

### Optimization Benefits:

- *Improve performance*
- *Improve employee productivity*
- *Avoid unnecessary service and equipment upgrades*
- *Reduce management expenses*
- *Avoid application and cloud computing inefficiencies*

### Sample ROI Case:

- *Increased remote workforce productivity*
- *Enhanced mobile employee productivity*
- *Bandwidth cost avoidance*
- *Reduction in both capital and operating IT expenses*
- *\$330K+ annual savings with complete ROI in just six months*

## THE HIDDEN COSTS IN NETWORK BANDWIDTH

One commonly overlooked operational expense in many companies is the cost of wide area network bandwidth. Many companies can substantially improve productivity and save capital and operating expenses if they merely optimize the bandwidth they already have. WAN optimization is a technology which not only automatically compresses data so that more of it travels down the same bandwidth, or WAN “pipe”, but also prioritizes data over competing network traffic, boosting performance even higher. This combination of more data over the same pipe and moving data ahead of network congestion and other traffic improves performance by 60% or more, depending on the type of data transmitted.

This optimization results in a savings of approximately \$130 per Mbps per month. Also, as more and more companies rely on the productivity and efficiency of a mobile and remote workforce, cost savings in productivity over an optimized WAN add significant savings. Based on the ROI analysis in this document, there are \$286,458 of productivity gains and \$36,000 of bandwidth savings per year by improving network performance for these remote and mobile workers resulting in a total pay-back period of six months. Please see the detailed ROI analysis later in this paper for more details on these and other hard-dollar savings delivered by WAN optimization.

Through years of customer experience and product development, Circadence Corporation, the leader in WAN optimization and performance technology, has consistently demonstrated how companies gain significant economic and strategic advantages when optimizing their WAN bandwidth:

#### Improve performance

Companies have found that Circadence MVO™ WAN Optimization improves the performance of their wide area networks even under the heaviest congestion. Customers worldwide have demonstrated the cost-savings of WAN optimization through increased utilization of available bandwidth which results in increased performance and a reduction in support calls. In many mobile and remote locations where service may be erratic or poor, WAN optimization may, in fact, be the only solution for maintaining performance of critical applications.

#### Improve employee productivity

Wait time for applications directly correlates to lost productivity. If the network is not running at peak performance, time and money is lost as employees wait for applications to launch, perform tasks, and save data. Mobile workers avoid logging into poorly performing networks, preferring to “wait until they get back to the office,” and building greater inefficiencies into the work day. Remote users often ignore slow applications on congested networks and create security risks by using unauthorized applications installed on their local machines to bypass bottlenecks. With Circadence MVO, mobile and remote connections are not only fast and secure, they also provide **Link Resilience™**—the ability to keep mobile users connected in the event of a temporary drop in network

connections or cellular signals. The end result is improved application compliance and better end user performance.

### **Avoid unnecessary service and equipment upgrades**

The most common approach companies take to bandwidth congestion is to add more bandwidth and servers. Unfortunately, the telecommunications industry does not offer tailor-made, small increments of bandwidth, so companies are consistently over or under provisioning their systems. The single most cost effective remedy to attaining and maintaining optimal network throughput is through WAN optimization—hardware and/or software that ensures your network runs at peak performance regardless of network congestion. With Circadence MVO, companies can avoid costly bandwidth upgrades and remote server installations while ensuring mobile workforce efficiency at a fraction of the cost of alternative upgrades.

### **Reduce management expenses**

If companies can eliminate costly equipment and bandwidth upgrades yet realize greater performance simply by implementing Circadence MVO, all the management expenses associated with the anticipated upgrades are eliminated. This simple, cost effective act can save thousands of dollars in operating expenses by retiring remote applications and will also allow businesses to realize the cost benefits of centralized applications.

### **Avoid application and cloud computing inefficiencies**

While the migration to cloud computing may save capital expenses, it can be a frustrating and inefficient platform for employees using poor network connections. The cloud-based applications companies build are only as effective as their performance. Poor cloud connectivity can kill any capital expense savings from cloud deployment. With Circadence MVO on cloud servers, remote desktops, mobile computers, and handheld devices, workers get LAN-comparable performance when logging into the cloud. This not only creates greater employee productivity, but reduces expensive cloud resource upgrades, such as adding additional virtual servers and memory to boost poor performance.

