

Can you streamline IT
operations, drive greater
efficiency and reduce costs?

CA Client Automation provides full IT operations lifecycle automation capabilities for inventory tracking, software management, system provisioning, remote control and migration across your entire IT computing environment whether physical or virtual.

Executive Summary

Challenge

As traditional IT infrastructures evolve to incorporate new paradigms such as system and application virtualization and a highly mobile workforce, the complexity of the IT environment continues to grow. This creates new management challenges for IT, as you must continue to discover, enable, monitor, maintain and administer this new mix of physical and virtual technologies and the daily lifecycle operational tasks that are required to keep your corporate resources productive and secure.

Opportunity

CA Client Automation provides fully automated lifecycle management features to help you streamline the processes of:

- Deploying and managing existing physical and virtual environments with a single policy based solution
 - Managing operating system and application installations, deployments and patching whether systems are physical or virtual
 - Securely and consistently manage end points that are not connected directly to your corporate network
 - Efficiently manage your highly mobile workforce using location awareness
 - Supporting corporate sustainability initiatives such as Green IT power management practices
 - Discovering, tracking and analyzing IT asset inventory
 - Standardizing and automating deployment or migration of Windows based desktop systems
 - Consistently manage both your corporate owned devices as well as user owned (BYOD) and mobile devices leveraging the integration between CA Client Automation and CA Mobile Device Management
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Benefits

CA Client Automation is designed to maximize the efficiency and responsiveness of all IT lifecycle management tasks across physical and virtual environments. Regardless of the complexity of your infrastructure, CA Client Automation helps IT to improve the quality of its computing services while helping to reduce operational costs, mitigate risk and increase productivity throughout your enterprise.

Section 1:

The Increasing Complexity of the IT Environment

Traditionally, IT has focused on providing and managing physical systems that delivered your enterprise the access to applications, data and productivity tools necessary to drive and support the business. In today's environment, IT is under pressure from the business on a number of fronts. In addition to staying on top of the daily operational processes associated with traditional IT environments, there is pressure to better enable workforce mobility, leverage employee-owned devices (BYOD) as well as mobile devices such as smart phones and tablets, more efficiently prevent data leaks from client devices, all while reducing overall operational costs.

In response to these pressures, there are a number of alternatives to the traditional methods of delivering applications and other productivity tool access which incorporate various forms of virtualization. However, the physical environment will not become obsolete. In fact, as the adoption of alternative environments increases, the need to manage these highly heterogeneous mixes of physical and virtual technologies across multiple platforms and their supporting infrastructures are being created. These changes are increasing the complexity of management simply because the resulting infrastructure has many more moving parts that must be orchestrated to deliver the experience your end users have come to expect.

Drive operational efficiency through automation

CA Client Automation is designed to provide comprehensive visibility into the IT asset base and automate the daily operational processes necessary to support the IT environment. In addition to traditional physical environments, the solution provides unique capabilities for managing virtual server, desktop and application deployments. So, regardless of the complexity of your IT environment, CA Client Automation can help streamline the time-consuming and labor-intensive tasks of your IT organization, helping you run more efficiently and cost-effectively than ever before.

Asset discovery and inventory

Utilizing such key functionality as automated discovery of hardware and software inventory, intelligent asset analytics, software usage monitoring and extensive cross-platform reporting, CA Client Automation provides you with a robust set of device tracking and identification capabilities that are critical for properly managing your physical and virtual infrastructures. Some of the relevant features of this functional area are:

- Discovery of systems through traditional IP-based or via more sophisticated passive discovery methods
- Generate detailed hardware inventory with serial numbers, normalized CPU information, OS and patch level information. The hardware inventory is fully extensible via configurable WMI inventory modules as well as scripting to collect unique data fully integrated with reporting solutions
- Generate detailed software inventory through a variety of methods including signature, heuristic or Intellisigs scanning.

