

# **Enhancing Virtual Environments**

When CIOs provision desktops and mobile devices for their users, they have a variety of products to help them—from Microsoft, Citrix, VMware and others. Some of our product functionality overlaps with these offerings, but no one provides the ease-of-use, feature range and depth of Ivanti.

For desktop and mobile provisioning we offer:

- DesktopNow and DesktopNow Plus
- DataNow

So how do you handle a sales situation in which you're told, "We don't need Ivanti for user personalization, application access control or managing server resources. We have that covered"?

Well, Ivanti is better and we have the proof. First, though, let's take a look at what CIOs really care about when it comes to provisioning desktops and mobile devices for their users.

## Automation, Security, Performance

 Businesses want to provision employees quickly—in seconds if possible. They need to migrate, upgrade or simply followed to alternative workstations. And they want to deploy applications and share data without encountering barriers, delay or uncontrollable service costs.

### Compliance

• Businesses need the right level of auditable, secure access for every individual in every situation regardless of location, network or device. What's the right level? It's the level that ensures compliance while being transparent to the user.

#### Cost Avoidance

 The move to virtualized desktops for cost avoidance and improved service often causes storage, network and performance issues. It can also impact business continuity and create havoc for the help desk.

# Disaster Recovery, Business Continuity

 Disaster recovery and business continuity solutions should be flexible, while avoiding costs, resource constraints, complexity and downtime—a tall order. Our flexibility, ease-of-use and range of functionality are unmatched. Here we take the top 30-something customer pain points and map them against a CIO's main business drivers. The key is to focus on the pain that has the most pressing business case associated with it.

#### The Ivanti Solution

IT Director's Pain Points	CTO Business Drivers			
			Cost	DR /
Use Cases	Automation Compliance	Avoidance	Continuity	
Reduced login times	4	×	4	×
Location-based Printing	4	4	×	✓
Fewer Gold Images to manage	4	×	4	×
Smarter licensing costs	4	4	4	×
Desktop lockdown	4	4	4	×
Application lockdown	4	4	4	×
Consistent end-user experience	4	4	4	4
GPO replacement: ADM, ADMX	4	×	4	×
Fine grain privilege management	✓	×	✓	×
Network access control	✓	✓	×	×
Intelligent session reconnect	✓	×	×	×
Smart access to key applications	4	4	×	×
Eliminate user profile issues	4	4	4	4
Intelligent package management	4	×	4	×
Zero Day and malware lockout	4	4	4	×
Self-healing features	4	4	4	4
Flexible IT management controls	4	4	×	×
Self-service rollback (Personalization)	×	4	4	4
User productivity: personalized apps	4	×	×	×
Fast recovery/replacement for lost devices	×	4	4	4
Advanced local cache for offline users	4	4	4	4
Application-level personalization	4	×	4	×
Improved OS migration	4	×	4	4
Personal data recovery	4	4	4	4
Locked down kiosk-style controls	4	4	×	×
Compliance enforcement	×	4	×	×
Reduced network traffic	4	4	4	4
Script & batch file management	4	×	4	×
Context aware configuration	4	4	×	✓
Increased app. performance and user density	4	×	4	4
Real-time file & registry keys saved	4	×	4	×
Fault tolerant environment	4	4	4	4

Those customer pain points are explained here:

Problem	Ivanti Solution
<b>Login time</b> —logging in to a desktop over a network takes too long.	Ivanti delivers automated, 'just in time' personalization to the OS and applications, reducing login time from minutes to seconds.
Location-based printing—Roaming users struggle to access local printers.	Ivanti combines context-aware conditions to control printers, drives and other settings based on where and how a user is connected. For example, device type or name, IP address range or MAC address can identify user location.
Golden images—Managing images is cost and resource intensive. A new one is required for every group of users that require something different.	Ivanti can modify an image 'in-flight,' tailoring the delivery to the recipient's requirements, negating the need for separate gold images

