

# Microsoft® SoftGrid Application Virtualization

Dynamically streaming software as a centrally managed service

*For Software Assurance Customers*

## FREQUENTLY ASKED QUESTIONS:

# Microsoft SoftGrid® Application Virtualization and Enterprise Scalability

### What is Microsoft SoftGrid® Application Virtualization?

Microsoft SoftGrid Application Virtualization transforms applications into virtualized, network-available services resulting in dynamic delivery of software that is never installed, never conflicts and minimizes costly application compatibility testing. Users and their application environments are no longer machine-specific, and the machines themselves are no longer user-specific, enabling IT to be flexible and responsive to business needs, and significantly reducing the cost of PC management, including application and operating system (OS) migrations.

Microsoft SoftGrid Application Virtualization is an integral tool in the Microsoft Desktop Optimization Pack for Software Assurance solution, a dynamic desktop solution available to Software Assurance customers that helps reduce application deployment costs, enable delivery of applications as services, and better manage and control enterprise desktop environments.

### What are the benefits of Microsoft SoftGrid Application Virtualization?

Microsoft SoftGrid leverages our application virtualization, dynamic streaming delivery, and centralized, policy-based management capabilities to make desktop administration a simple, automated process for deploying, patching, updating and terminating applications. It delivers critical PC management benefits, including:

- **Minimize application to application conflicts and regression testing**  
By eliminating the requirement to install applications on desktops or terminal servers, and shielding the OS and applications from changes normally created when applications are installed and run, Microsoft SoftGrid prevents problems that hinder deployments. Applications that might normally conflict can run side by side on the same desktop in a virtual environment, minimizing the need to perform lengthy regression testing.
- **Simplify OS migrations and patching**  
Turn time-consuming, tedious migration and patching projects into largely automated, conflict-free processes. Most applications do not have to be repackaged for OS migrations. Combined with the elimination of most application coexistence issues, the migration process can be streamlined into a more efficient procedure.
- **Build business continuity for applications**  
Replicate your virtualized applications like any other enterprise data to maintain an instant-on failover plan for your applications, significantly cutting end-user downtime. If you configure SoftGrid user profiles to persist on the network, all user-specific application preferences can also easily be replicated to a back-up site.
- **Intelligent Management**  
Not only are application permissions centralized, but the applications and licenses that run on laptops are protected from unauthorized use. Applications can be locked down in read-only mode so that they can't be altered or used in unauthorized ways. In addition, application isolation keeps the OS pristine, helping prevent and contain security breaches and infections.
- **Reduce PC management costs**

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By streamlining the entire application management process, and eliminating many time-consuming tasks, Microsoft SoftGrid significantly reduces the time and associated costs of managing desktops enterprise-wide.

## Microsoft SoftGrid® Application Virtualization and Enterprise Scalability

SoftGrid was focused on servicing the requirements of thousands of users in a primarily centralized architecture. Since Microsoft acquired Softricity, these requirements increased in scope by an order of magnitude to focus on a set of customers that are much larger, global and with a more distributed architecture. Microsoft is expanding and modifying the capabilities in SoftGrid Application Virtualization via the 4.5 release to widely address these new requirements and is targeted for release in H2, CY2008.

For organizations that can deploy the US English version of SoftGrid and/or are focused on deployment to a single site of any size or a limited number of branch offices, we have identified best practices in deployment that are available in the Microsoft Branch Office Deployment Guide and the Microsoft SoftGrid Server Sizing guide available from Microsoft. Microsoft further provides KB articles that will identify known issues for deployment of an US English version of SoftGrid on a localized OS that can be found in our Support database.

For organizations that require localized versions of the software, and/or that are looking for robust replication, redundant systems and support of multiple branch offices on widely distributed enterprise architecture, there is a recommended deployment process to enable you to focus your efforts on the largest of your sites and scale out via the SoftGrid 4.5 release. Since most deployments of this size and scale will typically take 9-18 months, Microsoft can support your short term needs with SoftGrid 4.2 while enabling your longer term architecture that will be ready to deploy when you are in H2 CY2008.

To further help with Enterprise scalability, Microsoft offers the Microsoft SoftGrid Connector for SMS. This allows Microsoft SoftGrid to take advantage of the existing SMS infrastructure so virtualized applications are managed the same way as your locally installed software. Evolving this integration to the next level, Microsoft Systems Center Configuration Manager (SCCM) will offer a deep integration with Microsoft SoftGrid Application Virtualization in the SCCM R2 timeframe.

There are 3 primary aspects of scalability that are relevant for SoftGrid application virtualization:

1) What are the maximum number of applications that can be virtualized?

There is no maximum number of apps that can be virtualized in SoftGrid, nor is there a maximum number of applications that can reside on a SoftGrid Application Server. Typically the only apps that cannot be completely virtualized are ones that contain device drivers. In these instances, the drivers must be installed locally on the system, and the rest of the application may be virtualized. At runtime, the virtual application will utilize the locally installed driver.

As of 4.2 the supported package size of any individual package is 4GB – typically most enterprise applications are not larger than 4GB however, to satisfy the edge cases where a customer may hit the ceiling, Microsoft is working on a significant mitigation of this implementation with 4.5.

2) Maximum number of concurrent streams of application's bits?

The server scale for concurrent streaming is as scalable as a typical file server in your environment Microsoft offers the Microsoft SoftGrid Server Sizing Guide to help determine server scalability for the customer environment.

3) Support for remote locations?

Remote locations can be managed in a number of ways as outlined by Microsoft System Center Virtual Application Server Branch Configuration Guide including:

- a) Independent and Centralized hub models

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- b) In versions 4.1 and 4.2, the SoftGrid client can be optionally configured to run in “disconnected” mode (can be configured to be disconnected for up to 9,999 days).
- c) In version 4.5 (estimated to be available in H2 2008), the SoftGrid client can be configured for “stand-alone operation” (i.e., configure the client to not communicate with a SoftGrid Virtual Application Server). In disconnected or stand-alone mode, updates are delivered to targeted devices utilizing traditional ESD methods.

In summary, SoftGrid 4.1 and 4.2 are “enterprise-ready” for data centers, back offices, and main campuses. If an organization has remote locations, then we recommend that SoftGrid is designed per the Branch Configuration guide, run in disconnected mode or wait until version 4.5 which will support additional options for even more robust delivery and authorization options including deep integration with SCCM.

To learn how Microsoft SoftGrid Application Virtualization and the Microsoft Desktop Optimization Pack for Software Assurance can help you, go to <http://www.windowstvsa.com/optimizeddesktop>.