- Heuristics detection collects broad software information by interrogating the operating system (MSI-database registry). When the management system detects new software titles or versions it is automatically categorized.
- Signature detection searches for very specific versions and patch levels and provides a more accurate detection. This can be used to implement patch management policies. Signatures are developed by our CA Technologies' content research team and new content is automatically downloaded daily. You can also create your own signatures to detect and inventory home-grown applications.
- Intellisigs (Intelligent signatures) is an innovative method of detecting software applications. It is script based and can detect new versions, editions and patch levels without requiring updates to the Intellisigs (which is needed for traditional signature based detection). Intellisigs are also developed by the CA Technologies' content research team and downloaded on a continuous basis. You are also able to create your own Intellisigs which are much more resilient to new versions being deployed, reducing the need to update your signatures on a continual basis.
- Collect usage data on key applications for license management purposes. The system can function in two ways; allowing active enforcement of license limits with users and queuing or off-line metering for reporting purposes.
- Scan systems against the Federal Desktop Core Configuration (FDCC) / Security Content Automation Protocol (SCAP) standards set forth by the US Federal government to more easily identify and report on systems that are out of compliance.
- Collect inventory data without installing a dedicated management agent with the use of Non-Resident Inventory capabilities that enable users to provide inventory data through several methods such as visiting a corporate website, clicking a link in an email message, login-scripts or even using a USB memory stick.
- Get accurate inventory in virtual desktop environments. Advanced technologies such as Linked Clones (VMware View) and vDisk/Machine Create Services/Provisioning Services (Citrix XenDesktop) can create issues for more traditional inventory solutions. CA Client Automation will keep accurate inventory across all these environments including non-persistent/floating virtual desktops. The solution even provides you visibility into the relationships between the host and guest systems inside your infrastructure making it much easier to manage these systems.
- Produce high-level analytics that help quickly identify risks in the environment and promote further investigation into asset deployment, performance metrics, power setting drift and much more. This detailed analytical data can help you determine which automated policies to configure to manage your unique environment.

OS installation management

Deploy and reimage existing systems with a comprehensive approach to operating system installation management which spans everything from bare metal buildups to rebuilds after crashes.

- Install and configure Windows and Linux operating systems and download a predefined application set. Administrators can also install VMware ESXi and Citrix XenServer.
- Utilize the ImageX tool within the Windows Automated Installation Kit (WAIK) and run from WinPE to capture images from FAT, FAT32 and NTFS installations.

- Read, manage and deploy standard images made with other supported image formats.
- Supports the deployment of Windows images to SAN as well as virtual Wake-on-LAN.
- Detect, rebuild and restore the most recently known configuration automatically in the event of a crash.

Software delivery

With management features encompassing everything from the policy-based distribution of software to the maintenance of system configurations and rollout across multiple platforms and locations, CA Client Automation streamlines the installation and updates of software across your heterogeneous business environment.

