting in savings of approximately \$750,00 p.a.
- Improvement of global user experience.

Conclusion

WAN Optimisation as a Service is a powerful tool that can increase network performance by over 90% - not just between branches but where required, to end user devices. Applicable in most organisations, even smaller-scale operations, it saves money, and enables greater flexibility of your IT infrastructure and works to future-proof your network and users.

For more information and a free consultation on the potential impact of WAN Optimisation as a Service on your business, refer to www.cdguk.com or get in contact directly on info@cdguk.com.