




# The Softricity Desktop v4.0

## Virtually Anything is Possible™



- Overview of the Softricity Desktop ..... 1
  - Today's Corporate Desktop: Rigid, Costly and Unreliable ..... 2
  - The Softricity Desktop: Designed for the Always-On Enterprise ..... 3
  - Components of the Softricity Desktop ..... 4
  
- The Softricity Desktop in Action ..... 6
  - Business Projects ..... 7
  - Technical Solutions ..... 12
  
- Technologies Behind the Softricity Desktop ..... 16
  - Application Virtualization ..... 17
  - Application Packaging ..... 18
  - On-Demand Streaming ..... 18
  - Centralized, Policy-Based Management ..... 19
  - Intelligent Deployment ..... 20
  - Desktop and Web Availability ..... 20
  - Usage Tracking and Compliance ..... 20
  - Self-Service IT ..... 21
  
- Real-World Successes ..... 22
- Real-World Savings: The Softricity Return on Virtualization™ (ROV) Calculator ..... 23
  
- System Requirements ..... 24



**We live in an always-on world** where technology can enable instant access to information, goods and services. But software, because it needs to be deployed and installed on each machine it runs on, has created a complex, costly environment that cannot react quickly or effectively to change.

**The Softricity Desktop reinvents corporate computing** by making software as instantly available and easy to use as electricity – anywhere your users are in the world. Read on to find out how.

## Today's Corporate Desktop: Rigid, Costly and Unreliable

**\$5,392**

Annual cost of managing a corporate desktop

**\$7,785**

Annual cost of managing a laptop

Source: Leading Analyst Firm

Today's business desktop is awash in applications. Each installed application – plus patches and updates – requires lengthy regression testing and deployment processes before it reaches production. Because applications are only available where they are installed, users are tied to their computers. Handling their diverse environments, on everything from broadband to dial-up, and everywhere from headquarters and branch offices to airplanes, is a headache for IT and users alike. All this makes complex, yet critical, business projects such as operating-system (OS) migrations, security refreshes and disaster recovery plans even harder to complete.

The fact is, supporting applications and users consumes valuable time and resources. Furthermore, traditional technologies meant to help often do not have, on their own, the depth or scale to provide the end-to-end solution that the corporate world needs to deliver the required savings and efficiencies.

But what if...

... to get PCs – including laptops – up and running **you only had to plug them into your network**, and users would instantly get exactly the applications to which they have the rights – no matter where they are – with no application security risks?

...adding applications or upgrades to desktops, migrating operating systems, and ensuring business continuity were **as simple and fast as putting a file on a server** and changing an entry on a single console?

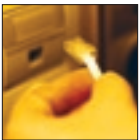
... the administrative and capital **costs associated with application management could be cut up to 80%**, while exceeding end-user satisfaction levels for even your most mobile and remote users?

All this is possible today. The Softricity Desktop transforms corporate computing by making software as instantly available and easy to use as electricity. Using patented Softricity technology, including application virtualization and on-demand streaming, it changes applications into network services that never need to be installed. The result is a highly scalable software environment that is securely deployed, managed and immediately available anywhere in the world at a fraction of traditional IT investments – delivering dramatic improvements in business agility and a superior end-user desktop experience.

## The Softricity Desktop: Designed for the Always-On Enterprise

The Softricity Desktop streamlines enterprise application management, transforming applications from static, hard-wired assets into on-demand network services, instantly responsive to your changing business needs:

### INSTANTLY ON



The Softricity Desktop virtualizes applications by enabling them to run without installation, turning software into portable

services available on-demand. Applications run reliably without failure or conflicts – no matter what other software is running on that computer – increasing user satisfaction and uptime. Deployments are accelerated by over 80% and the marginal cost of adding new users and assets is one-fifth that of traditional deployment methods.

### AVAILABLE ANYWHERE



All applications are instantly available anywhere in the world – from a user's desktop or a browser – without IT intervention. This is true in

virtually any scenario, regardless of whether the application is running on a desktop or server; whether the machine is the user's own computer or a device shared by many users; or whether the network is high-speed or dial-up. The Softricity Desktop even allows controlled application use when users are completely disconnected.

### SECURE AND STABLE



Softricity strengthens application security on many levels. Users are guaranteed to only get the applications they have the right to, and

the applications and licenses that run on laptops are protected from unauthorized use. Applications can even be locked down so that they can't be altered or used in unauthorized ways. And, because Softricity isolates applications from the operating system, it reduces the likelihood and limits the severity of security breaches and infections.

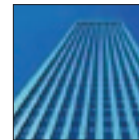
### INTELLIGENTLY MANAGED



Administrators simply set policies from a central console and the system takes care of the rest – determining who gets what

application in real-time, based on logic that considers user bandwidth, location and device. If users experience application issues, IT can remotely manage the client, diagnosing and remedying the problem without any end-user involvement or desk-side visits. Self-service capabilities let end users quickly get the applications and reports they need.

### BUILT TO SCALE



Designed for easy integration, the Softricity Desktop can be deployed as a complete standalone platform or as a modular virtualization

engine that plugs into Microsoft's systems management solution, after which on-demand streaming can be added as need dictates. Simple, fast sequencing and centralized management make it easy to virtualize and manage thousands of applications for tens of thousands of users in widely dispersed locations.

### COST-REDUCING



The Softricity Desktop eliminates costly application management lifecycle processes, including installations and regression testing,

resulting in significant savings. The Softricity Desktop also cuts many hidden costs. For instance, you can realize a four-fold increase in application up-time, making employees everywhere much more productive. You can also reduce over-provisioning of licensing, and license compliance risks, through real-time data on application usage.

## Components of the Softricity Desktop

The corporate desktop environment is neither homogenous nor simple. Although most users work from headquarters, others work from branch offices or telecommute using dial-up. Still others get their applications through a kiosk, or work from hotels and airplanes where they are totally disconnected from the network.

The Softricity Desktop is designed to provide superior support for all these users, wherever they are. The only solution on the market to deliver software that is never installed, yet securely follows users anywhere, it is comprised of the SoftGrid® Platform, an engine that turns applications into centrally managed virtual services that are delivered instantly, and Softricity ZeroTouch™, the front-end system that enables real-time worldwide availability to applications in a highly secure, self-serviced environment.

Together, SoftGrid and ZeroTouch consolidate each step of the application management lifecycle, changing it from a series of separate, manual processes into an automated, unified system that accelerates the pace of doing business. As a result, the Softricity Desktop makes it easy to transform your entire IT environment into a utility: centrally manageable, measurable and easily used by IT and business users with a simple click of a mouse.

“SoftGrid’s unique approach will simplify administration of all our computing environments, making IT much more responsive to the changing needs of our employees. It will enable us to provide reliable, agile service at less cost.”

– Kevin Sparks  
CIO  
Blue Cross Blue Shield Kansas City



### THE SOFTGRID® APPLICATION VIRTUALIZATION PLATFORM

SoftGrid drastically reduces the complexities inherent in deploying and updating applications and simplifies overall Windows desktop administration through the following technologies:

**Application virtualization:** Enables applications to run without the need to install them locally – and without affecting the host operating system or other applications. This eliminates application conflicts and allows applications to be handled like any other enterprise data.

**On-demand streaming:** Applications are instantly delivered to the desktop resource that needs them, upon user demand.

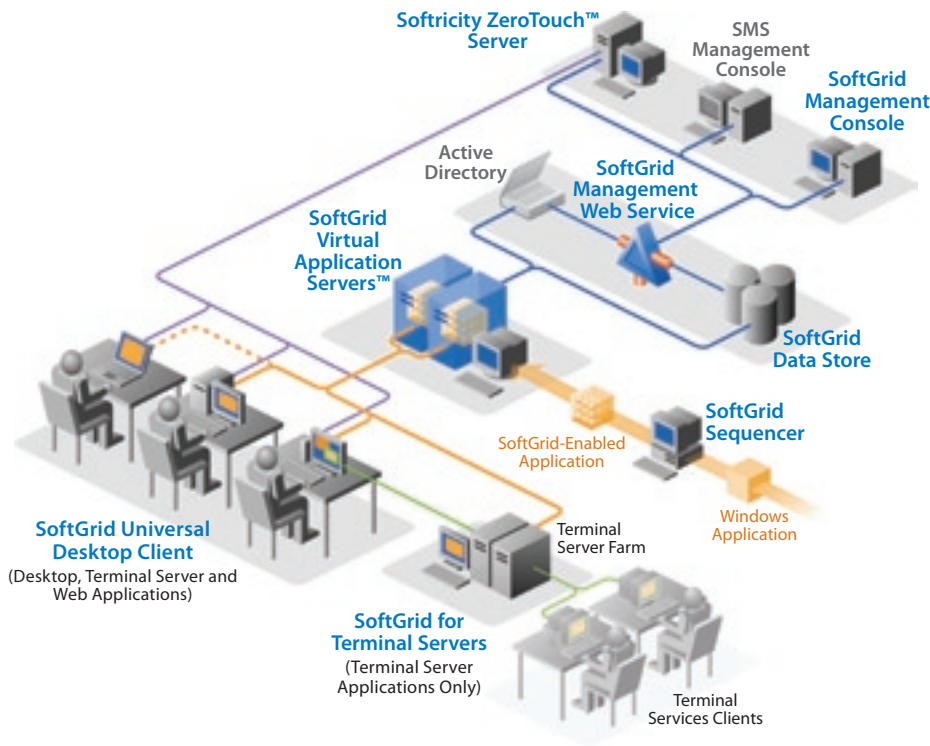
**Centralized, policy-based management:** Everything from deployment, patching and updating through application support and termination is managed for all users – including mobile, branch office and disconnected users – via policies and administered through a single console.