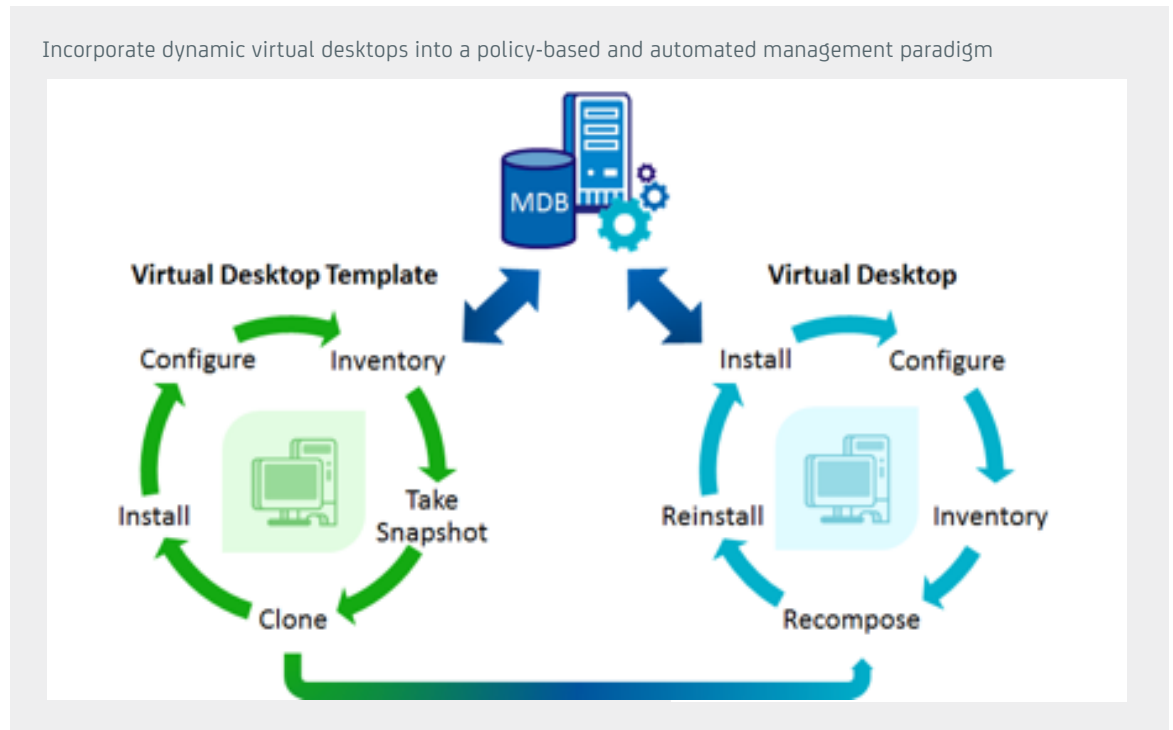
- Centralize the control and management of installing, reinstalling, configuring and uninstalling physical and virtual applications across a full range of enterprise devices.
- Create packages for homegrown or customized applications in Windows-centric Microsoft Installer (MSI) format, or standard PIF packages for Linux and Mac operating systems.
- Group software by business function, application, vendor or other categories for easy standardized distribution by business and computer groups.
- Provide an end-user self-service catalog allowing users to re-install or upgrade approved software at their own convenience.

Virtual desktop management

CA Client Automation manages software deployment and entitlements as well as inventory for virtual desktop infrastructures (VDI), supporting both VMware View and Citrix XenDesktop environments. This helps to simplify the complexity associated with managing virtual desktops alongside traditional physical environments from one comprehensive management system.

- Detects, monitors and visualizes the relationships between the host and guest systems.
- Retains version history of the golden templates and images and detects and manages differences between virtual desktops and golden templates.
- Monitors for activities such as reset and recompose of the golden images in the VDI environment and take automated policy-based actions regarding redeployment or reactivation of software allowing IT flexibility in image creation and maintenance that can be optimized based on storage or network constraints.
- Collects and maintains accurate hardware and software inventory across various VDI deployment models, including non-persistent or storage/network optimization models from VMware or Citrix.
- The CA Client Automation Patch Management solution can intelligently patch golden images or individual virtual machines, providing administrators a high degree of flexibility when the distribution high priority security patches are required.

Figure A.
VDI Management



Patch research and management

To help you deliver consistent and reliable software patch management, CA Client Automation addresses each step in the process—from monitoring and discovery through research, packaging, testing and deployment, with around-the-clock support from the CA Technologies Content Research Team.

