

Network Infrastructure Enhancement Solutions for Uncertain Economic Times

Smart Choices Help Improve Efficiency While Managing Costs

White Paper
December, 2008

Abstract

Businesses are facing economic challenges and need to find ways to make smarter choices while cutting costs. Many small and medium-sized companies are finding innovative ways to upgrade and enhance their IT infrastructures for critical, profit-center activities even though budgets are tight. Some are even cutting costs by swapping out energy hogging equipment with green solutions. IT departments across the world have been looking to alternative, affordable networking providers like D-Link, for example, to significantly reduce purchasing costs while deploying leading edge, energy-saving equipment. This white paper examines current networking challenges and purchasing pressures, best practices and considerations during critical purchasing processes, and specific D-Link solutions for tight budgets and power reduction.

Challenges

Corporate IT organizations are trying to do much more with much less these days. IT groups are trying to figure out ways to support their enterprises with less staff, less power, less cooling and smarter architectures that can save them money, hassles and resources. Meanwhile, mobility trends, data demands and the continued expansion of online work and productivity habits are increasing the need for more bandwidth and connectivity access. Essentially, people need their information where and when they want it. They're connecting everywhere, through all types of devices, and at all hours of the day.

During the growth days (a not so distant memory), companies built out their infrastructures as needs arose. However, many of those architectures are proving costly. Equipment, space and energy costs have taken a big bite out of budgets.

Meanwhile, technology has steadily advanced offering better, more intelligent, more efficient and energy saving equipment. The problem is figuring out how to know what to replace to ensure cost reduction and investment returns. After all, although the economy is depressed, companies still need to support revenue-driving initiatives and support their profit-generating activities with the appropriate IT solutions. There are certainly opportunities to improve in the areas of 1) equipment cost reduction, 2) reduced demands on IT staff, 3) architecture efficiency improvement and equipment consolidation, and 4) energy savings.

Reduce Equipment Acquisition and Overhead Costs

D-Link offers several unique value propositions with respect to these issues providing very attractive options when it comes to comparing prices on equipment with identical features and capabilities. Customers often find discounted pricing on equipment that is identical to competitor products in terms of performance, scalability, flexibility, expandability, software support, redundancy, security and support. Our solutions help you cut costs by reducing operational and maintenance activities. Built-in ease of scalability and interoperability ensure that you can quickly, easily and flexibly adapt your network to changing demands. Intuitive interfaces allow IT staff to quickly configure, manage and modify settings from within a browser. Centralized management makes it easy to add equipment, manage ports and control Quality of Service (QoS) across the company. SMBs don't want to spend money on excessive professional services. They should be able to install the equipment quickly and easily, and take advantage of the management features and interfaces quickly. Many SMB customers report that they considered larger enterprise competitors but settled on D-Link because they realized they didn't need extensive professional services in order to deploy the equipment. These competitive solutions often feature complex proprietary configuration settings and difficult to manage interfaces that require vendor set-up at a significant cost. If you reduce reliance

on consulting, paid support and outside services, you'll end up ahead of the game on the current balance sheet as well as in the future.

Evaluate and Compare Equipment Side-by-Side in Your Environment – For Free

Another way to cut costs is to right-size the solution for your particular needs. D-Link makes it really easy to test out equipment, compare features and usability, and make informed decisions about more expensive, competitive offerings. First, D-Link's website has many tools to help during the decision-making process such as product selectors, product demos and emulators, white papers, and case studies. Also, D-Link frequently offers promotions, such as the D-Link® "Test Drive!" program which allows users to evaluate D-Link switching solutions in real-world IT environments – for free. The promotion allows users to replace a D-Link competitor switch with a D-Link premium switch for free. D-Link pays for shipping, and if the customer doesn't like the product they can send it back for free. If they do like it, it's theirs to keep after the 30-day trial. The offer is extended to potential D-Link customers in the U.S. (not existing customers) that have more than 25 users. The program helps organizations make reasoned evaluations before committing to larger, mission-critical purchasing decisions.

We also offer solutions that meet the special requirements of government and education markets. Trade Agreements Act (TAA) compliant products are available for government customers. Educational institutions have access to targeted rebate and discount programs. D-Link's promotional website describes specific promotions, terms and expiration dates in detail at <http://www.dlink.com/promotions/>

Reduce Reliance on In-House IT, Eliminate Downtime Issues

Organizations that need to reduce burdensome IT processes can leverage built-in D-Link network management features. Many of our Web Smart™ wired and wireless switches support SNMP and wireless access management. D-Link's managed Access Points (APs), for example, include smart AP managers that allow users to distribute configuration templates to multiple access points via a simple click of a button.