**Software asset tracking:** Real-time application usage tracking makes it easy to determine how applications are – or are not – being used so you can better manage license compliance.

**Business continuity:** Applications and updates can be replicated – just like data – to back-up servers, and application states and user profiles can be instantly restored, cutting end-user downtime from hours or days to just minutes.

**Branch server infrastructures:** Application updates and patches can be replicated to branch office servers – minimizing WAN traffic while keeping application management centralized.

**Integration into Microsoft Systems Management Server (SMS) infrastructure:** Application virtualization and streaming can be integrated into SMS deployments with SoftGrid for SMS.



The Softricity Desktop is comprised of the SoftGrid Application Virtualization Platform (including the SoftGrid Server, Sequencer, Management Web Service, Data Store, Management Console, and Clients) and Softricity ZeroTouch.

## SOFTRICITY ZEROTOUCH™

Softricity ZeroTouch simplifies provisioning, access and reporting of applications virtualized by the SoftGrid platform:

**World-wide availability:** Users get universal access to all their SoftGrid-enabled applications – even their entire desktop – from any computer anywhere, aggregated on a single web page and/or within a Windows desktop. By clicking on My Desktop (a remote desktop session), users can also get any or all of their content, even when they’re not in their own office or using their own computer.

**End-user self-service provisioning:** End users and business units can self-provision new and updated applications that have been authorized for their use and immediately run them without the risk of application conflicts breaking their production environment and tying up help desk resources.

**Real-time intelligent application deployment:** Softricity ZeroTouch provides the intelligence needed to optimize application delivery. Based on real-time information about a user’s network, application and device, ZeroTouch determines the best way to deploy an application to a user – either delivering it directly to the device or processing it at the datacenter on a Terminal Server and presenting the graphics on the desktop.


**Automated workflow:** Application allocation is handled by workflow controls that set the authorization chain of command. These are delivered via a web-based portal or integrated into standard email.

**Business unit software usage reporting:** Business managers can get real-time, detailed reports of application usage on their own at any time, without relying on IT.

“ZeroTouch will allow Russell’s users to have much more control over provisioning applications and real-time knowledge of how they are being used. **This level of information was not available before ZeroTouch, and I expect it will have a big impact on our business.**”

– John Stingl  
CTO  
Russell Investment Group





**With the Softricity Desktop, you can easily support any and all users with the same simple, scalable infrastructure.** You never again have to compromise in terms of costs, time-to-production or functionality. Not only is enterprise-wide application management faster and more cost effective, you get much greater value from your application and desktop investments.



## The Softricity Desktop in Action: Business Projects

The Softricity Desktop is ideal for critical business projects faced by corporate IT:

### RETURN ON VIRTUALIZATION™: REDUCE APPLICATION MANAGEMENT COSTS



A leading analyst firm estimates that annual IT management costs can reach more than \$5,000 per desktop and more than \$7,500 per laptop. This is largely because the entire application management process (deployment, updates, patches, support, termination, licensing, asset management and business continuity) is decentralized and labor-intensive. IT administrators must regression test, install, troubleshoot, and un-install applications on a machine-by-machine basis.

The Softricity Desktop eliminates the traditional, tedious application management steps – including regression testing and installation/uninstalls – dramatically reducing labor costs. It also reduces capital costs. By optimizing server-based computing, you can reduce the number of servers needed for a Terminal Services deployment. Not only does this eliminate hard costs, it reduces the time and money associated with managing server farms.

With Softricity, you can:

- **Reduce by over 80% the time and associated costs** required for application deployments, updates and terminations by eliminating manual and repetitive processes.
- **Cut help desk costs by over 30%** by reducing the number of times users call the help desk for application-related problems, and by enabling the help desk to resolve user issues in just a few minutes without having to visit or take possession of the user's computer.
- **Reduce end-user down-time by 80%** by ensuring business continuity of applications, handling desktop recovery and image refreshes instantly, and eliminating the need to shut down user computers during migrations and upgrades.

Softricity's customers consistently validate these findings in their own implementations. For example, Northeastern University, which has 13,000 desktops and laptops running 800 applications, estimates reducing application management costs by 85% and saving more than \$1.6 million over a 3-year period. Softricity helped Scotland's Dundee City Council save \$290,000 (155,000 UK pounds) on IT support, replacement, server consolidation and license agreements.



For more information about how Softricity's products can be used to facilitate critical real-world business projects, please read our whitepaper ["What if Applications Could be Managed Like Data?"](http://www.softricity.com/papers) at [www.softricity.com/papers](http://www.softricity.com/papers)

"Softricity's application virtualization platform is the only solution we found that promises to **save us the kind of time and money needed to really impact our IT and business operations.**"

– John Moran  
Program Manager  
Pioneer Investments



“Softricity enables us to deploy any kind of application anywhere in the world without worrying about conflicts, bandwidth or IT management issues.”

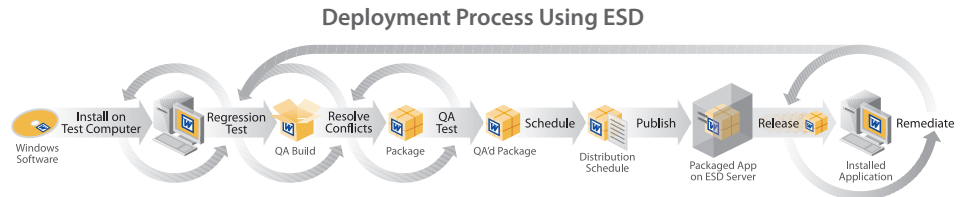
– Ronald Zant  
IT Manager  
Martinair



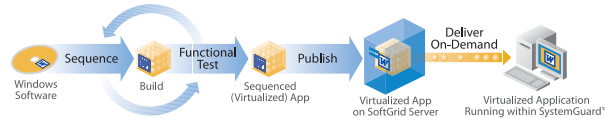
## ACCELERATE APPLICATION AVAILABILITY



With the Softricity Desktop, you can transform the way new applications and updates are deployed, making everything much simpler and faster. The Softricity Desktop can instantly deploy applications to any and all global users on any client device from a central management console.



## Deployment Process Using The Softricity Desktop



Eliminating testing and installation accelerates the deployment process by orders of magnitude. Sanofi-Aventis Deutschland GmbH accelerated application deployments and updates from 2 weeks to just 3 hours. A major multinational investment bank reduced deployment time by over 80%. With ZeroTouch, all of these applications can be instantly accessed and self-provisioned by business users, wherever they are.

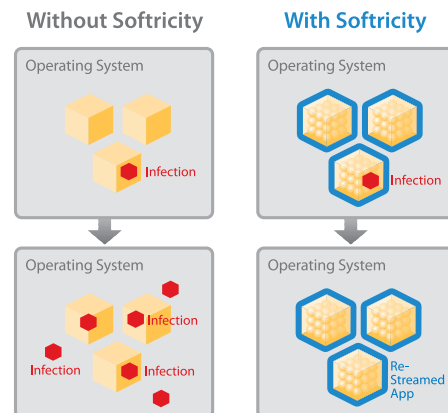
## SECURE YOUR APPLICATIONS



When applications are not secured, everything from reliability to license compliance can be affected. Each time an application is installed, the OS is affected. Browsers and other networked applications are in constant threat of infection and corruption.