### **Circadence WAN Optimization Bandwidth Savings: Example Case**

Over years of experience, Circadence has consistently proven to its satisfied customers that complete bandwidth utilization and optimization is a viable means for reducing capital and operating expenses, as demonstrated in the following scenario.

### **Sample ROI Case**

Let's take a typical business case and break it down in real numbers how bandwidth optimization delivers true cost avoidance while lowering capital and operating expenses.

Our sample company has the following structure:

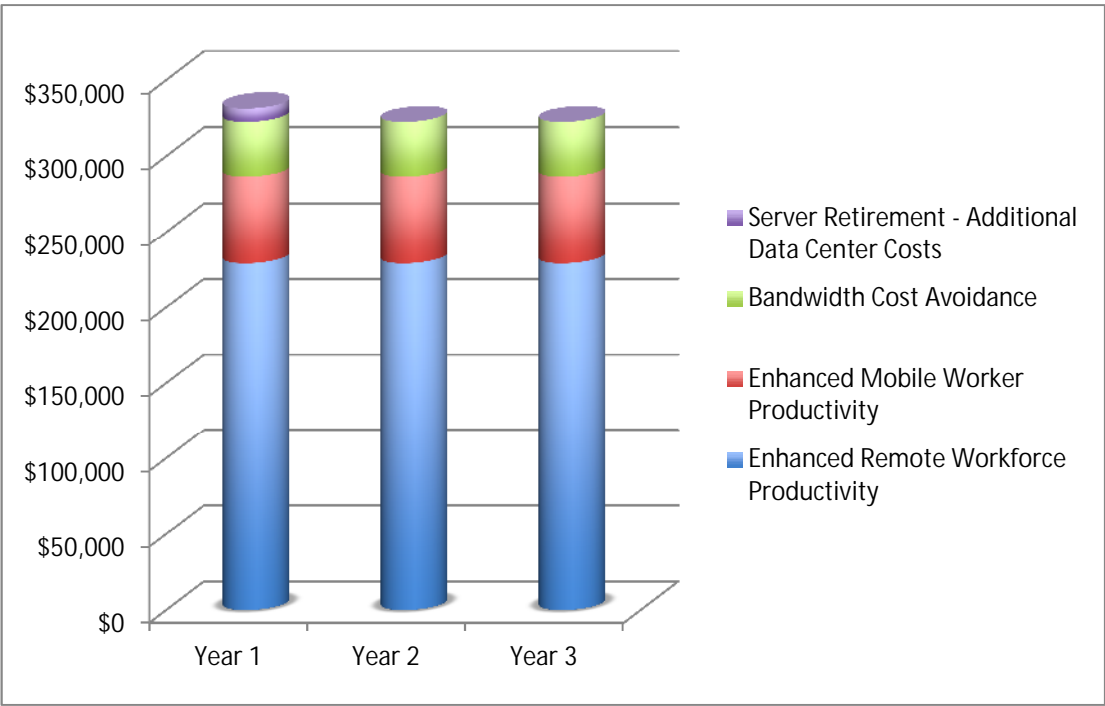
- Ten branch offices, each with an average of 50 employees
- An average employee salary of \$55,000
- A rate of network usage of less than two hours per day per employee
- An average amount of network traffic between remote offices
- A total of 125 mobile workers in the field
- Bandwidth costs of \$500 per office
- IT and IT related costs of \$70,000 including server upgrades, salary percentage for remote server management, and bandwidth management

Our sample company’s total capital and operating expenditure savings for these items under this scenario assume the following:

- Any savings in operating expenses and productivity gains are related to time saved per employee and resulting productivity gains
- Cost avoidance or reduction in costs through the use of less bandwidth
- Retirement of remote servers, reduction in IT maintenance time, and future equipment purchase avoidance

Given these parameters, use of Circadence MVO appliances, software, and management applications would deliver the following real benefits to the company on an annual basis:

