

- **Reduce application distribution times to remote branches by more than 95%**
- **Speed application deployment to branch offices**
- **Securely distribute application and security updates in less time**
- **Reduce the cost and complexity of managing multiple branch deployments**
- **Eliminate under-utilized servers and replace with a single, general purpose server with Microsoft Hyper-V and aCelera software**

Microsoft System Center Configuration Manager 2007 (SCCM) helps solve the critical management issues of the enterprise. It provides centralized, automated software provisioning, updating, and management of physical and virtual servers and desktops. Microsoft SCCM enhances IT managers' insight into, and control over, their infrastructures. By providing the primary way to manage desktops, IT organizations can ensure that systems comply with desired configuration states to improve systems availability, security, and performance network-wide.

### **Deploying and Managing Applications in a Distributed Enterprise**

Microsoft SCCM provides a cohesive management infrastructure for delivering, updating, and inventorying locally installed and virtualized applications to desktops throughout a distributed enterprise. To achieve this, Microsoft SCCM delivers the application package efficiently for installation on remotely distributed desktops. These application files can be quite large (for example, Office 2007 is approximately 566 MB), so delivering these files over the WAN can prove to be a challenge, especially considering that the average change windows are normally just a few hours. In order to ensure predictable delivery, a server is set up at the branch location and the application files are replicated during off-hours and then downloaded and installed to each local client in a subsequent change window.

#### **The Challenges**

While Microsoft SCCM provides a centralized system to efficiently manage the application lifecycle, the network in a distributed environment can cause additional challenges that result in greater complexity and diminished efficiency. These challenges include the following:

- Remote users lose productivity while waiting for large application/file downloads over the WAN.
- Files and data can be redundantly transmitted. For example, a marketing group and a sales group work in a branch but use two different packages of Office 2007, requiring transmission of both large packages across the network despite a high percentage of common components.

- Inventory data (OS, applications, drivers, etc.) is highly redundant across many of the inventory reports but is still sent back across the WAN.
- Multiple server roles must be deployed and managed at the branch as part of the infrastructure, giving way to higher TCO and a complex delivery infrastructure.

### **aCelera Virtual Appliance for Application Acceleration**

To meet the cost savings, performance, and scalability needs of distributed and virtualized application environments, Certeon has introduced aCelera, the first and only true application acceleration virtual appliance. aCelera software is supported in both data center and branch office servers on virtual machine operating systems, such as Microsoft Hyper-V. aCelera also supports Microsoft SCCM and Microsoft App-V, and delivery protocols, including BITS, HTTPS, HTTP, SMB, CIFS, and RTP. aCelera software, with its embedded Application Acceleration Blueprints, which allow for Layer 7 knowledge of application traffic, delivers a 95% reduction in application distribution and response times over the WAN. aCelera accelerates the application flow between centralized server farms and the branch by minimizing network traffic, decreasing the number of packet flows across the network, eliminating redundant transmissions, and reducing application chattiness. The results are dramatically reduced application distribution time and exceptional scalability with less complexity.

Effective application acceleration techniques, such as Certeon's unique Stream Based Differencing, can identify and reduce application traffic to only the essential data objects (i.e., changes). By reducing the amount of data traffic sent over the WAN, application response time can be dramatically improved. With its application fluency, aCelera understands how these elements are used and thus can make a more accurate identification of these data streams and enable industry-leading acceleration. Customers can consolidate Microsoft SCCM servers into centralized data centers without sacrificing performance for remote branch deployments.

aCelera virtual appliances can also be provisioned and monitored by Microsoft System Center Virtual Machine Manager (SCVMM) for centralized management of the entire virtualized infrastructure.

# Application Acceleration Blueprints™ Microsoft® System Center Configuration Manager

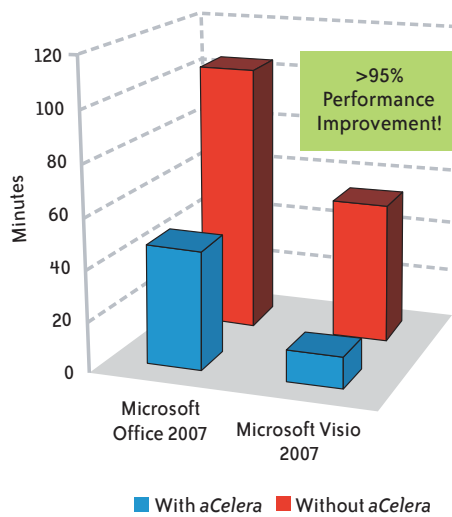
*“Certeon’s aCelera Virtual Appliance maximizes the performance benefits which Microsoft App-V and SCCM bring to these environments, while at the same time directly contributing to lower application management labor costs.”*

— David Greschler,  
Director, Integrated  
Virtualization &  
Management Strategy,  
Microsoft Corporation

## Using Certeon aCelera with Microsoft System Center Configuration Manager 2007

Certeon aCelera creates a virtualized distribution infrastructure as an extension of a centralized Microsoft SCCM solution. aCelera software enables Microsoft SCCM traffic to be de-duplicated and compressed, reducing application distribution times to remote branches by more than 95%.

### SCCM File Acceleration with aCelera WAN: T1, 200ms latency



The increased network performance from aCelera software enables the following results:

- Applications and updates become instantly available for on-demand delivery to branch offices while significantly reducing WAN delays.
- Packages with common components are recognized by aCelera and their delivery is de-duplicated so that only the delta differences between files are transmitted over the network, saving time, bandwidth, and storage.
- Inventory data is accelerated and de-duplicated between the data center and branch sites, reducing the complexity and delay of administrative tasks.
- Branch servers with multiple roles can be replaced with a single server running Hyper-V and the aCelera virtual appliance software, reducing TCO and administrative complexity.
- aCelera optimizes HTTPS traffic over the WAN, enabling the secure acceleration of applications.

## Benefits for Microsoft SCCM Administrators

aCelera’s benefits for administrators of Microsoft SCCM environments are clear and demonstrable:

- Microsoft SCCM deployments, which can be slowed by complex setups and decentralized server deployments, can be rapidly set up and ready for application deployment to branch offices in the shortest amount of time.
- Application deployments and security patch updates are dramatically accelerated, reducing the time to apply these critical updates.
- Certeon’s aCelera dramatically reduces the overall cost of managing multiple branch deployments.

## Microsoft Application Acceleration

aCelera virtual appliance software is uniquely optimized for Microsoft applications such as Microsoft Office, MOSS, and Exchange, as well as Hyper-V, SCCM, and App-V environments. Certeon’s aCelera with Application Acceleration Blueprints provides optimum performance, security, and scalability for these applications when accessed over a WAN. The results are the lowest response time and the highest productivity possible for all remote branch office employees.

### aCelera Benefits:

#### Speed

aCelera WAN optimization and application acceleration reduces the response times of applications by more than 95%.

#### Scalability

aCelera enables the transmission of more application data without the need for more bandwidth. aCelera scales on demand as additional system resources (CPU, memory, and disk) can be added to virtualized servers through Microsoft SCVMM. aCelera supports more concurrent accelerated connections than any other WAN acceleration solution.

#### Total Cost of Ownership

aCelera software leverages the cost savings of virtualization, reducing IT capital and operations TCO by 60%.



4 Van de Graaff Drive  
Burlington, MA 01803  
USA: 781.425.5200  
Toll Free: 877.221.6688  
EMEA: +33 (0)1.79.97.48.66  
info@certeon.com  
www.certeon.com