The Softricity Desktop improves application security in several ways. First, as a result of policy-based intelligent management, users can only access applications that they have been given permission to use. Second, applications that typically require administrative rights can be run using a standard user account – in virtual administrator mode – so end-users cannot inadvertently, or intentionally, affect the network. Third, IT can secure applications via a read-only operating system with a fully locked down security template or group policy object, protecting

applications from being altered or used in unauthorized manners. Fourth, because applications are never installed, the OS remains clean. With application virtualization, if malware does infect one application, the chances that it will compromise other applications or the OS are greatly reduced. Finally, if a laptop is lost or stolen, the applications on it will eventually time out, protecting your license agreements. These security benefits have been critical to the British Columbia School District, whose 2,000 computers are shared by 7,800 students – and supported by only 4 IT staff.



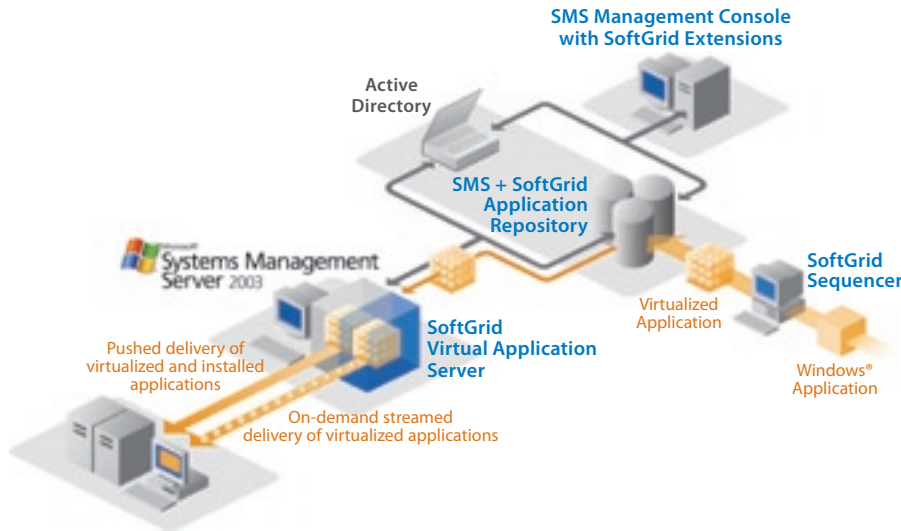
In a normal PC, an infection in one application can rapidly compromise other applications – and the underlying OS. The per-application isolation provided by Softricity’s application virtualization limits this spread, while on-demand delivery makes it simple to restore a clean copy of the affected application.

**INTEGRATE VIRTUALIZATION AND STREAMING INTO MICROSOFT SMS**

 Microsoft Systems Management Server (SMS) is the most widely used tool for deploying and managing applications and operating systems on Windows desktops and servers. With SoftGrid for Microsoft SMS, IT administrators instantly gain all the benefits of the Softricity platform – including application virtualization, on-demand streaming and self-provisioning – from within their existing SMS infrastructure.

“By integrating Softricity’s application virtualization and on-demand streaming with SMS 2003, **customers can accelerate SMS application deployments and reduce costs by shortening potentially lengthy management processes** – such as compatibility testing – while helping IT offer software in the context of services.”

– Felicity McGourty  
 Director of Product Marketing  
 Windows Enterprise Management Division  
 Microsoft Corp




SoftGrid for SMS provides a single management interface for both locally installed and virtualized applications, giving you the option to push entire virtualized applications to client computers using SMS deployment delivery or pull them on-demand with Softricity’s streaming software technology – or both. The combination of SMS and Softricity gives you the flexibility to choose the best way to deploy applications while maintaining OS level patches, updates, inventory, asset tracking and much more from a single, integrated management point. Softricity also offer SoftGrid Virtualization Extensions (VX) for SMS, which is limited to only application virtualization. It is designed for customers who wish to only eliminate conflicts and reduce compatibility testing within their SMS deployments.



SoftGrid for SMS provides a centralized management interface for both installed and virtualized applications.

**ENABLE ROAMING AND FREE SEATING**

 Hoteling or free-seating models can be powerful for a range of IT environments including those in hospitals, financial services firms, universities, libraries and training rooms/labs. However, they have never been viable using solely Windows desktop operating systems. This changes with the Softricity Desktop because of two key capabilities:

- All applications and user preferences can be configured to persist on the network; and
- Applications cannot affect the local operating system on which they execute. This makes it possible for users to share Windows desktops or laptops in a successive fashion.

Several Softricity customers are implementing hoteling/free-seating. Northeastern University uses it to simplify management of computers located in classroom labs, which are used by different students who need different applications for their courses. St. Luke’s Medical Center uses Softricity to give clinicians who use different PCs throughout the hospital “follow-me access” to the applications they need. A major financial services firm created a disaster recovery plan to transport traders to an alternate location where they can instantly use other machines to resume mission critical company business.

“Softricity has been an evolution for our IT business. **We’re profoundly impacting the way we handle disaster recovery, operating system patching and help desk support.** Everything is accelerated and simplified, and we’re able to service users around the world much more quickly at consistently higher levels.”

– Jonathan O’Brien  
Senior Systems Engineer  
Lend Lease



### SUPPORT BUSINESS CONTINUITY FOR APPLICATIONS



Applications impacted during outages put end users offline and severely hamper productivity. But, what if you could have users log into any computer and access their full desktop at a backup site with the same locally running applications they had at their original location within minutes of an outage? You can with Softricity in your business continuity plan.

The Softricity Desktop turns applications into data files that can be treated – and replicated – just like other enterprise data. Applications can be kept up-to-date between live sites and back-up sites by automatically replicating virtualized application files on the live sites’ SoftGrid servers to SoftGrid servers at a back-up site (using third-party tools).

This provides dramatic time savings; the alternative is to install applications on each terminal server and desktop at the back-up site each time a change is made at the live site. It also reduces end-user downtime to minutes instead of hours or days. This capability, combined with the way Softricity separates the state of user interactions from the application’s own state (which can be backed up) – vastly reduces the time to recover users from desktop failures.

### SIMPLIFY OS MIGRATIONS AND PATCHING



Many IT organizations are reluctant to begin large-scale migrations because of the testing and deployment issues they inevitably have to tackle. Even with ESD-delivered applications the failure rate can be quite high, requiring more troubleshooting by IT on the back-end. Similarly, OS and application patches must go through rigorous regression testing against existing applications to make sure applications are not affected. It often takes weeks, if not months, to complete. As a result, many companies are in a state of perpetual patching.

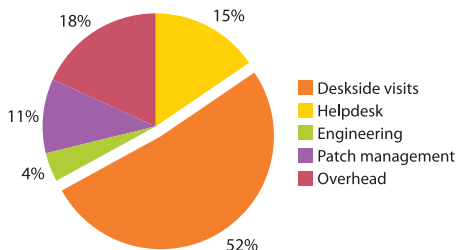
With Softricity, applications typically do not have to be repackaged for OS migrations. Patching and migrations do not require regression testing. This has enabled Softricity customer Lend Lease to accelerate patching from 45 days to just 1 week. It helped Suncor Energy migrate over 1,300 applications on 3,200 desktops to XP in just 3.5 months. As part of Swedish Medical Center’s XP migration, Softricity is cutting per-application migration times from 40 days to just four hours, and making the process largely transparent to users while helping IT remain responsive to ad-hoc user requests.

### REDUCE HELP DESK CALLS




Help desks are deluged by end-users with application problems. Traditionally, when requests reach the top of the queue, IT assists users through the issue over the phone or through on-site visits.

With Softricity, IT no longer manually troubleshoots application issues; instead, they can use Softricity’s remote app-desk feature to diagnose and remedy the problem without any end-user involvement or a desk-side visit. If a user’s computer fails, IT no longer needs to rebuild that individual’s application set; the user can log in to any other computer and have instant access to their personalized set of authorized applications. Help desk costs are routinely reduced by at least 30 percent. Heartland Financial has 4 help desk administrators supporting 800 users. Before Softricity, they spent hours on the phone with a single user. Now, they typically spend less than 10 minutes. With Softricity, Sweden’s Feelgood healthcare provider cut help desk calls from 350 to less than 150 per month.




According to an Intel report (2003 Intel IT Average Quarterly Spending on Desktop PC Support), desktop visits comprise 52% of all IT support time. By reducing the need for application-related desktop visits, Softricity dramatically reduces overall help-desk costs.

