

PageScope Enterprise Suite Backup and Recovery

USER GUIDE

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Introduction:

This guide has been created to discuss the Backup and Restore options of PageScope Enterprise Suite (PSES). PSES is a networked based server solution and necessitates the need for backing up stored data and restoring backed up data. This functionality is mandatory for surviving any possible system or network failures in order to maintain maximum server/application up-times.

In this guide we will discuss the Backup and Restore features of PSES. We will also provide step-by-step setup configurations to enable these features. Lastly we will discuss other industry standard backup & recovery methods and how these methods can be implemented in conjunction with PSES.

Document Scope:

PageScope Enterprise Suite Backup and Restore Procedure.

RAID Array

Chapter 1

PageScope Enterprise Suite Backup and Restore Procedure (Local and/or network) PageScope Enterprise Suite offers a Backup and a Restore feature built into the software application. This feature is designed to allow an IT administrator to backup the PSES database on a scheduled basis. This chapter will describe the step-by-step procedure involved for enabling and performing this operation.

Creating a Database Backup:

🗳 Admin Console							
		Enterprise S	Suite				?
Server Start and Stop	Database Settings	Proxy Settings	Backup	Restore	Change Password		
Server Status							
The server is runnin	ig normally.						
					Start	S	itop
						 <u> </u>	

Open the PSES Admin Console, and click the "Stop" button.



Once the server is stopped a message in red will display "The server has stopped."

Save Directory					Browse
\\Print\d\RobPSESBACKUP\					[Required] Max: 246 chars
File Name	DataBaseBackup		yyyymmdd.f	8ak	[Required] Max: 244 chars
Backup Interval					
💿 No Backup	-				
	Tst	×	23:00	Y	
	23-00		23:00	×	
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Next, click on the Backup Tab and select your destination folder by entering the local or network file path in the Save Directory field or clicking the Browse button and locating the intended folder.

Next enter a file name in the File Name field. Finally, an admin can schedule an automatic Backup Interval by selecting Monthly, Weekly, Daily and setting the appropriate day, date or time.

Click the apply button and select the "Backup Now" Button.

Note: When selecting a backup folder you MUST make sure that the User Group "SQLServer2005MSSQLUser\$HOSTNAME\$SQLPSESCORE" has FULL CONTROL of the selected folder otherwise it will not be able to create the backup.

These permissions can be verified by right clicking on the intended folder, select properties, security tab.

Admin Console	
📄 KONICA MINOLTA 🛛 🕸 Scoff Enterprise Suite	?
Server Start and Stop Database Settings Proxy Settings Backup Restore Change Password	
Backup Settings	
Save Directory	Browse
	[Required] Max: 246 chars
Backup Interval No Backup Backup is being executed. Please wait Backup is being executed. Please wait Sunday Veekly Daily Please check that SQL Server has write permission to the folder specified on the Save Directory.	
Backup Now Apply	Clear sional

A "Backup is being executed. Please wait..." message is displayed during the backup process.

🕸 Admin Console			
🔵 KONICA MINOLTA 🛛 🕸 PAGE	Enterprise Suite		?
Server Start and Stop Database Settings	Proxy Settings Backup Restore Change Password		
Backup Settings Save Directory \\Print\d\RobPSESBACKUP\		Browse [Required] Max: 246 chars	
File Name	DataBaseBackup yyyymmdd.Bak	[Required] Max: 244 chars	
Backup Interval No Backup Monthly Weekly Daily Please check that SQL Server has write	Admin Console Backup has been completed successfully. CK e permission to the folder specified on the Save Directory.		
	Backup Now Apply	Clear	

A "Backup has been completed successfully" window will open once the backup is done. To continue click the OK button.

🗳 Admin Console						
		Enterprise S	Suite			?
Server Start and Stop	Database Settings	Proxy Settings	Backup	Restore	Change Password	
Server Status						
The server has stop	ped.					
					Chart	Stop
					Start	Stop

Navigate back to the "Server Start and Stop" tab and click on the "Start" button.



Once "The server is running normally." is displayed the backup procedure of the database is complete.

Restoring a Backup File:

🗳 Admin Console							
	DLTA JEPAGE E	Enterprise S	Suite				?
Server Start and Stop	Database Settings	Proxy Settings	Backup	Restore	Change Password		
Server Status							
The server is runnin	g normally.						
							_
					Start		Stop

Open the PSES Admin Console, and click the "Stop" button.



Once the server is stopped a message in the red will display "The server has stopped."

🗳 Admin Console							
		Enterprise	Suite				?
Server Start and Stop	Database Settings	Proxy Settings	Backup	Restore	Change Password		
Restoration Setting							
Backup File						Browse [Required] Max: 259 chars	
		Restoration in P	rogress			Clear	

Click on the "Restore" tab, and then select the "Browse" button.

