

The Kollective Software Defined Enterprise Content Delivery Network (SD ECDN)

CLOUD ACCELERATION FOR WINDOWS 10 AND SCCM

Microsoft is changing the way enterprises are receiving platform updates. Cloud distribution places new capabilities in the hands of the user community faster and more securely than ever before. Addressing feature updates, system patches and security releases becomes a monthly occurrence that blows away the notion that IT organizations can take their time managing the change.

With this change comes a heightened focus on the timeliness of updates, particularly in enterprise-wide installations where the volume of users and the frequency of updates challenges legacy methods of distributing company defenses. Microsoft enterprises will be forced to focus on new ways of meeting the requirements of the following:

- Windows 10 Deployment
- SCCM Acceleration
- Timely Security Updates

Windows 10 Deployment

On January 14, 2020, Microsoft extended support for Windows 7 will come to an end and Windows 10 as a Service (WaaS) will become a de-facto standard. Reaching the more than 1B devices on pre-Windows 10 versions before this date is a challenge that requires a vastly scalable approach to software distribution. Simply put, conventional methods don't stand a chance of supporting corporate IT's need to make the date.

SCCM Acceleration

Microsoft's System Center Configuration Manager (SCCM) is designed to manage systems that transcend the Microsoft footprint to include other operating systems, pervasive in the marketplace. Market leaders are rightfully looking for peer-assisted options to reduce intervals from weeks and months to days and hours. Accelerating the distribution of updates is paramount to staying ahead of network threats and competitive features as file sizes and frequency grow. Enterprises will be challenged to distribute files ranging from 1GB security updates every month to 4GB Windows updates semi-annually going forward, breaking limited distribution models.

Timely Security Updates

Network security is wholly dependent on timing. Without timely updates, it is estimated that the ~\$5B in global ransomware costs in 2017 could exceed \$2T for global data breaches by 2020. Receiving platform updates after a virus was detected is simply too late. This is the challenge facing many organizations that depend on conventional, hardware-based deployment to stay ahead. Whether it is tremendous cost, limited scalability or sheer inability to meet demand, organizations, like yours, are turning to cloud-based solutions that leverage “peer power” to remain relevant.

The Critical Role of Peer-Assisted Technology

Enterprises are starting Windows 10 migration projects, but a major concern is scaling operating systems deployments fast enough to finish ahead of the Windows 7 End of Life date. Collective leverages a next-generation peer-assisted technology that can reach the largest enterprise installations and shorten deployment timelines.

With market-transforming capabilities come new challenges to conventional enterprise distribution methods. These are limited by their ability to serve the sheer volume and size of a Windows 10 deployment. Most conventional methods depend on a growing network of appliances to serve the needs at the edge. This simply won't cut it when it comes to large-scale, high-speed deployments.

With the promise of a single method of reaching all relevant network elements to provide remote control, patch management, software distribution, operating system deployment, network access protection and hardware and software inventory management, the efficacy of Microsoft's SCCM solution will depend heavily on its ability to reach the user community ahead of tangible security threats.

To help SCCM bear the load, Microsoft recommends a peer assisted solution. Michael Niehaus, Director, Windows Commercial, says: *“We recommend having a peer-to-peer mechanism in place in order to enable efficient distribution of these large migration packages that would be pushed around your network. With these in place, 90% of the traffic can be shifted away from that core Distribution Point and out to the edges of the network”*

A peer-assisted software infrastructure such as Kollektive's distributes feature updates and deploys platform changes efficiently and securely across your existing network architecture with no new hardware while reducing the load on existing network resources. Additional efficiencies include the ability to repurpose existing, dedicated assets and simplification of IT operations by eliminating complex management of distributed hardware.

With peer-to-peer distribution, 90% of traffic can be shifted away from core Distribution Points out to the edges of the network, significantly accelerating installations and upgrades.

Kollektive Smart Peering

Kollektive for SCCM allows IT personnel to distribute software packages and updates by leveraging Kollektive's Software Defined Enterprise Content Delivery Network (SD ECDN). Kollektive SD ECDN is a software-based network overlay that facilitates adaptive, continuously optimizing, fully distributed content delivery. Its formation and operation are fully software-based, providing the flexibility, agility, and central control commonly afforded by software-defined systems.

With Kollektive SD ECDN, you leverage a single investment to address all your critical content delivery challenges.

Kollektive is unique among peer-assisted solutions. Unlike peer-to-peer options that broadcast updates across the network and rely on a response from the entire network footprint to determine a suitable path for updates, Kollektive maintains a top down view of the network topography which means that it automatically adjusts to network changes prior to distribution and picks the most logical, least resource dependent route from the onset. The difference means less load on the network with more proactive mapping.

Kollektive's software-defined solution will securely and efficiently update previous versions of Windows using a technology that has been widely adopted by the largest global enterprises to distribute complex digital assets over the last decade. In contrast to conventional methods, which rely on installing physical distribution points throughout the network, peer-assisted technology leverages the computing power of existing PC's to reach their cohorts throughout the enterprise.