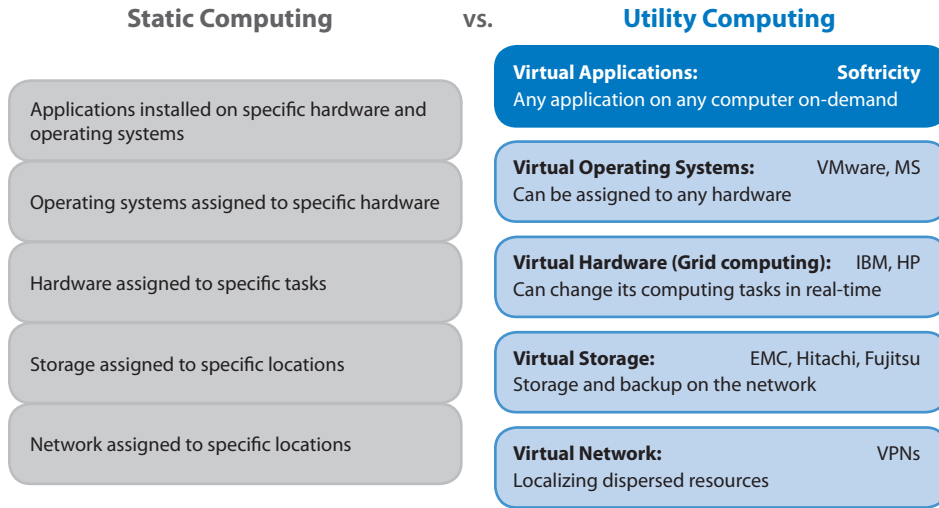
**SUPPORT BRANCH OFFICES**

 The ability to replicate Softricity-enabled applications from one site to another is a great way to manage applications for users at branch offices. Anytime an application update or patch is added to a SoftGrid server at the main data center, the change is automatically replicated by third-party tools to SoftGrid servers in branch offices, which then serve the change to local end-users. This greatly reduces WAN traffic, and enables IT to update applications globally with just one change to their central SoftGrid server. This has helped AWD, Europe’s leading independent financial services provider, quickly and economically service its 800 laptops and 200 desktops at 30 sites across Austria.

**ENABLE A UTILITY COMPUTING ENVIRONMENT BASED ON SOFTWARE AS A SERVICE**

 Traditionally all layers of computing environments – hardware, OS, storage – have been static, configured to support a single computing solution. Components are installed and configured for specific computers, resulting in a tightly bound system that does not adapt well to changes.

Virtualization frees each element of this system from the other. Softricity enables the most often-changed part of the infrastructure – applications – to be delivered and managed as virtual services without any code development or re-write. Applications are turned into on-demand utilities that are as easy to use as electricity. They are no longer tied to systems and departments, and can be used on any system, in real-time, as needed. This makes it easy to dynamically add, update and support applications and systems, creating the foundation for a much more nimble business.



In essence, Softricity turns enterprise IT into a service bureau that provisions and manages applications as services, on demand, to the desktop.

Softricity application virtualization is different than machine virtualization – such as VMware and Microsoft Virtual Server. Machine virtualization provides an abstraction layer between the hardware and operating system, allowing you to operate multiple environments on a single computer. The abstraction layer created by Softricity lies between the operating system and the applications that run within it. Many customers, such as Fidelity National Financial, use both Softricity and VMware to maximize server and IT management efficiencies.

“There’s a lot of talk about the promise of on-demand computing. Most of it involves the costly and time-consuming re-writing of applications. **Softricity delivers it immediately – with today’s applications – and without having to re-write a single line of code.**”

– Anthony Lackey  
CTO  
ABM Industries



To learn more about how VMware and Softricity work together in a utility computing infrastructure, read the whitepaper (co-authored by VMware and Softricity) “Desktops on Demand: Leveraging Softricity and VMware for Robust Desktop Delivery & Management” at [www.softricity.com/papers](http://www.softricity.com/papers)

# The Softricity Desktop in Action: Technical Solutions

For detailed information about how Softricity's products can help solve technical problems with your application environment, please read our whitepaper "SoftGrid Under the Covers" at [www.softricity.com/papers](http://www.softricity.com/papers)



The Softricity Desktop solves critical technical issues that traditionally plague IT and consume valuable resources:

## ELIMINATE APPLICATION CONFLICTS AND REGRESSION TESTING



Application conflicts are the bane of IT's existence. According to IBM Autonomic Computing research, 28% of all application failures are related to installation and configuration errors:

- Applications overwrite common settings in the Windows Registry, install different versions of components, and utilize common resources, de-stabilizing the functionality of other installed applications.
- Different versions of the same application often cannot run simultaneously on a single computer. One version may overwrite the settings or contents of the other.
- Because you never know which applications will conflict, IT must spend hours, days and even weeks regression testing them on staging machines and then on production systems, before deployment.

By eliminating installations, and shielding the operating system and applications from changes that normally occur when applications are installed and run, the Softricity Desktop prevents all these problems. Because each application executes inside its own virtual space, conflict is eliminated. This means any application can run alongside any other. Even multiple versions of the same application, such as Office 2003, Office XP and Office 2000, and multiple database client versions such as SQL, Oracle and Sybase, can run on the same device at the same time. Just as critical, the need to perform lengthy regression testing – one of the biggest time factors in bringing an application from purchase to production – is also eliminated. The University of Illinois Medical Center estimates that, with Softricity, it cut the 100 hours of regression testing that were previously required for deploying a single application. They no longer have to regression test against other applications on either staging servers or production servers.


## CONSOLIDATE TERMINAL SERVERS



Server growth is a costly issue for organizations that rely on terminal services. To avoid post-installation application conflicts, applications must be tested up-front to determine which ones will collide, with conflicting applications separated into silos. These siloed servers are routinely underutilized – typically at just 25% of capacity – because each server is locked in to a specific configuration, capable of serving only a limited set of non-conflicting applications.

The Softricity Desktop completely changes this dynamic. Because any application can run side-by-side with any other – even applications that normally conflict with each other, multiple versions of the same application, and applications that were previously incapable of running under Terminal Services – eliminating the need for silos. This increases the utilization of Terminal Servers by reducing the number of servers in a farm and raising the overall utilization of the remaining servers. This enabled Russell Investment Group and Suncor Energy to reduce the number of their application servers by 40%, and Fidelity National Financial to eliminate one-third of its servers. Not only did this save significant capital costs, it also greatly reduced the administrative time and resources required to manage complex server farms.

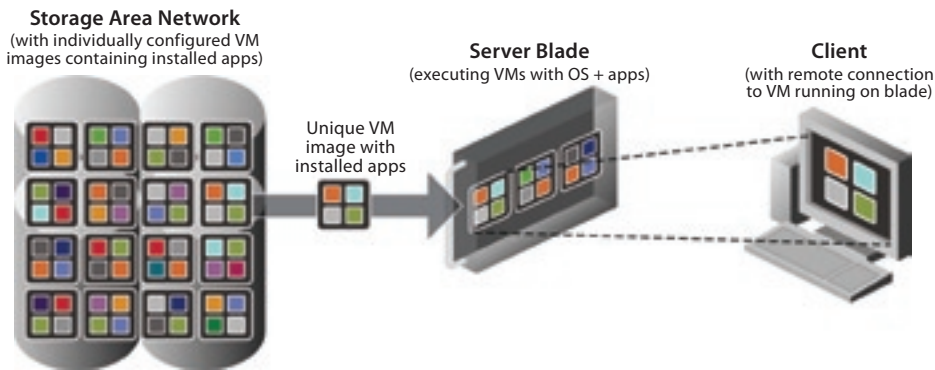
**SUPPORT HOSTED VIRTUAL DESKTOP SOLUTIONS**

 “Virtual hosted clients” and “virtual desktop infrastructure” solutions, from vendors such as HP, IBM and VMware, represent a new way to deliver “virtual” desktops on-demand to end-users. As with physical desktops and server-based computing, Softricity plays a critical role in reducing many of the deployment and management steps required to build a scalable hosted virtual desktop solution. Softricity also provides unique benefits in the virtual desktop environment, among the most compelling of which are single image management and hybrid application execution:

**Single Image Management:** With Softricity, a single instance of the base operating system can be used for all users – instead of having to provision each user with a unique OS that has been pre-configured and installed with a unique combination of their applications. This is possible since Softricity deploys applications to users in real time, once they have logged into the OS and passed their credentials to Active Directory. Single image management reduces many of the operational aspects and costs of current hosted virtual desktop solutions.

