

## Cisco Digital Signage: Flexible and Centralized Management of Digital Signage Displays

### Executive Summary

Cisco® Digital Signage is a comprehensive solution for flexible and centralized management and publishing of compelling digital media to networked, on-premise digital signage displays. Cisco Digital Signage builds on the power of the Cisco Digital Media System, enabling organizations to use high-quality and compelling digital media to easily reach customers, employees, partners, and students—anywhere, anytime.

### Digital Signage for Compelling Communications

Over the past few years, organizations have shifted how they deliver important messages to target audiences, including customers, employees, partners, and students. Businesses are moving away from static, printed communications to more dynamic, flexible, and customizable digital signage.

Digital signage—whether it is called narrowcasting, captive audience networks, out-of-home television, or electronic billboards—dynamically delivers high-quality information, including live and on-demand video, graphics, text, and other Web content, to a targeted audience, at a targeted time, through on-premise digital signage displays.

Companies are using digital signage to market to customers and communicate with employees, enhance customer experience, share rapidly changing information, provide directional information, and maintain consistent branding.

With this shift, marketing and advertising budgets are being directed to digital signage. Financial services organizations are taking advantage of this new medium to promote banking products and services in branch locations, resulting in increased sales and improved customer experience; they are also using digital signage to deliver corporate content to branch employees. Retailers are using digital signage to create richer, more interactive shopping experiences, including marketing directly to customers as they shop and at the point of purchase to reduce perceived wait times. Other industries such as government, education, healthcare, sports, entertainment, safety and security, and transportation, are also rapidly deploying digital signage as a tool to enhance customer and user experience.

### The Challenge

Organizations of all sizes are increasingly striving to improve external and internal communications. Companies face growing challenges in marketing to customers or communications to geographically dispersed employees—on top of concerns about innovation and competition. Digital signage is an attractive way to address all these issues, by transforming the customer experience and promoting richer communication globally.

However, until now, employing digital signage has typically required complex integrations of individual components from multiple, often small vendors, resulting in high total cost of ownership and limited scalability. Many early digital signage deployments were PC-based, vulnerable to the same security and maintenance problems associated with PCs.

Now, business users are increasingly demanding reliable and comprehensive digital signage solutions that provide flexibility along with low cost and fast speed of deployment.

These requirements point to the need for an integrated offering that handles creation, management, and publishing content to digital signs, while also flexibly supporting standard formats for live broadcasts and on-demand content publishing.

### **The Solution: Cisco Digital Signage**

Conceived and developed internally, Cisco Digital Signage is an example of Cisco innovation, building on the company's history of networking and video expertise. Cisco Digital Signage is a comprehensive solution for flexible and centralized management and publishing of compelling digital media to networked, on-premise digital signage displays:

- Built on the power of the Cisco Digital Media System to support publishing to both digital signs and desktops
- Flexible and integrated, making it simple for IT to install and nontechnical users to operate
- Appliance-based, using the reliability and security of the underlying network as a platform
- Ability to offer instant updates across groups of or individual displays, and content playback changes across the course of a day (planned or in real-time as changing conditions dictate)
- Backed by the strength and scale of Cisco support and partners; easy and quick installation, combined with the highest-quality ongoing support

### **Cisco Digital Signage Business Benefits**

With Cisco Digital Signage, organizations can:

- Improve corporate and executive communications—reach globally dispersed employees with consistent messaging or target specific locations with specific content
- Improve customer experience with real-time information and entertainment in the branch, in the store, anywhere
- Deliver compelling marketing and advertising to onsite customers—and use the Cisco Digital Media System to also reach them through the Web for consistent branding
- Accelerate new products and services introductions with more cost-effective and flexible employee training

With Cisco Digital Signage, organizations can create new opportunities that can transform their businesses, generate new revenue streams, and provide strategic advantage over competitors.

