



SHADOWSTOR™

Leading the Way to Safer Computing.

SHADOWSERVER™

Your server's first line of defense.



PRODUCT SCENARIOS

ShadowServer Overview

Corporations, OEMs and home offices can't afford the costs associated with server downtime. ShadowStor™ ShadowServer™ provides non-restrictive, easy to use server protection for Windows NT, 2000 and 2003 servers. ShadowServer is the best way to prevent unwanted or deliberate changes from being made to a server. ShadowServer is your first line of defense, reducing the time and cost associated with reinstalling the operating system, restoring from an image or recovering from a tape backup. At anytime, authorized users can save changes to the system, save selected files and folders or simply return the system to its pre-ShadowMode™ state. ShadowMode bullet proofs your servers. Place your server in ShadowMode and:

- **Reduce Total Cost of Ownership** - Reduce the TCO for managing and maintaining your servers by simply rolling the system back to an optimal state.
- **Improve System Performance** – Configure your servers exactly the way you want them ONCE and run in that optimal state at all times. No need to spend the time removing unwanted files or trouble shooting and eliminating unwanted server changes.
- **Maximize System Uptime** - Maximize server uptime by instantly undoing accidental or malicious changes to your servers. Avoid the costs associated with server downtime.
- **Improve System Security** - Prevent downtime and system damage due to virus and worm outbreaks. Avoid the virus or worm from ever being written to the server.
- **Increase Stability** - Safely test system updates, service packs, new applications and patches before permanently saving changes to your server.

ShadowServer is a perfect solution for:

- Enterprise Environments
- Computer Labs
- Training Centers
- Help Desks
- Libraries and Public Kiosks
- Home Offices or a Single PC

Product Use Cases

Product Use 1 ShadowServer

Server Administrators must ensure critical servers stay online and available 24X7 365 days a year. Server downtime due to virus and worm outbreaks, application failure, or unwanted changes to servers can cost a company millions of dollars each year. Any solutions that improve 24X7X365 coverage must be easy to implement, require little management and must have a significant ROI to justify the capital and resources needed to integrate it into an existing enterprise environment.

Desired Solution:

Server Administrators need a solution that is proactive against attacks that lead to server downtime. Traditional disaster recovery and backup methods take too much time, are not always reliable and require IT resources. A company can't afford losing money every minute the server is offline. Administrators need an easy way to get their servers back up and running without taking too much time to re-install, re-image, or hope for a successful system recovery from tape backup.

How can ShadowServer Help?

ShadowServer is an easy-to-use security and recovery system for your servers. ShadowServer, combined with a good backup and disaster recovery plan, will save companies millions of dollars in server downtime. Placing a server in ShadowMode ensures the system volume and other designated volumes will be safe from attack, accidental changes, or patches and new applications gone awry. ShadowServer minimizes server downtime to a reboot rather than using the traditional methods of recovery that requires a significant amount of time, money and productivity.

Time	Traditional Way 1	Traditional Way 2	Time
2-4 hrs.	Re-load operating system from CD	Reboot server to another operating environment	<45 minutes
	REBOOT	Locate backup image	
1 hour	Download and Apply Patches	Restore the entire backup image	1-3 hrs.
	MULTIPLE REBOOTS	REBOOT	
1-2 hrs.	Re-install applications	Complete	> 3 hrs.
1-2 hrs.	Re-configure settings and desired look and feel	2.4 million*	\$ Cost
> 5 hrs.	Complete		
\$ Cost	4.1 million*		

* cost per hour of server downtime averaged out by industry (see industry table below)

ShadowUser SMART Snap Technology	Time
Save desired changes to files and folders	1 minute
REBOOT	
Complete	< 5 minutes
<41K*	\$ Cost

Industry	Avg. Cost of Downtime Per Hour (\$USD)
Brokerage operations	\$6,450,000
Credit Card Authorizations	\$2,600,00
E-Commerce	\$240,000
Package Shipping Services	\$150,250
Home Shopping Channels	\$113,750
Catalog Sales Center	\$90,000
Airline Reservation Center	\$89,500
Cellular Service Station	\$41,000
ATM Service Fees	\$14,500
Table 1: Based on a survey done by Contingency Planning Research™	

Product Use 2 ShadowServer

Blade servers are becoming a popular alternative in enterprise environments for their ease of management and strengths in failover capabilities when corruption or failure occurs. Blades are also becoming a preferred solution for server clustering. ShadowServer compliments blade server solutions by assisting in quick failover and recovery of a blade that is corrupted or has failed.