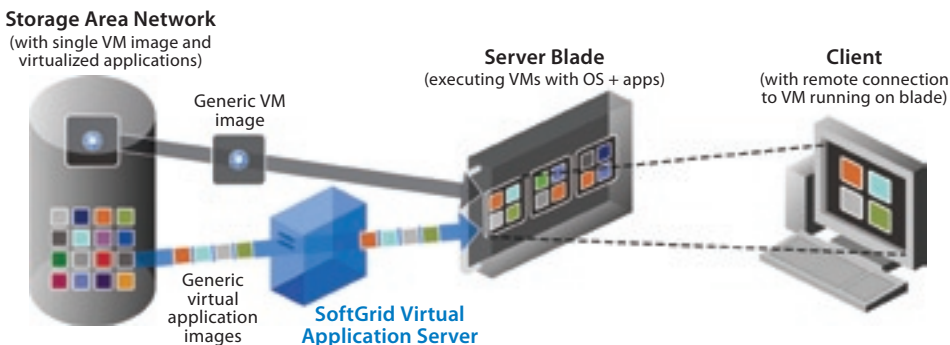
**Hybrid Application Execution Model:** Softricity supports multiple tiers of application execution. Under the original hosted virtual desktop model, applications run on server blades and require a constant network connection. However, laptop users may not always have connectivity. Softricity can support disconnected users without any additional work on the back-end system. Applications that have been packaged to run on a hosted virtual desktop will run exactly the same on a physical desktop/laptop. In addition, users who need to run graphically-intensive applications locally can do so, even in hosted virtual hosted environments. Softricity makes it easy for you to manage exceptions like these without any change to the core process.

**Basic Hosted Virtual Desktop Infrastructure**



In a basic Hosted Virtual Desktop architecture, each end-user is assigned a specifically configured virtual machine (VM) image, into which that user’s specific set of applications is installed. These unique VM images are stored on a large-scale Storage Area Network. When a user logs into the system, that user’s unique VM is delivered to a server, where it executes and delivers a remote desktop on the end-user’s local machine.

**Hosted Virtual Desktop Infrastructure with Softricity’s On-Demand Applications**



Softricity dramatically streamlines Hosted Virtual Desktop infrastructures. Instead of a proliferation of individual VM images, only a single, lightweight VM image is needed, containing the SoftGrid client. When a user logs in, a copy of the generic VM is delivered to the server, while the applications authorized for that user are streamed on-demand via the SoftGrid server (but can be stored on the SAN). Within the VM, the streamed virtualized applications run without conflicts or further configuration, while the end-user’s experience is seamless and transparent. This significantly reduces the TCO of the Hosted Virtual Desktop infrastructure while increasing its scalability.

“After an exhaustive evaluation process, it became clear that **Softricity was the only solution** that could enable us to quickly and efficiently deploy critical applications.”

— Sheryl Bell  
Director of Information Technology  
St. Luke's Regional Medical Center



## RUN MULTIPLE JAVA VIRTUAL MACHINES (JVMS) ON THE SAME COMPUTER



The Java platform was once heralded for its “write once, run many” promise. Unfortunately, it does not deliver on its critical multi-version capability. For instance, both the Sun and Microsoft JVM only allow a single version to be installed on the client operating system. This essentially hard codes the entire OS to a specific Java version, which can prevent other desktop and web applications from functioning correctly. Similarly, the fact that only one instance of a browser’s security settings can reside on one computer hinders organizations’ ability to deploy mission-critical web applications.

The Softricity Desktop eliminates this problem by transforming locally-installed JVMs into fully portable, self-contained programs that can be centrally deployed on-demand to any Windows computer. Now multiple JVMs can run side-by-side without conflicting with or changing each other or any locally installed applications. In fact, any web application’s specific client-side requirements can now be supported with virtualized application bundles containing a specific JVM, plug-ins, other client-side components and even browser security settings. This gives each web application the exact client-side environment it needs – without interfering with the local machine’s installed JVM, browser components or security settings.

## CONSOLIDATE AND STABILIZE WINDOWS USER PROFILES



By separating application preferences from their normal location in the Windows user profile and allowing them to persist on the network, the Softricity Desktop enables IT to alleviate many profile management challenges. Administrators can have a mandatory profile environment while still allowing users to customize and personalize their applications. This not only greatly reduces the variability of user environments (and therefore, the number of support issues) but also enables profile consolidation by eliminating the need to maintain an individual profile for each user.

In a typical Terminal Services configuration, user sessions are load balanced across multiple servers in a farm to maintain availability. Consistent look and feel of the user’s desktop is achieved with roaming user profiles. Over time, each profile is copied thousands of times and is susceptible to corruption from a number of sources. The Softricity Desktop can significantly reduce or eliminate profile corruption. Because there is essentially one file for each application, instead of one master file for all applications, if a single file gets corrupted, only the personalization for the single application has to be recreated, which takes significantly less time.

## MANAGE SOFTWARE ASSETS WITHOUT A SEPARATE SYSTEM



Keeping track of software assets is extremely difficult, particularly in today’s dispersed, global business environment. Most companies must employ separate tools to stay on top of who is using which application, and whether they are over- or under-utilizing licenses according to software agreements.

With the Softricity Desktop, you do not need a separate tool to manage application assets. Because the Softricity Desktop is, in effect, a network service, application tracking is a natural by-product of using the system. IT and business units can easily and accurately track and manage applications. Intuitive reports allow those higher on the authorization chain to see summaries of activities lower on the chain as well as drill down to the individual user level. Softricity’s real-time monitoring and reporting capabilities enables Swedish Medical Center in Seattle to more easily track license usage so they can reharvest and redeploy when appropriate, and optimize the licenses needed.



### STANDARDIZE, CONSOLIDATE AND STABILIZE OS IMAGES



Softricity helps organizations minimize the number of applications that exist in the OS image of their devices. This decreases the size and complexity of system images as well as the number of images that must be maintained across the environment for different user communities. By reducing the need to pre-install applications in an OS image, the Softricity Desktop allows for quicker deployment and recovery times. Softricity helps Northeastern University optimize image size by determining which applications go into cache as part of the standard image and which get delivered on-demand over the network. This reduction in image size also benefits environments using machine virtualization, such as Microsoft and VMware, to manage Windows client OS environments. The smaller the image, the smaller the VM and the easier and quicker it is to move around the network.

By removing applications from the OS image, Softricity allows organizations to standardize and consolidate images. This is known as “single image management.” Administrators can layer applications on top of a standard image based on Active Directory group membership. This is different than the layered approach offered by ESD systems which actually modifies the OS when user- or group-specific applications are deployed and thus “brands” the machines, tying them to specific users or group of users.

Because the Softricity Desktop delivers applications virtually, it keeps the OS free from the wear and tear that installations, tweaks, preference modifications and removals inflict on the OS over time. It is these types of changes that, without Softricity, tie a system to particular users, forcing administrators to worry about the state of each machine and the ramifications of backing up (or not backing up) each and every device in their enterprise.

### CONSOLIDATE AND TRACK APPLICATION PACKAGES

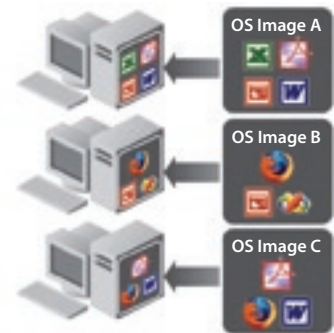


The Softricity Desktop allows owners of large application package libraries to consolidate individual installers and better track packages. This is due to its sequencing methodology, which enables all updates to be part of a self-contained package. The update is always applied to a sequenced package and never directly to a system or group of systems, minimizing the number of packages in an enterprise environment’s library. In addition, because all Softricity packages are assigned via Active Directory, the Softricity Desktop provides an inherent way of tracking which users are using a particular iteration.

Softricity also allows administrators to deal with the ever growing challenge around application dependencies, such as those related to database clients, legacy Microsoft Office components for client/server applications, web application components and configuration dependencies. It allows for the repackaging of dependencies alongside applications inside a single virtual environment. Bundling dependencies with applications does not impact conflicting versions of the same components that may be locally installed on the system where the SoftGrid-enabled applications are being run.


You can also choose not to bundle dependencies with sequenced applications. If a particular dependency required by an application is part of the standard corporate image, you can leave it out of the sequenced package. When the package runs, the virtual application will see and can leverage the locally installed dependency.

### Image Management Without Softricity



### Image Management With Softricity





**Innovation and experience have yielded the exclusive technologies** that underpin the Softricity Desktop. From application virtualization – the patented technological heart of the platform – to on-demand streaming, policy-based management, self-service IT and intelligent application deployment, the Softricity Desktop offers a streamlined solution for today's complex computing environments.

