



## About Kronos

Founded in 1977, by Mark Ain, a Massachusetts Institute of Technology (MIT) graduate, Kronos has more than 30 years in business. Providing workforce management solutions, they offer key tools that companies need to help control labor costs, minimize compliance risk, and improve workforce productivity.

## The Challenge

Kronos needed to upgrade their wireless LAN to support the rapid growth of various “pure wireless” devices (e.g. smartphones and iPads). At the same time they wanted to ensure a consistent implementation worldwide, security enforcement at the edge, and the solution needed to support Kronos’ commitment to virtualization.

## The Solution

Kronos selected ADTRAN’s vWLAN solution operating on VMware® to support a global transition to an 802.11n-based wireless LAN. Kronos has also deployed approximately 200 ADTRAN’s Bluesocket® wireless access points across global locations.

## The Benefit

With ADTRAN’s vWLAN solution, Kronos has upgraded to 802.11n technology; has leveraged virtualization to easily scale across global locations, and realized major cost-savings by eliminating hardware-based controllers.

# Kronos® Boosts Connectivity and Employee Productivity with vWLAN®

**With over 3,000 employees worldwide, secure and reliable high-speed wireless connectivity is fundamental to the productivity of Kronos employees. Kronos selected ADTRAN’s virtual Wireless LAN (vWLAN) solution to support a global transition to 802.11n and away from a controller-based solution.**

## Kronos Incorporated

As the global leader in workforce management solutions—with tens of thousands of customers in 60 countries including more than half of the Fortune 1000—Kronos knows well the importance of technology as a framework for business success. Kronos once again turned to ADTRAN® to upgrade its wireless network.

## The Challenge for Kronos

Kronos’ IT department supports over 3,000 employees who are using over 1,500 wireless devices per day. The sudden growth of various “pure wireless” devices (e.g. smartphones and iPads) which lack any wired networking functionality. Kronos not only expects this trend to continue in the future but also expects that these devices will quickly dominate the installed base.



“We needed a solution that would allow us to upgrade to 802.11n technology, accommodate the proliferation of devices hitting our network, and allow expansion cost-effectively and efficiently across remote sites.”

**Douglas Tamasanis,**  
Senior Director of IT

However, with these devices also comes a substantially greater increase in network traffic.

According to new 2011 figures from Juniper Research, a provider of research and analytical services to the global hi-tech communications sector, the amount of mobile data traffic generated by smartphones, feature phones and tablets will exceed 14,000 Petabytes by 2015, equivalent to 18 billion movie downloads or three trillion music tracks.

While planning their wireless LAN upgrade, Kronos outlined critical needs including; security enforcement at the edge, a consistent 802.11n implementation worldwide, and support of the corporate commitment to virtualization.



**ADTRAN, Inc.**

Attn: Enterprise Networks  
901 Explorer Boulevard  
Huntsville, AL 35806

P.O. Box 140000  
Huntsville, AL 35814-4000

256 963-8000  
256 963-8699 fax

**General Information**

800 9ADTRAN  
info@adtran.com  
www.adtran.com

**Pre-Sales**

**Technical Support**  
800 615-1176 toll-free  
application.engineer@adtran.com  
www.adtran.com/support

**Where to Buy**

877 280-8416 toll-free  
channel.sales@adtran.com  
www.adtran.com/where2buy

**Post-Sales**

**Technical Support**  
888 423-8726  
support@adtran.com  
www.adtran.com/support

**Global Inquiries**

256 963-8000 voice  
256 963-6300 fax  
international@adtran.com  
www.adtran.com/global

## The Solution

vWLAN deployment included high availability operating in two data centers (Chelmsford, Massachusetts and Noida, India), 150 Bluesocket 802.11n access points deployed in three main locations followed by another 50 access points in London, Chicago, Sydney, and Bangalore.

## The Benefits

- Elimination of the physical WLAN hardware controller completely to leverage the scale capabilities of virtualization and the enterprise data center
- Scaling wireless capabilities through software on the access point and virtualized control rather than wireless-only hardware
- High availability configuration that provides failover with zero packet loss—achieved by a secondary virtual control instance that supports each access point
- As a multi-site deployment, the use of one single control instance at the data center rather than controllers at each site
- Security at the access point to ensure that unwanted and undifferentiated traffic never enters the LAN
- Simplified implementation and expansion due to a software-based virtual controller
- Cost savings recognized from:
  - implementing a virtual software-controller rather than costly hardware-based controllers expenditures
  - a reduction of energy costs since a hardware-controller accounts for 80 percent of the power costs

Kronos is delighted with their deployment of ADTRAN's vWLAN solution and have now planned to have all future WLAN controllers be virtual.

**EN1650A** November  
Copyright © 2011 ADTRAN, Inc. All rights reserved. ADTRAN believes the information in this publication to be accurate as of publication date, and is not responsible for error. Specifications subject to change without notice. ADTRAN, Bluesocket and vWLAN are registered trademarks of ADTRAN, Inc. and its affiliates in the U.S. and certain other countries. All other trademarks mentioned in this document are the property of their respective owners.

ADTRAN products may be subject to U.S. export controls and other trade restrictions. Any export, re-export, or transfer of the products contrary to law is prohibited. For more information regarding ADTRAN's export license, please visit [www.adtran.com/exportlicense](http://www.adtran.com/exportlicense)