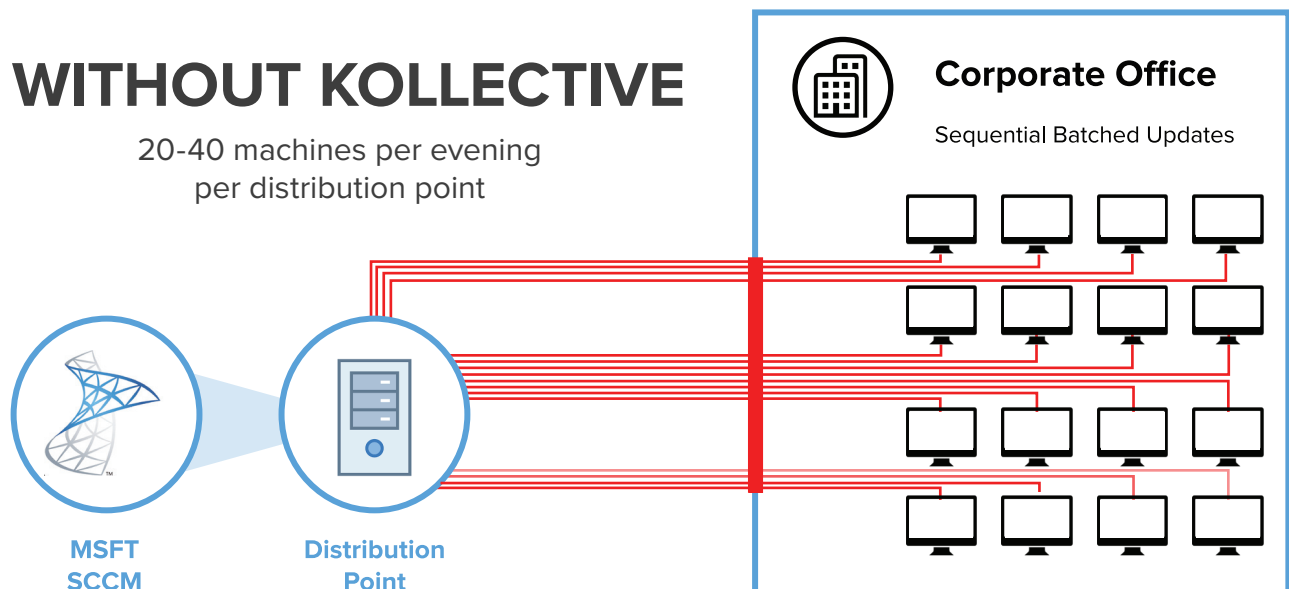
As each PC incrementally receives the Windows 10 update, it in turn distributes the update to additional machines on the local network reducing the network load as well as the reliance on legacy hardware-based distribution points. The effect is an exponential reduction in time to reach the edges of the global enterprise, resulting in significant reduction in distribution time.

And because we have been perfecting the approach for more than a decade, we optimized the model through highly complex digital asset distribution channels.

Peer assisted vs. sequential distribution

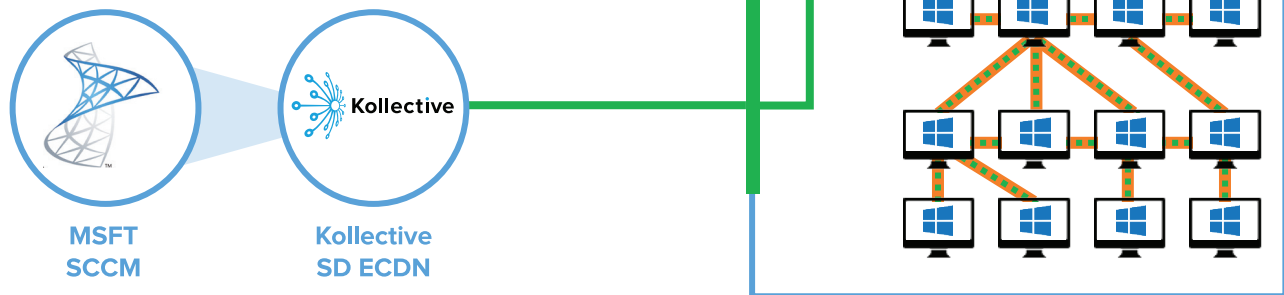
WITHOUT KOLLEKTIVE

20-40 machines per evening
per distribution point



WITH KOLLECTIVE

Thousands of machines per day



Summary

The Kollektive SD ECDN enables enterprises to distribute flawless software and video content to every employee without any network impact. The technology employs a centrally managed software defined network which moves the network load from the WAN to the LAN, resulting in significant improvement over traditional hardware solutions. The Kollektive SD ECDN solution is completely cloud-based and requires no additional investment in hardware or network capacity.

WHY KOLLECTIVE?

The largest, most successful, global companies trust Kollektive Technology to power their Enterprise Live and On-Demand video delivery, serving millions of users worldwide. From its software defined enterprise content delivery network (SD ECDN) to edge related IT tools like Network Readiness Testing and Network Analytics, Kollektive drives a powerful ROI and makes the flexibility of software defined networking a reality.

US +1 408 215 6400

UK +44 (0) 800 242 5602

APAC +65 9371 8000

kollektive.com

info@kollektive.com