# Technologies Behind the Softricity Desktop

## APPLICATION VIRTUALIZATION

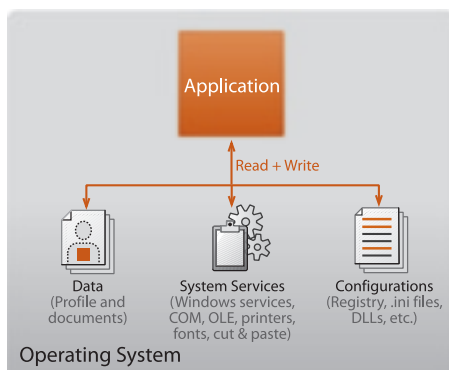
Application virtualization is at the heart of the Softricity Desktop. It decouples applications from the operating system and enables them to run as network services. The completely virtualized application does not affect the operating system or other applications running on the same machine. The power of the Softricity Desktop is that it allows applications to be delivered dynamically as services that can be added or removed without leaving a trail on the client system. This in turn reduces the total cost of deploying and maintaining applications and systems by an average of 80% for enterprises.

Softricity's application virtualization is enabled by two key technologies: SystemGuard™ and the Softricity Sequencer.

SystemGuard enables each application to bring its own set of configurations (including registry entries, DLLs, INI files, etc.) and run without any installation within a protective virtual run-time sandbox on the client, so there is absolutely no dependency or effect on the configuration of the machine running them. However, since applications execute locally, they run with full performance, functionality, and access to local services – including cut and paste, OLE, printing, network drives and attached devices.

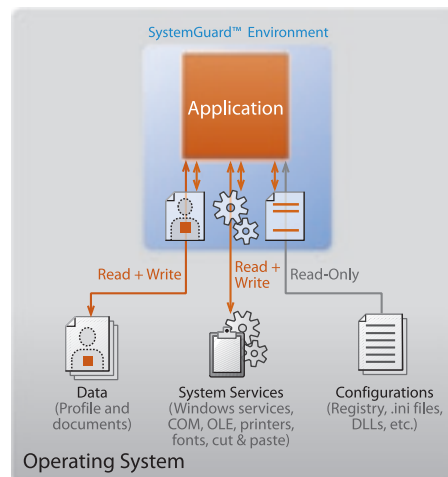
### Standard Operating System Environment:

Under standard environments, applications hard-code their settings onto the host operating system. Other applications' settings can be overwritten, causing them to malfunction or break. This is the key reason that enterprises must spend hours testing each application against every other to make sure that they do not conflict before committing applications into production environments.



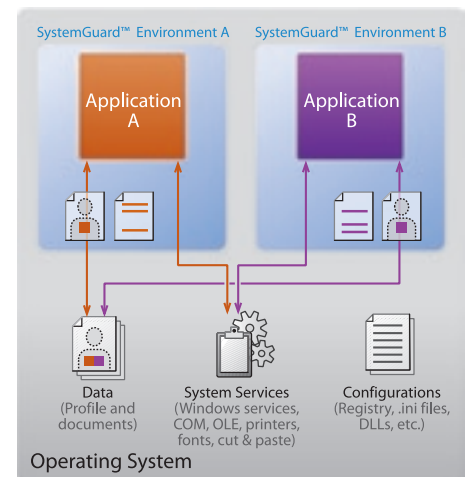
### The Virtual Application Environment:

With SystemGuard, each application executes in a way so that only it sees its own settings, leaving the host OS and existing settings unaltered. SystemGuard provides the most extensive application virtualization on the market. In addition to virtualizing Windows Services, it virtualizes per user, per application instance, every critical application component.



### Side-by-Side Virtualization:

Each SoftGrid-enabled application brings down its own set of configurations and can run side-by-side without the settings conflicting with each other – or the host operating system. Despite this separation, inter-application communication with other SoftGrid applications and those installed locally is preserved, allowing for cut and paste, OLE, and all other standard operations.



“Virtualization will replace traditional imaging and software distribution at the desktop.”

– “Understanding The Value Of Desktop Virtualization” Webinar  
March 22, 2006

FORRESTER®

## APPLICATION PACKAGING – THE SOFTGRID SEQUENCER

The Sequencer is a wizard-based tool that quickly packages and virtualizes Windows applications for real-time delivery as network services. Even a 1.5 GB application such as Cerner Millennium takes just an hour to package. The entire Microsoft Office package takes less than 10 minutes. The Sequencer uses a once-per-application process to protect the application's integrity and does not modify its source code. To date, it has been used to sequence over 25,000 applications.

The Sequencer performs several major functions:

**1. Creates the SystemGuard environment:** The Sequencer uses SystemGuard to monitor and record all interactions between the application and operating system during application installation and execution. It analyzes which OS components are used and set by the application. It also analyzes patterns and dependencies, such as the specific version of a DLL. The Sequencer uses this information to create a virtual application package.

**2. Prepares an application package for on-demand delivery:** In an unobtrusive process, the Sequencer converts the hierarchical file system data into Softricity's file format, optimized for efficient delivery. Applications such as the Office 2003 suite can be available for on-demand deployment in less than 10 minutes. In addition, enterprise IT departments that support hundreds of applications for thousands of users can automate the sequencing of new applications, as well as updates and patches, accelerating their delivery and use. Applications can be automatically sequenced in batches. Another important feature is that you can "sequence once, run anywhere," enabling a single package to run on multiple Windows operating systems, such as both a desktop XP system and Terminal Services server.

**3. Transforms existing application package libraries into virtual applications without having to re-configure their existing packages:** The Sequencer can natively read MSI files, enabling these packages to be virtualized without new coding or reconfiguration. By automatically detecting file-type associations, the Sequencer simplifies the usability of the application by end users. Existing IT packaging groups can continue to focus on their core packaging expertise in MSI, Install shield and other packaging methods without having to shift their focus to Sequencing.

**4. Provides logging and information display for each application** include update history, helping you manage sequencings.

## ON-DEMAND STREAMING

The Softricity Desktop enables you to realize greater efficiency and responsiveness in software deployments and updates – with or without a network. It employs an innovative system for centrally deploying applications. Rather than "pushing" down and installing entire applications, the first time an application is requested by end users, the SoftGrid client rapidly responds and "pulls" only the code necessary to start the program from a central Server – typically 20-40% of the total code. This happens without any degradation in functionality or response time; applications launch within seconds, based on application size and connection speed.

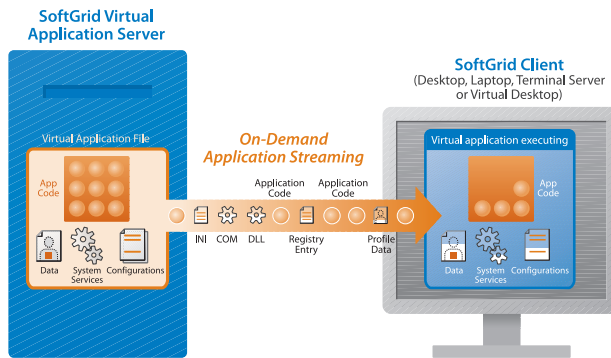
When the session terminates, application settings and profiles are saved in a non-volatile, memory-locked cache, providing instant access for subsequent use with little impact on bandwidth and ensuring that applications are also preserved, even in the case of unexpected computer shutdown.

"Like most organizations, we have a complex application environment and really wanted to think out-of-the-box in order to simplify it and support our evolving business. Softricity can help us accomplish this in ways that just haven't been possible with other technologies on the market."

– Tichard Thompson  
Senior Architect  
Purdue Pharma



Applications are protected even if the network goes down or users detach from the network. The code brought down to the clients enables applications to run locally with full functionality. End-users can also be authorized to pre-cache applications themselves for disconnected use, so IT doesn't have to take time to reconfigure the client.



Softricity's on-demand streaming technology delivers granular portions of application code and components on-demand.

Enterprises can also have all advantages of application virtualization without delivering applications across a network. For end-users on low-bandwidth connections, virtualized applications can be deployed via USB flash drives, CDs or portable hard drives instead of network delivery.

## CENTRALIZED, POLICY-BASED MANAGEMENT

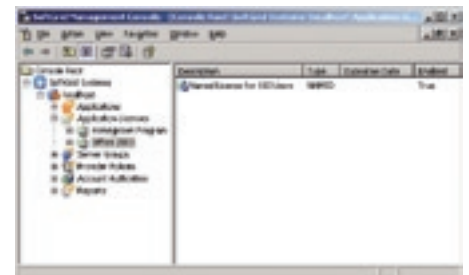
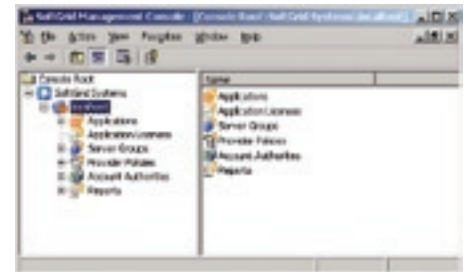
The Softricity Desktop lets you easily set policies for users, applications and delivery via a centralized console, and then turn much of the daily management over to the system itself.