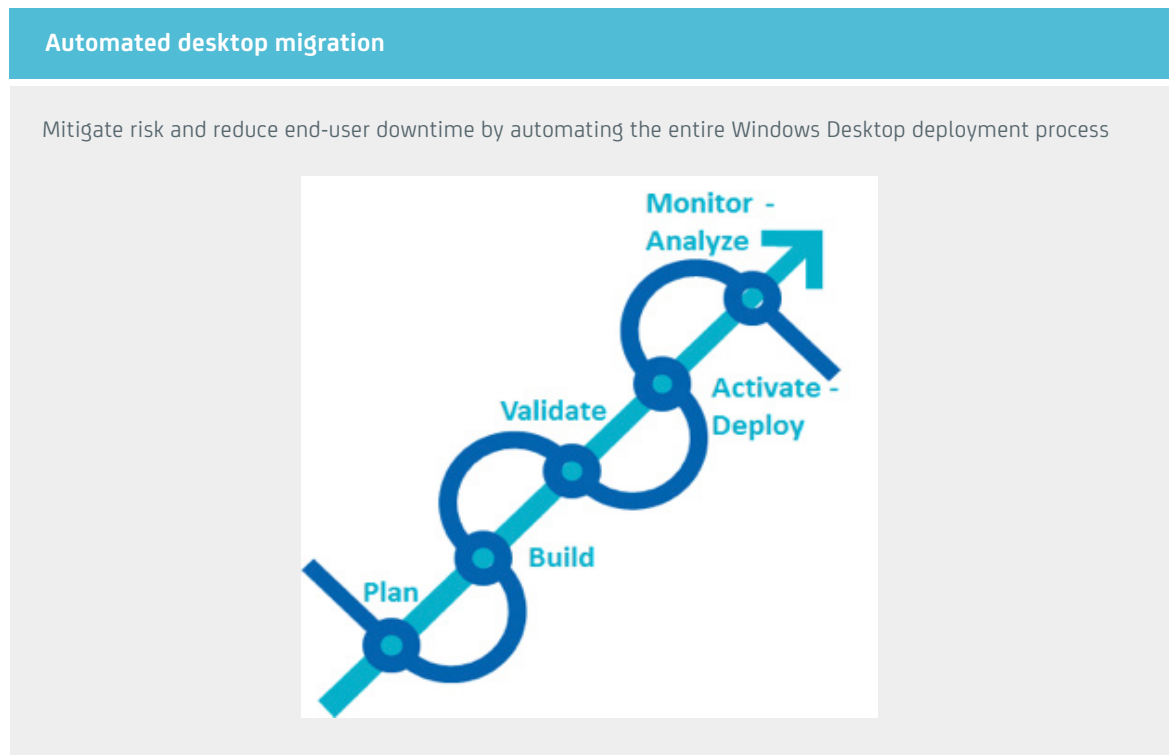
- Implement a formal patch testing phase that assesses patch packages and metadata against the required system configurations.
- Automatically initiate package deployments using defined policies, apply pre-and post-requisites, dependencies and rollout structures during installations.
- Monitor all patches and packages to ensure they remain valid and in effect, and that new or crashed systems are automatically brought to the most up-to-date patch level.
- Utilize unique monthly delta roll-ups of new patches to enable administrators to deploy a single patch package each month to efficiently bring systems up to the required baseline.

Automated windows desktop migration

By providing automation, you will have greater control and improved execution of change initiatives, such as lease refreshes and replacement of desktop systems that may have crashed as well as the enterprise wide deployments of new Windows desktop operating systems.

- Leverage pre-built IT process automation workflows and web-based wizards and templates to streamline and standardize system deployments and migrations. CA Client Automation allows standardization and personalization during the migration process allowing IT administrators greater flexibility when planning company-wide, departmental or individual system refresh activities.
- Save unique data and settings to a local machine or server for later migration or transfer them in real time via a connection between the old and new PCs.
- Leverage powerful features for account creation, redirection, security and tools for migrating user profiles.

Figure B.
Automated
Migration



Remote desktop control

CA Client Automation enables your IT administrators to reliably and securely access, control, view, manage, and modify remote desktop and mobile systems—no matter how far they may be from the main office.

- Enforce policies through template-based remote control configurations that can be applied to groups of computers to prevent unauthorized changes.
- Securely manage remote systems using features for exclusive control, shared control, stealth view, Web viewer, and classroom modes.

- Transfer files, chat with the host user, record remote sessions for later playback, or reboot the host system.
- Enable cross-platform remote management from Windows to Linux, or Windows to Mac OS X.

