Distributed Branch Offices:
A Guide to Network Uptime

ECESSA™

Overview

Technology has altered the way we do business, and the workplace will never be the same. There is no limit to how far we will advance in the coming years. Products and services including computers, internet access, and cellular phones have become integral parts of our daily lives. As our capacity and need for technology continues to develop, more innovations will also become standard parts of the way we live. Communication has driven many recent inventions that have shifted the way we communicate, both in our personal and work lives.

Companies dealing directly with these changes must be open and willing to change in order to grow with technology. "IT departments' jobs get more complex every day," said Jim Nonn, CIO of EGAN Construction Company. "We are dealing with so much complexity that you don't find many CIOs and IT directors with hair."

With the improvements in technology, companies are conducting operations in a leaner and more mobile and virtual manner. Recent virtual based workplace implementations include Virtual Desktop Infrastructures (VDI), which has aided the shift in organizational structure, strategic planning, and everyday operations of workplaces both large and small.

The shift in the workplace has increased the need for reliable communication tools and networks, and service providers who can yield flexible products and services, and unprecedented consistency. A product of this work related shift is a distributed workforce-- more distributed brand offices and employees remote from headquarters than ever before.

Rapid Growth of Distributed Branch Offices

A distributed office, also referred to as a distributed workforce, is a workforce that uses a networking infrastructure to connect to the company's network, share files, use company calendars, and communicate with others.

Distributed offices come in all shapes and sizes. From insurance giant Aetna allowing employees to tele-commute, to EGAN Construction Company, which utilizes multiple worksites in different locations and makes acquisitions around the United States; the shift in the way companies work has affected every organization and employee.

Distributed offices are not restricted to a specific industry. Companies rarely operate out of a single office, and face a growing need in connecting multiple locations with headquarters and with each other. Walmart, McDonalds, and Chase Bank all operate in over 5,000 locations around the world. Information is sent and received from each location on a daily basis, and new locations are being created each year.

According to Global Workplace Analytics, telecommuting alone has increased from 2005 to 2012 by 79.7%, despite an overall drop in the total workforce from 2011 to 2012. This trend has allowed several modernized companies to have fully distributed teams. Some other fully distributed companies include Mozilla, inVision, Upworthy, Zapier, and Basecamp. Brie Weiler Reynolds recognized that these companies do not see their remote work environment as just a luxury. "They [employers] don't see virtual working as a perk, but as a necessity, as standard operating procedure - as THE way to do business."

Virtual Desktop Infrastructures (VDI) allow companies to work on cloud-based networks in order to tap into technological resources while at a remote location. The VDI market is expected to see a significant increase as the need for remote access continues to grow. The shift to a virtual based working environment has allowed companies to reduce overhead costs and avoid the need to have servers and

hardware at physical locations, resulting in substantial savings, often in the millions. The importance of technology within a company has shifted from hardware to the cloud and Wide Area Networks (WAN).

Magic WANd: Optimization & Virtualization

For distributed companies that rely on virtual networks; WAN strength, cost efficiency and network consistency are vital to their success. WANs can be a contributing factor to successful growth, or a bottleneck that holds an organization back, either due to cost or downtime. Businesses lose an average of between $84,000 and $108,000 for every single hour of IT system downtime. The combination of WAN virtualization and optimization techniques has turned a pain point into a competitive advantage.

WAN optimization increases the efficiency of transferring data across a network, allowing individual applications to work at an optimal rate. VDI, VoIP, streaming video, and additional real-time applications require available bandwidth from multiple unique sources. To create an excess of available bandwidth, WAN virtualization comes into play.

WAN virtualization compliments WAN optimization by providing bandwidth aggregation. The aggregation of available bandwidth results in increased performance within the WAN. Ecessa's WAN Virtualization system, WANworX™, allows companies to design, deploy and manage multi-site, multi-layer wide area networks. WANworX™ is cost-effective, scalable and flexible, and ensures Never Down™ performance. When combined, the optimization and virtualization of the network creates an agile and consistent connection that can handle even the most demanding distributed company's needs.

EGAN Construction Company

EGAN Construction Company, based out of Minneapolis, began in 1945 with $3,000 in startup capital. The now $215 million dollar commercial construction company employs over 800 people. EGAN specializes in mechanical, electrical, and systems construction and service.

EGAN operates from multiple worksites using VDI, but was struggling to maintain an uninterrupted connection to their cloud and vital business applications for their remote employees. Maintaining a consistent network connection was not possible using their previous network provider. "Employees had to login 50 times a day," said EGAN CIO Jim Nonn. According to Jim, "When a site can't communicate, we lose the opportunity to bid on a job, we can't follow up on PO's, and we are unable to confirm changes or provide costs, and of course, our project managers and field staff are frozen in place." That productivity loss translates to revenue loss.

Their remote locations needed a high performing network that would never experience downtime. Jim chose Ecessa's WANworX™ to virtualize their WAN.

"You need to have good communication links, and that means something that never goes down. That is something that Ecessa can bring to the table, and something that [competitors] can't do today." - Jim Noon, EGAN

A key advantage of WAN Virtualization that EGAN has encountered is with worksite acquisitions. With every acquisition came a set of new challenges. "No one can know about it, and then on a Monday, you'll sign the paperwork and as soon as that's done, everyone looks to IT and says "when are they going to be up on our system?" The process in the past consisted of up to a half day spent on each machine. With WANworX™, even if the worksite is using outdated machines, it can be replaced with a dummy terminal and can connect to virtual desktops in twenty minutes. "This process only works with good communication links."

Annually, EGAN saves over $100,000 per site in technology expenses. WANworX™ WAN virtualization has allowed them to replace their MPLS network with multiple Internet connections at each location and implement cost saving VDI technologies at remote locations.

Summary

Changes in the workplace have opened opportunities for providers, products and services to solve new needs. The distributed office is not only changing the way we work, but the competitive landscape of business. Distributed offices will continue to grow as the availability of WAN virtualization and optimization increase and the costs of operating virtually decrease.

EGAN Construction Company was able to decrease onsite costs, reduce the time and difficulty of worksite acquisitions, and secure a seamless connection for their WAN to operate VDI and communicate with their remote applications.

Technology has increased the availability and demand for workplaces in various locations. Distributed offices require fast and reliable networks to maximize efficiency and to allow for communication anywhere in the world.

Give your distributed team a competitive advantage with Ecessa.

Sources

Assessing the Financial Impact of Downtime
Global Workplace Analytics
PR Web
Scott Berkun
Smart Planet