Problem	Ivanti Solution
<b>Licensing</b> —It's often difficult to identify and enforce software licenses within a large, distributed desktop estate.	Ivanti controls which users or devices have permission to run named applications. It places limits on the number of application deployed, which devices or users can execute an application and for how long. This control from Ivanti is recognised by Microsoft for enforcing device-based software license control.
Desktop lockdown—Users alter printers, change the start menu, add device drivers, change screen savers, etc. Any of these could potentially cause confusion or errors.	Ivanti offers fine-grain control of what a user can change, enforcing settings that ensure the desktop remains in a known good state
<b>Application lockdown</b> —Users remove toolbars, alter security settings, and access items they shouldn't.	Without altering the underlying source code, Ivanti enables selected parts of the operating system or specific Windows application content to be secured by preventing access, hiding it or disabling the function.
Consistent end-user experience—When a user moves between different desktop delivery mechanisms (laptops, physical, virtual), the user experience can vary dramatically.	Ivanti abstracts users' personalization settings from the OS and applications. We deliver the users' familiar experience (desktop settings, application settings, and data) to any device.
<b>Group policy objects</b> —Changing group policy is a massive and slow undertaking, prone to errors and redundancy.	The Ivanti visual policy model replaces all batch and scripting needs, reducing costs and complexity.
Fine-grain privilege management—Granting administrative rights solves many user issues. However, it violates compliance and puts the enterprise at risk.	Ivanti can dynamically assign and revoke elevated privileges based on policy, providing complete compliance adherence and strict security enforcement
<b>Network access controls</b> —The activity or the role of the user needs to determine access to specific network resources.	Ivanti dynamically assigns and revokes network access rights based on user name, location or device, ensuring compliance and enforcing strict security.
Intelligent session reconnect—For occasionally connected devices, such as roaming tablets, reconnecting to an active session can be time consuming and affect security settings.	Ivanti optimizes profile and registry settings based on extensive trigger points, streamlining session configuration. Context-aware conditions ensure security is applied when users reconnect, greatly speeding up the process.
Smart access to key applications—Prevent unauthorized users from connecting to corporate resources as well as trusted users attempting to connect from insecure locations.	Ivanti employs a list of extensive conditions to govern access to key applications by user, device used, location and how the users connects to the corporate environment.
Eliminate user profile issues—When a profiles becomes corrupt, the only recourse is deletion and asking users to manually recreate their environments.	Ivanti provides on-demand per user, per application snapshot and rollback capabilities to quickly and simply remediate profile inconsistencies.
Intelligent package management— Managing multiple application packages, and 10s of thousands of user profiles, is resource and time intensive.	We dynamically inject personalization and policy to tailor a single application package to the various needs of users. Having just one package saves disk space, costs, and time.
Zero day and malware lockout—Rogue application execution causes many IT breaches. Typical whitelist solutions can easily be circumvented	Ivanti Trusted Ownership technology ensures only trusted applications, installed by named users (administrators) are allowed to execute, while user-introduced applications are prevented from launching by default.