Mobile end point management with CA MDM

CA Client Automation supports an out-of-the box integration with CA Mobile Device management (CA MDM) to provide comprehensive management of all end point devices including mobile operating systems. CA MDM is a scalable on premise and SaaS solution which provides enterprises the capabilities to configure, secure and manage mobile devices as well as public and enterprise apps for all leading mobile platforms in the market place.

This key integration provides a method to collect the CA MDM device hardware and software inventory and import it into CA Client Automation. This will give IT Administrators a comprehensive and holistic view of combined assets managed by CA Client Automation and CA MDM. It also has the added benefits of making the asset information from CA MDM available to your integrations with CA Service Desk, CA IT Asset Manager, CA Asset Portfolio Management and any other integration to external systems you may be supporting.

With the availability of this integration between CA Client Automation and CA Mobile Device Management, busy IT teams can add the management of mobile devices to their management of desktops, laptops, servers and virtualized resources. This allows the appropriate and comprehensive management of the different device types; from corporate owned assets through employee owned laptops to mobile devices.

Section 2:

Sophisticated Management for Today's Complex Environments

CA Client Automation has been deployed in some of the largest and most distributed environments. The ability to work in highly secure and complex world wide networks is one of the strongest non-functional features of the product.

- The solution can manage systems inside and outside the corporate firewall without opening ports beyond the standard HTTPs (Port 80); this is achieved via the extended network connectivity gateway.
- Strong security features such as FIPS 140-2 Compliance for communications, data transfers and certificates for communication throughout the management infrastructure.
- IPv6 support in both pure and mixed IPv4/IPv6 environments.
- Multiple deployment methods for software, from simple shares to configurable data transfer protocols that can optimize bandwidth usage.
- The solution supports location awareness, which is the ability to efficiently and effectively manage your workforce based on their current location, to support the consistent management of end systems used by highly mobile workforces.

- You are able to configure alerts, set threshold values and monitor the overall health of the CA infrastructure to ensure the ongoing, uninterrupted and efficient management of all your IT systems and devices, keeping your end user productive and your enterprises systems safe and secure.
- Agnostic approach to new technologies around application and desktop/server virtualization. The system provides manageability across Microsoft and VMware application virtualization technologies as well as VMware and Citrix VDI solutions. This provides flexibility and consistency for most large enterprises that cannot standardize on a single technology platform.
- A vast array of functionality allows for integration with third party systems as well as other CA Technologies products. This includes an out-of-the-box integration with CA Mobile Device Manager. This integration allows the appropriate and comprehensive management of different device types; from corporate owned assets through employee owned laptops to mobile devices.

Section 3:

The CA Technologies Advantage

A strategic approach to managing your IT infrastructure

CA Client Automation helps you develop a targeted and strategic approach to managing systems throughout your organization. As such, the solution helps you:

- **Reduce operating costs:** CA Client Automation drives informed IT decision-making based on key performance indicators (KPIs) and executive-level views of critical device information. Through easy, centralized access to up-to-date device information, you can more proactively identify cost-cutting opportunities, avoid redundant and unnecessary spending, optimize power consumption and make cost-sensitive decisions that support business operations.
- **Improve operational efficiency:** CA Client Automation helps improve IT efficiency by streamlining and automating the day-to-day processes associated with the management of your IT systems. It simplifies the management of complex environments, whether physical or virtual, improving IT productivity and freeing up valuable resources to focus on the development and deployment of strategic technology initiatives.
- **Mitigate risk:** CA Client Automation helps you keep pace with the high volume of changes, patches and updates necessary to keep your environment secure and running at an optimized level of efficiency. The solution also helps mitigate the operational risk associated with unlicensed software or unauthorized and unmonitored devices. In addition, CA Client Automation helps reduce the financial risk of noncompliance by providing the important asset information necessary to meet any regulatory mandates.

To learn more about CA Client Automation visit [ca.com](#).



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