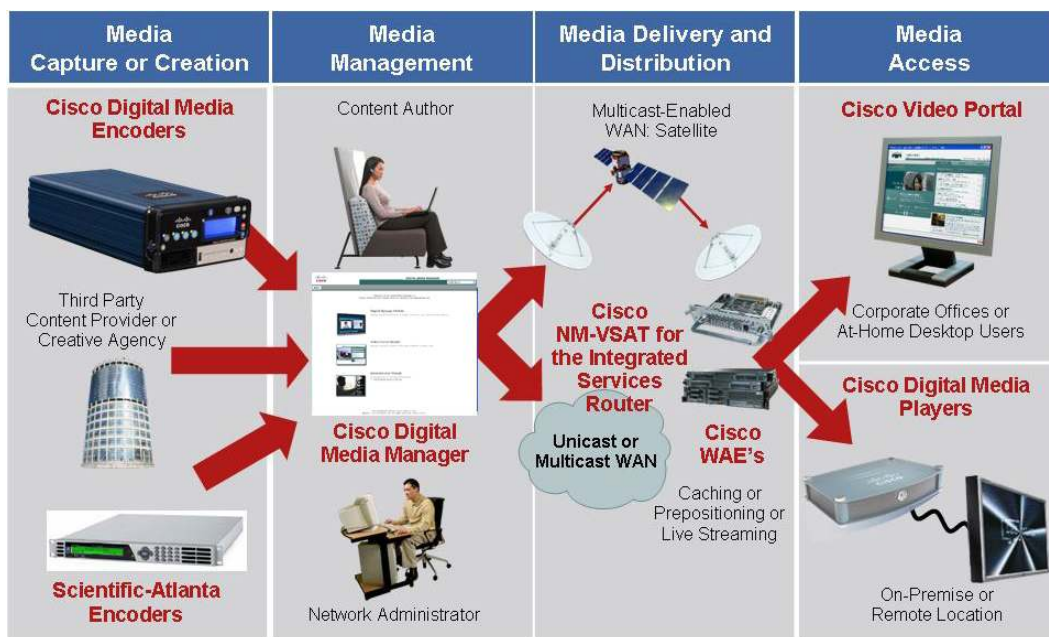
### **Integrated Components of Cisco Digital Signage**

Cisco Digital Signage (Figure 1) includes three product lines:

- Cisco Digital Media Manager: This Web-based media management application manages, schedules, and publishes digital media to digital signage displays. It provides flexible tools for users to manage content and approval flows, schedule instant and future content playback, create playlists, and remotely control digital displays. It supports the ability to customize signage screen layouts and populate content with an easy drag-and-drop format.

- Cisco Digital Media Player: The Cisco Digital Media Manager publishes content to and manages networked Cisco Digital Media Players. The Cisco Digital Media Player is a highly reliable IP-based hardware endpoint that handles the display and playback of digital media content—including high-definition live broadcasts and on-demand video, Flash animations, text tickers, and other Web content—across digital signs.
- Scientific Atlanta Encoder: For live broadcasting of standard-definition video to the Cisco Digital Media Player, Cisco offers the Scientific Atlanta D9032 Encoder with options for both analog and digital signage inputs. For more information about Scientific Atlanta Encoder models, visit: <http://www.cisco.com/web/solutions/sa/>.

**Figure 1.** Cisco Digital Media System: Cisco Digital Signage



Additional integrated components of the Cisco Digital Media System for Cisco Desktop Video are Cisco Digital Media Encoders that provide live and on-demand streaming digital media across an IP network, and the Web-based Cisco Video Portal which allows desktop users to quickly browse, search, and view digital media interactively over an IP network right at the desktop.

### Architecture

The Cisco Digital Media System employs the underlying network as a platform in combination with Cisco Wide Area Application Engines (WAEs) to automatically and reliably distribute and stream digital media content. Running the Cisco Digital Media System with Cisco Application and Content Networking System (ACNS) Software on Cisco WAEs provides optimal, secure performance and traffic management capabilities to:

- Support both live unicast and multicast streaming services
- Provide on-demand access to video and audio files cached locally for viewing at LAN speeds
- Reduce video bandwidth to minimize impact on network traffic

- Prioritize, secure, and separate video traffic over the network to help ensure optimized viewing
- Efficiently distribute video to a large and dispersed user base
- Manage and protect video assets on the network

### Service and Support

Cisco and its partners provide a broad portfolio of end-to-end services and support that can help you lower network total cost of ownership and increase business agility and network availability. This portfolio is based on the Cisco Lifecycle Services approach, which defines activities needed, by technology and by network complexity, throughout the six phases of the network lifecycle: prepare, plan, design, implement, operate, and optimize. For more information about these services, visit:

[http://www.cisco.com/en/US/products/svcs/ps3034/ps2827/ps2993/serv\\_group\\_home.html](http://www.cisco.com/en/US/products/svcs/ps3034/ps2827/ps2993/serv_group_home.html)

[http://www.cisco.com/en/US/products/svcs/ps3034/ps2827/ps2978/serv\\_group\\_home.html](http://www.cisco.com/en/US/products/svcs/ps3034/ps2827/ps2978/serv_group_home.html).

### For More Information

For more information about Cisco Digital Signage, visit <http://www.cisco.com/go/dms> or contact your local Cisco account representative.



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