In order to reduce purchasing risk further, D-Link has partnered with Unisys to offer a flexible set of world-class hardware maintenance services. Businesses that don't want to maintain large on-site IT staff can leverage this program to save time and money and reduce downtime in the event of technical issues. The partnership offers one of the largest available geographic footprints for rapid response onsite support services. It features flexible support options that ensure up to 4-hour response times from a seasoned and certified networking expert. Technicians deliver timely diagnosis, analysis, and repair or replacement for the troubled equipment. Technicians arrive onsite equipped with the proper tools, parts and knowledge to restore networks to operational status as quickly as possible. Customer can

choose from 24 x 7 x 4-hour Onsite Support or 9 x 5 x Next Business Day Onsite Support options. For more information see D-Link Care Support Packages at <http://www.dlink.com/business/care-support-packages/>

3rd Party Software and Solutions Integration

Companies can also reduce infrastructure complexity, reduce management overhead, enhance interoperability and usability, and bolster security with 3rd party software and solutions that compliment D-Link xStack® storage products. D-Link products integrate with a wide variety of partner solutions that solve technology and business problems without adding exorbitant costs. Example 3rd party storage solutions include VMware compatibility, ROBOBAK data protection solutions, and SureSync file synchronization and replication solutions. Surveillance solution partners include OnSSI surveillance platform, Aimetis Symphony™ integrated video management, as well as others. IP Telephony product partners include Cbeyond and NGT SIP for VoiceCenter™.

Go Green and Save on Power and Space

Network consolidation projects and green initiatives can save organizations significant money by reducing power and space requirements as well as reducing NOC cooling requirements. Many D-Link switches will power down unused ports and reduce power on ports with shorter cable runs, for example. Why pay for power when you're not using the equipment? Depending on product and usage, D-Link Green™ switches can save up to 80% of the power used compare to competing switches.

Before any D-Link product can be labeled D-Link Green, it must pass a formalized qualifying process that may include specific validations and certifications. Certifications include the Waste Electrical and Electronic Equipment Directive (WEEE), the Directive on the Restriction of the Use of Certain Hazardous Substances (RoHS) and ENERGY STAR (ENERGY STAR power supplies save 30% of power on average, for example).



Our minimum requirements for D-Link Green switches include Green Ethernet and time-based PoE features. Green Ethernet enables power savings via a link-down mode which removes power from ports that do not have devices attached. You can save up to 80%* on energy costs by simply turning off ports that are connected to PCs that are turned off. Green Ethernet also detects Ethernet cable length and adjusts power usage to save energy. This way, a port connected to a 20 meter cable only uses as much power as it needs, instead of

using full power, which is only needed for 100 meter cables. Cable power adjustment can save up to 9.3%* on energy for each system. In a standard workday scenario where PCs are used for 10 hours a day and powered off 14 hours a day and connected to the switch using 20 meter cables, D-Link's Green Ethernet can save up to 44%* power used for each system. For more details on power savings, please visit <http://www.dlink.com/corporate/environment/dlink-green-ethernet/>. These are significant cost savings that accumulate over time. Time-based PoE applies power to connected devices based on optimized schedules. PoE also eliminates inefficient power bricks and reduces overall wasted power.

Our wireless equipment must have Wi-Fi scheduler and Green Ethernet features in order to be deemed D-Link Green. Wi-Fi scheduler turns off WLANs to save power and enhance security. Routers incorporating the D-Link Green technology are the Xtreme N Gigabit Router (DIR-655), Xtreme N Duo™ Media Router (DIR-855), Xtreme N™ Dual Band Gigabit Router (DIR-825) and the Xtreme N Gaming Router (DGL-4500).

Our network attached storage (NAS) solutions include hard drive power management and smart fan features. Hard drive power management hibernates or powers down hard drives based on specific inactivity timeouts. Smart fan automatically turns off fans or reduces their speed to reduce noise and power consumption. Finally, a more intelligent network architecture that's designed to consolidate resources and improve efficiency reduces costs on server equipment, power consumption and cooling, and space requirements. Many companies are able to upgrade their networks and improve performance while consolidating networks – all while justifying the transition with ROI scenarios based on energy savings, reduced overhead costs and space reduction.

For more information on D-Link Green initiatives, please visit our green resources page at <http://www.dlink.com/corporate/environment>.

End-to-End Solutions from One Provider

With D-Link, you can choose from a wide variety of low-cost switch, WLAN, surveillance, firewall, network storage, VoIP and integrated Wi-Fi solutions without chasing down multiple vendors. You enjoy low-price advantages, guaranteed satisfaction, single provider support and a range of products that work great together and with third party software. Our solutions are sold exclusively through a network of Value Added Resellers (VARs). These VARs help customers select the right products for their unique applications and budgetary requirements.

For more information about D-Link cost-saving solutions, please visit www.dlink.com or call 800-326-1688.

* Power savings may vary depending on product used.

D-Link, the D-Link logo, xStack, Xtreme N, Xtreme N Duo, D-Link Green, WebSmart and VoiceCenter are trademarks or registered trademarks of D-Link Corporation or its subsidiaries in the United States and other countries. All other trademarks or registered trademarks are the property of their respective owners. Copyright © 2008 D-Link Corporation/D-Link Systems, Inc. All Rights Reserved.