Desired Solution:

To keep blade servers online at all times for access to users, applications, and storage. Enterprise organizations require a method for quick failover and recovery of blade servers. ShadowServer should be a component of an enterprise disaster recovery plan to minimize downtime and the adverse affects it can have on day-to-day business.

How can ShadowServer Help?

ShadowServer is the right solution for blade servers. It is very easy to install and configure, does not require on-going management, and has minimal impact on server resources. ShadowServer provides flexibility to administrators so that ShadowMode sessions can be scheduled, run ShadowMode on designated volumes and set schedules to reset servers for No Touch Recovery™. Administrators can ensure their blades are safe while running in ShadowMode. If the operating environment becomes corrupt by a virus, worm or an unwanted system change, simply reboot the blade back to its original optimal state. The adverse impact of downtime to a business is minimized while maximum uptime is achieved.

Product Use 3 ShadowServer

Protect the system volume on file & print, web servers and other static servers in the enterprise. Data needs to be written to the other non-system volumes.

Desired Solution:

IT organizations must ensure the system volumes on all servers are protected at all times and reduce the amount of downtime. Depending on the role of the server, end-users may need to save files to volumes or have access to applications at all times. IT staff must ensure end user data is saved and applications remain online while protecting the system volumes of the servers.

How can ShadowServer Help?

ShadowServer allows IT organizations to select which volumes should be placed into ShadowMode. IT staff could place the system in ShadowMode and ensure the volume is completely protected. In the event of a virus outbreak, a failed upgrade or update, or accidental and unwanted changes to the server are made; the system volume can be rolled back to its original optimal state. Downtime is dramatically reduced, and all data is protected on the server.

Product Use 4 ShadowServer

No touch system recovery for servers. Scheduled tasks can be created which require no human intervention to be performed.

Desired Solution:

IT organizations don't want to visit each server every time there is a problem. Most problems a server will have can be solved by running in ShadowMode and simply rebooting the system.

How can ShadowServer Help?

IT organizations can create a scheduled task to perform this operation during off peak times each night to ensure the system volumes and data are protected, and ensure the server is running at its most optimal state. Tasks can be created in the UI of ShadowServer and allow for daily tasks or for one time only tasks.

Product Use 5 ShadowServer

Create the first line of defense for all servers in the enterprise. Combine ShadowStor's powerful technology with tape backup and imaging methods to create the ultimate defense to costly server downtime.

Desired Solution:

IT staff need to create a defense against server downtime. Creating this defense involves using multiple technologies to address all the issues.

How can ShadowServer Help?

ShadowServer is the first line of defense for corporate servers. Coupled with a tape backup or imaging solution, creates the ultimate defense to reduce the cost associated with server downtime in an organization. ShadowServer protects from the day to day threats that exist from viruses, worms, malicious attacks, unwanted changes, failed service packs and updates, and unknown operating system errors. When catastrophe hits, and the servers must be completely brought back from a bare metal state, tape backups and imaging solutions can recover the server. ShadowServer should be part of the standard build for servers so protection of the server can resume.

Next Steps

If you would like to evaluate ShadowServer you can download a 15-day full-featured trial version or purchase it at www.shadowstor.com. Volume pricing and licensing is available for enterprise, OEM, government, education and non-profit organizations.

ShadowStor is a leading provider of innovative solutions for PC and server security and protection. Please visit us at www.shadowstor.com for more information about ShadowUser, ShadowServer and other available solutions.