The SoftGrid Management Web Service is a central service for setting up, administering and monitoring all Softricity servers and applications. You publish applications, manage licenses, run reports, and more. Assigning and changing applications is simple and easy through Active Directory. When you are ready for a new application, you simply bring it up and assign it to users. If there is an issue, or you want to terminate the application or the rights, simply disable the application in the management console and it is gone, because it was never really "there" in the first place.

The SoftGrid Management Web Service also includes the ability to add licensing control over any sequenced application through License Groups. You may add named, concurrent, time-based or unlimited access license types to any application delivered, even if the program does not have a built-in license enforcement.

Softricity's extensive management capabilities enable it to scale easily from hundreds to tens of thousands of end-users. Enterprise-class management features include:

- **Remote control of Softricity clients** enables IT to diagnose and fix problems without end-user involvement or desk-side visits
- **Active upgrade** of virtualized applications lets you update application versions without disconnecting users or taking down machines that are running an earlier version
- **One-click SoftGrid server migration** helps to instantly migrate configurations to one or more servers
- **Application check-pointing** monitors the state of user preferences and applications for easy back-up and restore
- **Real-time monitoring and concurrent user session control** improve management of desktop users and terminal services environments by enabling you to terminate an open, unused session to free it for others
- **Hierarchical application tree views** simplify management of large sets of applications and users



The Softricity Desktop can be centrally managed through a Microsoft Management Console (MMC) snap-in, or integrated into third-party management systems through the SoftGrid Management Web Service.

## INTELLIGENT DEPLOYMENT

Softricity's policy-based management extends to intelligent application deployment. Applications can be delivered in a manner optimized to each user's individual (and changing) environment and to your company's best practices. Policies determine whether to stream the application directly to the user's desktop, or whether the application runs back at the data center on a terminal server. Policies can be based on portal host names, client host names, IP addresses and ranges, date/time access, time zone adjustments, client available bandwidth, application launch size and installed clients.

## DESKTOP AND WEB AVAILABILITY

Using the Softricity Desktop, end-users can access all of their authorized desktop, terminal server and web applications via two familiar methods, as allowed by IT:

- A web-browser front end, that provides a gateway to specific applications or to the user's entire remote desktop;
- A standard Windows desktop environment.

In the latter, applications can automatically be configured into the user's Start menu, tool bar and as desktop icons. To the user, applications look, act and perform the same as they always have, regardless of whether the applications are being accessed from headquarters, home, a remote office or a plane.

The Softricity Desktop's unique application availability technologies also include Automated Desktop Configuration, which makes the system aware of which applications each user is entitled to access. The Softricity Desktop also provides real-time authentication and logging. With each user application request, the system authenticates the user, checks that user's authorization for the requested application, and confirms the availability of an application license. It then logs a metering record at application launch time.

## USAGE TRACKING AND COMPLIANCE

The Softricity Desktop provides a detailed, real-time view into application usage. Users cannot access a Softricity-enabled application without the server being notified and providing authorization. When a session ends, the server records usage data, including application, end user, time and length of use. Detailed, customizable reports enable IT to manage application assets much more effectively. With ZeroTouch, these reports can be run by business units without having to request them from IT.

The Softricity Desktop supports multiple licensing models including named, concurrent, time-based and unlimited access. It also prevents users from illegally copying applications onto additional devices, and maintains license control at all times – even for mobile and disconnected users.

By tracking usage in real time, the Softricity Desktop enables IT to determine which applications are under-utilized and can be redeployed, and whether license agreements need to be adjusted to reflect actual usage patterns. IT can build license-management policies and, if someone is not meeting the threshold, can reclaim the license and extend it to another user. In addition, because no one can use software who is not authorized to do so, usage policies and license agreements can be 100% enforced – without time-consuming, labor-intensive administration.

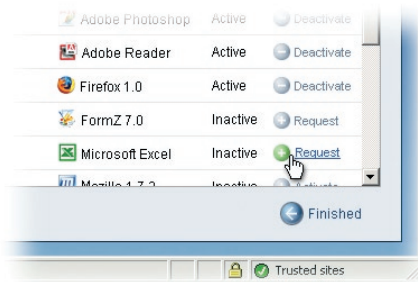


SoftGrid provides a range of powerful reports templates for use by IT. ZeroTouch makes many of these reports available directly to business units as well.

## SELF-SERVICE IT

The Softricity Desktop enables end-users to self-provision applications – the moment they need them. This includes robust workflow that controls the authorization chain of command for allocating applications, making self-service risk-free for all involved. Designed to allow a locked-down view of an application environment, it gives only those with proper permissions the ability to manage the assignment of applications.

A typical workflow-enabled application provisioning scenario includes these simple steps:



An end user makes a request for a new application by clicking on a button in the “Manage My Applications” screen.



An automated email is sent to the user’s workgroup administrator, who can authorize or deny the request with a single click.

“ZeroTouch will let us fully realize the promise of self-service without any of the troubleshooting headaches that typically burden IT.”

– Matthias Quernheim  
Manager IS Infrastructure  
Sanofi-Aventis Deutschland GmbH



Upon authorization, the application appears instantly in the user’s ZeroTouch browser and is ready for immediate use.

Self-service provisioning and access can be an invaluable tool, pushing control of application deployment management out to business units. However, unless it is integrated with virtualization technology that ensures the integrity – and uptime – of client devices, more IT resources will be required on the back-end to fix problems resulting from conflicting downloaded applications. With the Softricity Desktop, the vision of utility computing becomes a reality – simplifying IT administration, accelerating business user provisioning, improving productivity and saving your organization valuable time and money.

## Real-World Successes

The Softricity Desktop is being used by companies around the world – including many of the global Fortune® 1000 – to virtualize, centralize, and accelerate the deployment and management of their enterprise applications. Our customers include:

“SoftGrid’s unique application virtualization approach will simplify administration of all our computing environments, making IT much more responsive to the changing needs of our employees and physicians. It will enable us to provide reliable, agile service at less cost.”

– Chris Leininger  
CIO  
Swedish Medical Center in Seattle



### Financial Services & Insurance

Ensure business continuity for real-time financial applications even for hotelling and globally remote users, while accelerating Sarbanes-Oxley compliance, deployments and break/fix turnarounds.

- ABN AMRO Bank
- AIG-American General
- Americo Life Insurance
- AWD
- Fidelity National Financial
- IXIS AEW Europe
- Merrill Lynch
- Prudential
- Putnam Investments
- Russell Investment Group

### Healthcare & Pharmaceutical

Simplify HIPAA compliance, accelerate FDA validation for pharmaceuticals, and put an end to perpetual patching, while dramatically reducing deployment times for even the most complex applications.

- Blue Cross Blue Shield Kansas City
- Cerner Corporation
- Feelgood Svenska AB
- Mayo Clinic
- Purdue Pharma L.P.
- Sanofi-Aventis Deutschland GmbH
- St. Luke’s Hospital
- Swedish Medical Center in Seattle
- University of Illinois Medical Center
- University of Utah Medical Center

### Energy

Accelerate updates of large application portfolios for globally dispersed users and enable higher-quality IT service with zero touch to the desktop, while ensuring business continuity.

- Suncor Energy
- Chesapeake Energy

### Manufacturing

Create an environment where new and upgraded design, engineering, project management and desktop applications are continually and securely available to appropriate users anywhere, anytime.

- Kone
- Mercedes
- Motorola
- Raytheon
- The Tech Group

### Government

Tune IT for maximum efficiency and reliability by making it easy to instantly deploy and support applications for global users around the clock, and ensuring the highest security for even the largest-scale deployments.

- Dundee City Council
- Inland Revenue
- Region of York
- U.S. Department of Veterans Affairs

### Education

Easily support shared student labs, remote users and last-minute courseware requests, while securing applications against inadvertent and intentional misuse, and meeting rigorous back-to-school deadlines.

- Central Michigan University
- Free University of Amsterdam
- Northeastern University
- Univ. of Applied Science Technikum Wien

### Other

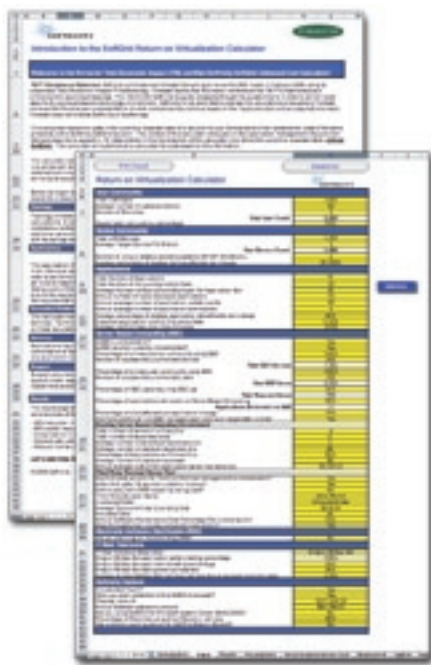
- ABM Industries
- Dixons
- Holland & Knight
- Lend Lease
- Martinair
- PRIMEDIA
- Vancouver Airport Authority



## Real-World Savings: Return on Virtualization™ (ROV)

More than 500 Softricity customers are realizing the promise of application virtualization and on-demand streaming with the Softricity Desktop. With Softricity's Forrester TEI™-compliant Return on Virtualization™ Calculator, you can quickly evaluate the impact Softricity can have on your own enterprise's application environment.