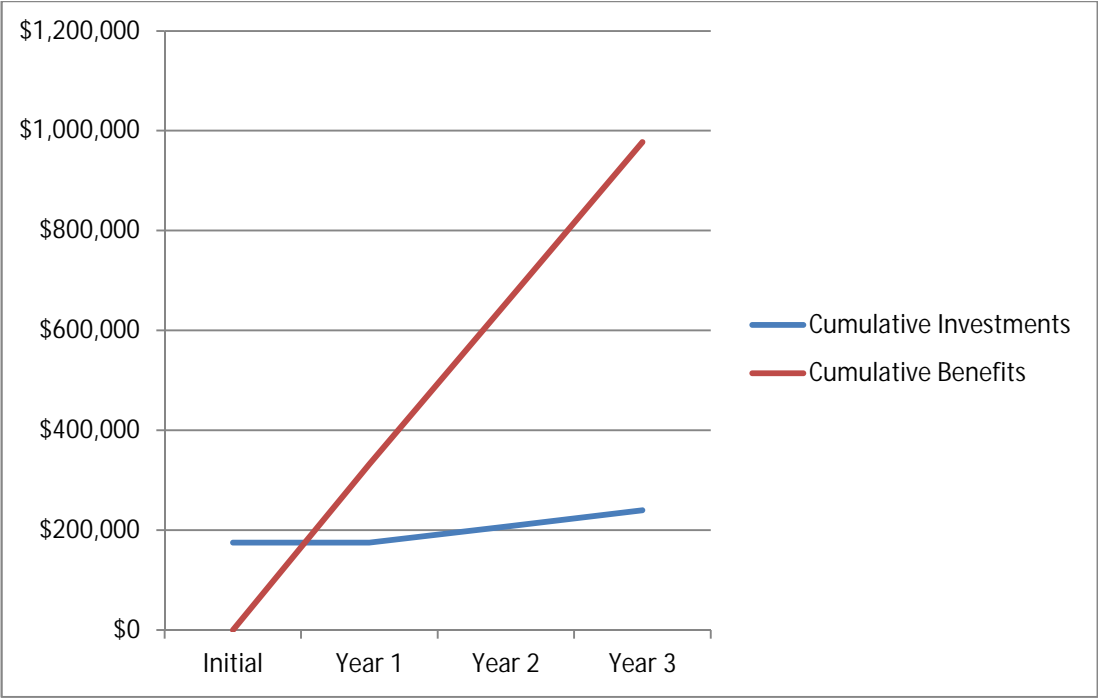
- \$229,167 in branch office productivity based on employee minutes saved
- \$57,292 in mobile worker productivity enhancement
- \$36,000 in bandwidth cost savings through both upgrade cost-avoidance and use of lower bandwidth to some offices
- \$9,615 reduction in both capital and operating IT expenses



Meanwhile, the total investment in Circadence equipment and software required to realize these savings is:

- Eleven 1200 series MVO appliances and 125 Enterprise Mobility software products at \$142,322
- Annual maintenance of \$28,464

**Given these numbers, the total one year savings for the company equals \$332,073, with a complete return on investment in just six months. Over a three year period the savings are impressive, rising to nearly \$1.0 million—a payback of over 400%.**



**Get Control Now**

Bandwidth, when properly optimized and controlled, can provide tremendous operating savings to companies, improve productivity, and ensure a smoother, more efficient cloud-based application deployment. Much of the current cost of connectivity is hidden, however.

[Contact a Circadence representative](#) today for a detailed analysis of your bandwidth use and see how a minimal investment can reap tremendous long-term savings.

**ROI Summary**

Productivity gains result from eliminating employee wait time for all key applications, such as email, ERP systems, file sharing, document management, and more. The following are the cumulative results of productivity gains, bandwidth avoidance and consolidation savings over a 3 year period in our sample company:

Productivity Gains	Amount
Enhanced Remote Workforce Productivity	\$687,500 <sup>1</sup>
Enhanced Mobile Worker Productivity	\$171,875 <sup>2</sup>
<b>Bandwidth Avoidance</b>	
Bandwidth Cost Savings	\$108,000 <sup>3</sup>

<sup>1</sup> Estimated 4 minutes per employee saved each day; 10 offices with 50 employees per office (average).

<sup>2</sup> Additional 4 minutes per mobile worker saved each day.

<sup>3</sup> Average \$500 per month per office on bandwidth. Savings come from better utilization of bandwidth and related upgrade deferrals. Amount is based on an estimated 60% reduction in bandwidth utilization.

Consolidation Savings	Dollar Amount
Application & File Servers	\$10,500 <sup>1</sup>
Less Incremental Data Center Investment	\$-3,150
IT Maintenance for Optimization	\$2,265

<sup>1</sup> Consolidation savings come from retiring servers and reduced IT maintenance. Assume that 30% of these savings can be reinvested into other areas in the data center.

**For more information**

To read more about Circadence MVO, go to [www.circadence.com](http://www.circadence.com)