Specify the backup file. NONICA NONICA Several Statiant Several Statiant Declarge Volund PS Volund PS My Documetr My Documetr

Navigate to the location where the database backup file is located (local or network location). (See pages 5-9 to create a backup file)

🛎 Admin Console	
CONICA MINOLTA Description Enterprise Suite	?
Server Start and Stop Database Settings Proxy Settings Backup Restore Change Password	
Restoration Setting	
Backup File	Browse
\\Print\d\PSESBACKUP\DataBaseBackup20080421.bak	[Required] Max: 259 chars
Restoration in Progress	Clear

After selecting the backup file click on the "Restoration in Progress" button.

	min Console		
<u>0</u>	KONICA MINOLTA 🖉 🕍 Enterprise Suite		2
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i i i	estoration Setting	. Now office event had	
	lackup File	Browse	1
	VPrint/d/PSESBACKUP/D at all acell ackup20080421 (bak	Required Max 259 chars	
3	If you execute restoration, all current data will be deleted. If the re-	storation fails, please see the Help file. Do you wish to execute t	te restoration?
	Restoration in Plagess	Clear	

The next window will state "If you execute restoration, all current data will be deleted. If the restoration fails, please see the Help file. Do you wish to execute the restoration?" Click Yes to replace your data with the backup data.

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	Reng mitoed. Please well.		
	Restation in Progress	Dew	
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"Being restored, Please wait" is displayed. The database is being restored from the backup file.

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	Backup File		Batterin	
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When the restore is finished a new window will state "Restore has been completed successfully." Click OK.

KONICA MINOLIA Server Start and Stop Database Settings Proxy Settings Backup Server Starts The server has stopped.	🗳 Admin Console			
Server Start and Stop Database Settings Proxy Settings Backup Restore Change Password Server Status The server has stopped. Image: Change Password Image: Change Password	SCOPE KONICA MINOLTA	Interprise Suite		?
Server Status The server has stopped.	Server Start and Stop Database Settings	Proxy Settings Backup Restore	Change Password	
The server has stopped.	Server Status			
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Jak Stop			Jan	зтор

Navigate back to the "Server Start and Stop" tab and click on the "Start" button.

🚔 Admin Console	
e KONICA MINOLTA LE PAGE Enterprise Suite	?
Server Start and Stop Database Settings Proxy Settings Backup Restore Change Password	
Server Status	
The server is running normally.	
	_
Start Stop	

Once "The server is running normally." is displayed the backup database restore process is complete.

Chapter 2

Recommended Industry Standard Practices

In this chapter we will discuss some of the Industry standard practices regarding backing up and storing critical data.

RAID Arrays

RAID — which stands for **Redundant Array of Independent Disks** — is a technology that employs the simultaneous use of two or more hard disk drives to achieve greater levels of performance, reliability, and/or larger data volume sizes.

The phrase "RAID" is an umbrella term for computer data storage schemes that can divide and replicate data among multiple hard disk drives. RAID's various designs all involve two key design goals: increased data reliability and increased input/output performance. When several physical disks are set up to use RAID technology, they are said to be *in* a *RAID* array. This array distributes data across several disks, but the array is seen by the computer user and operating system as one single disk. RAID can be set up to serve several different purposes, the most common of which are outlined below.

Purpose and basics

A RAID distributes data across several physical disks which look to the operating system and the user like a single disk. Several different arrangements are possible. We assume here that all the disks are of the same capacity, as is usual.

Some arrays are "redundant" in a way that writes extra data derived from the original data across the array organized so that the failure of one (sometimes more) disks in the array will not result in loss of data; the bad disk is replaced by a new one, and the data on it reconstructed from the remaining data and the extra data. A redundant array obviously allows less data to be stored; a 2-disk RAID 1 array loses half of its capacity, and a RAID 5 array with several disks loses the capacity of one disk.

Other RAIDs are arranged in a way that makes them faster to write to and read from than a single disk.

There are various combinations of these approaches giving different trade offs of protection against data loss, capacity, and speed. RAID levels 0, 1, and 5 are the most commonly found, and cover most requirements.

RAID 0 (striped disks) distributes data across several disks in a way which gives improved speed and full capacity, but all data on all disks will be lost if any one disk fails.

RAID 1 (mirrored disks) uses two (possibly more) disks which each store the same data, so that data is not lost so long as one disk survives. Total capacity of the array is just the capacity of a single disk. The failure of one drive, in the event of a hardware or software malfunction, does not increase the chance of a failure or decrease the reliability of the remaining drives (second, third, etc).

RAID 5 (striped disks with parity) combines three or more disks in a way that protects data against loss of any one disk; the storage capacity of the array is reduced by one disk. The less common RAID 6 can recover from the loss of two disks.

RAID involves significant computation when reading and writing information. With true hardware RAID the controller does the work. In other cases the operating system or simpler and less expensive

controllers require the host computer's processor to do the computing, which reduces the computer's performance on processor-intensive tasks (see "Software RAID" and "Fake RAID" below). Simpler RAID controllers may provide only levels 0 and 1, which require less processing.

RAID systems with redundancy continue working without interruption when one, or sometimes more, disks of the array fail, although they are vulnerable to further failures. When the bad disk is replaced by a new one the array is rebuilt while the system continues to operate normally. Some systems have to be shut down when removing or adding a drive; others support hot swapping, allowing drives to be replaced without powering down. RAID with hot-swap drives is often used in high availability systems, where it is important that the system keeps running as much of the time as possible.

It is important to note that RAID is not an alternative to backing up data. Data may become damaged or destroyed without harm to the drive(s) on which it is stored. For example, part of the data may be overwritten by a system malfunction; a file may be damaged or deleted by user error or malice and not noticed for days or weeks; and of course the entire array is at risk of catastrophes such as theft, flood, and fire ¹.

¹ An excerpt from the internet definition website Wikipedia.com



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