The Softricity Return on Virtualization (ROV) Calculator is a comprehensive tool for determining the cost savings gained by integrating Softricity into IT environments. It guides you through a comprehensive questionnaire about your business and technology environment



to create a tangible, concrete analysis. The calculator is completely transparent. Every single assumption and number in the calculator can be changed to reflect the reality of your operations. We commissioned Forrester Consulting to help create the ROV Calculator and to ensure that it meets the Forrester Total Economic Impact (TEI)™ fundamentals and principles of a sound business tool.

The guiding principle behind the ROV Calculator is that you must examine every step in the application management lifecycle – namely deployment, update, support and termination – to determine its true costs to your organization. All of the calculations are based on the time required to complete the tasks and the associated costs for people's time, including IT staff and end-users that experience downtime during the various processes.

### How the ROV Calculator Works

The Softricity ROV Calculator breaks application management into five categories: topology, applications, execution platform, delivery and support. Based on your inputs about your user and device communities, application volume and activity, method of delivery and tolerance for risk, it determines what each application management phase costs you today, which steps are eliminated or added by using the Softricity Desktop, and the associated costs and savings.

### Results

The Calculator provides detailed savings data, comparing your current environment to a Softricity Desktop-enabled environment for your business. This includes server costs, if applicable; application management broken down by deployments, updates, support and terminations; and initial investment including hardware, implementation and licensing.

Results detail the total cost of ownership for your existing overall environment and for a single user, both in one-year and three-year periods, and the savings possible with the Softricity Desktop. In addition, it will calculate the return on your Softricity investment.



For more in-depth information about the Softricity ROV Calculator, including a detailed real-world ROV case study, read the [Return on Virtualization™ Whitepaper](#) at [www.softricity.com/papers](http://www.softricity.com/papers)

“Desktop virtualization offers significant benefits, including better security, manageability, and access to desktop applications in a distributed world.

**With Softricity – a pioneer in the application streaming market – applications are never installed on the host OS and virtualization prevents application conflicts.”**

– *Desktop Virtualization is the Future of the Corporate PC*  
Forrester Research  
January 5, 2006



“SoftGrid’s efficiency and productivity benefits have been so great that we decided to replace our server-based infrastructure with SoftGrid and deploy all our applications directly to the desktop. ZeroTouch is just what we needed to make this move even easier and more attractive. It allows all our users – even those working from home – to securely access all their applications from a browser without fear of breaking their desktop and overburdening the help desk. As an added benefit, management gets all the tools needed to track usage on their own without having to ask IT to run reports.”

– Kimberly Peine  
 Director of Emerging Technology/Architecture  
 Amerigo



## SYSTEM REQUIREMENTS

The following minimum system requirements are suggested for a standard Softricity implementation. Requirements may vary based on number of users, number and type of applications and bandwidth requirements. Please work with a Softricity Solution Provider or a Softricity technical support representative to determine the specific requirements for your implementation.

### SoftGrid Server

- Intel Pentium III 1GHz
- 1GB RAM per CPU (512MB minimum)
- 200MB available hard disk space (not including application storage)
- Microsoft Windows 2000 Server/Advanced Server or Windows Server 2003

### SoftGrid Management System

- Intel Pentium III 850MHz
- 512MB RAM
- 200MB available hard disk space
- Microsoft Windows 2000 Server/Advanced Server or Windows Server 2003
- MSDE or SQL Database Engine
- Active Directory Domain Controller or NT 4 PDC

### SoftGrid Management Web Service

- Intel Pentium III 800MHz
- 256MB RAM
- 50MB available hard disk space
- Microsoft Windows 2000 Server/Advanced Server or Windows Server 2003
- Internet Information Service 5.0 or 6.0
- MDAC 2.6+
- .NET Framework 1.1+

### SoftGrid Management Console

- Intel Pentium III 700MHz
- 128MB RAM
- Microsoft Windows 2000, XP or 2003
- .NET Framework 1.1+

### SoftGrid Sequencer

- Intel Pentium III 850MHz
- 256MB RAM
- 500MB Page File
- Microsoft Windows 2000, XP or 2003
- SCSI drives for Operating System (OS) and SoftGrid Sequencer software for maximum performance
- Any additional requirements needed by the applications and the OS

### SoftGrid Universal Desktop Client

- Intel Pentium III 600MHz
- 128MB RAM
- 10MB available hard disk space for installation + 2GB for cache
- Microsoft Windows 2000, XP or 2003
- Any additional requirements needed by the applications and the OS

### SoftGrid for Terminal Servers

- Intel Pentium III 850MHz
- 2GB RAM (minimum 256MB, actual dependent on number of users and applications)
- 10MB available hard disk space for installation + 4GB for cache
- 1GB Page File
- Microsoft Windows 2000 Server/Advanced Server or Windows Server 2003, with Terminal Services enabled
- Any additional requirements needed by the applications and the OS
- Separate SCSI drives for OS and SoftGrid software for maximum performance

### Softricity ZeroTouch Server

- Intel Pentium III 1GHz
- 512MB RAM
- 15MB available hard disk space
- Microsoft Windows 2000 Server/Advanced Server SP3, or Windows Server 2003
- Internet Information Services 5.0 or 6.0
- MDAC 2.7+
- .NET Framework 1.1+
- SoftGrid Virtual Application Server 3.1.0.334+
- Specified ZeroTouch security groups created within Active Directory

### Softricity ZeroTouch Client

- Intel Pentium III 600MHz
- 5MB available hard disk space
- Microsoft Windows 2000, XP or 2003
- Internet Explorer 5+ or Firefox 1.0.1+
- SoftGrid Client software v3.2 or 4.0

**The Softricity Desktop provides application deployment and management** for enterprises that want to operate with much greater agility and deliver a superior end-user desktop experience, at a fraction of traditional costs. Using Softricity's patented application virtualization and on-demand streaming technologies, it changes applications into network services that no longer need to be installed. This enables a highly scalable software environment that is securely deployed, managed and immediately available anywhere in the world.

#### **ABOUT SOFTRICITY**

Softricity, Inc. was founded in 1999 to enable software to be as instantly available and easy to use as electricity. Our solutions are designed to accelerate the time to market and reduce the risks and costs of getting software to users the moment they need it. The result is dramatically improved business agility and a superior desktop experience for end users in any environment. More than 300 global customers rely on Softricity solutions, including AIG, Blue Cross Blue Shield, Northeastern University, Prudential, Raytheon, Sanofi-Aventis Deutschland GmbH and Suncor Energy. Softricity is a partner with Microsoft (Gold Certified), IBM, HP and VMware.

#### **LEARN MORE**

To learn how the Softricity Desktop can help you, please contact us at [info@softricity.com](mailto:info@softricity.com), or at:

##### **Headquarters**

27 Melcher Street  
Boston, MA 02210  
USA

Tel: +1 617 695 0336  
Fax: +1 617 338 7769  
[info@softricity.com](mailto:info@softricity.com)

##### **EMEA** (Europe, Middle East & Africa)

Weena 290 (Regus building)  
3012 NJ Rotterdam  
The Netherlands

Tel: +31 10 282 1410  
Fax: +31 10 282 1222  
[emea@softricity.com](mailto:emea@softricity.com)

##### **APAC** (Asia-Pacific)

PO Box 9038  
Brighton, Victoria  
Australia

Tel: +61 418 390 354  
Fax: +61 39 530 3360  
[asiapac@softricity.com](mailto:asiapac@softricity.com)

#### **[www.softricity.com](http://www.softricity.com)**

To quickly see how you can cut application management costs by comparing the Softricity Desktop to your existing environment, get an in-depth, customized ROI analysis using our Forrester TEI™-compliant Return On Virtualization™ Calculator, please fill out a request form at [www.softricity.com/products/howtopurchase.asp](http://www.softricity.com/products/howtopurchase.asp)

[www.softcity.com](http://www.softcity.com)