Problem	Ivanti Solution
Self-healing—A user can maliciously or accidentally make changes to a desktop environment that cause downtime and increase support costs	Innovative self-healing capabilities enable real-time remediation of malicious or accidental changes to files, processes, services or registry items, protecting critical application and operating system components.
Flexible IT management controls—Large enterprise environments require comprehensive context-aware controls in order to ensure efficient management.	Ivanti provides a comprehensive list of conditions and actions to configure desktop environments, along with flexible trigger points to enable complete context-aware desktop management.
Self-service rollback—Should a profile consistency error or corruption occur, the only recourse is to delete the entire profile, with all the user's personalized settings	Ivanti offers a web-based, self-service portal where a user can rollback personalization settings to a known good state, thus reducing support calls and costs.
User productivity: personalized applications—When users resize windows, customize dictionaries, and add tools bars to their applications, these customizations are lost when they're migrated to a new OS or logon to a new, static profile machine.	Ivanti abstract user customization and dynamically applies it every time an application starts, delivering a known working environment, regardless of operating system, application delivery mechanism or other changes.
Fast replacement of lost devices—Issuing a replacement device (laptop, tablet or smartphone) wastes valuable time as users reconfigure their environment to be recognizable	Ivanti offers a complete restoration of the lost device, maximizing productivity. It can easily wipe corporate data from lost or stolen tablets and smartphones.
Advanced local cache for offline users— When users work offline, they need their personalized settings to be present as if connected to the corporate network.	Ivanti supports offline and online personalization syncing, ensuring changes are never lost. Offline resiliency is built-in so mid-sync settings are not lost in the event of network outage.
Application level personalization—With roaming profiles, all application and operating system settings are saved at logoff and restored at logon, which causes profile bloat, corruption or slow logons.	Ivanti abstracts OS and individual application personalization settings and manages them in isolation, reducing profile bloat, enabling faster logons and more streamlined rollback in the event of profile inconsistencies.
Improved OS migration—Users need to migrate to a new or different OS without losing their familiar environment	The Ivanti profile abstraction technology allows users to easily migrate between any version of Windows while retaining their customizations, including the adoption of virtualized desktops or sessions
Personal data recovery—Crashed disks, dropped laptops and corrupted data require a reset of the user, which is time consuming and costly.	Ivanti dynamically recreates a user's last known state with minimum hassle, ensuring less downtime and no loss of customization.
Locked down kiosk-style controls— Restricting access to a subset of the OS and applications is vital in unsecure or poorly regulated arenas.	Ivanti can prevent access to specific applications as well as block or remove individual parts of applications or the operating system. This reduces complexity for the end user and secures the environment from malicious changes.

Problem	Ivanti Solution
Compliance enforcement—Controlling user, application and data access in an audited environment is often a legal requirement.	The Ivanti approach to application control, privilege management and lockdown, together with self-healing and highly granular auditing, complement your existing security and management controls. Ivanti helps increase compliance through better security while lowering costs.
Reduced network traffic—Moving large, roaming profile files for all users when they sign on causes massive network issues.	Ivanti dynamic, granular and on-demand personalization loads and saves only the profile settings required by the user when they need them. This reduces network data transfer during a 'boot storm.' Compressing the settings before transport further reduces bandwidth requirements.
	Additionally, all end-points communicate via web servers, to reduce network traffic, congestion and load between the web server and the main data store.
Script and batch file management—Writing and maintaining scripts is difficult and expensive IT, especially without version control or audit capabilities. Scripts and batch files typically execute in sequence, which means logon times are slow.	The Ivanti graphical, 'drag and drop' policy model eliminates batch and scripting needs, massively decreasing cost and complexity. Our multi-threaded engine executes actions in parallel, dramatically reducing logon times. Audit logon actions and use version control to rollback settings in case of configuration errors.
Context aware configuration—Grant user access based on the device type connecting to the corporate environment.	Ivanti can apply access to resources based on device type or name, operating system, IP Address or MAC address.
Increased application performance and user density—Rogue processes and memory, resource-hungry applications can reduce user productivity and block other applications from executing in a timely manner.	With its patented technology, Ivanti Performance Manager intelligently manages CPU and memory resources, allowing optimal application execution and maximizing user density on shared hardware.
Real time file and registry keys saved— Traditionally, file and registry keys are saved only at session end. This often causes profile corruption and synchronization issues.	Ivanti settings are saved to a local, virtual cache whenever they're altered and are re-synchronized to a central data store when applications are closed, assuring maximum reliability.
Fault tolerant environment—Servers fail, networks crash, data centers go dark. But the user expects the system to cope and to remain productive.	Ivanti offers a multi-tier architecture, based on proven, industry-standard solutions, designed to outperform DR expectations.

