# Use of Commercial Backup Software with Juris (Juris 2.x w/MSDE)

Juris databases hosted on a Microsoft SQL Server 2000 Desktop Engine (MSDE) instance can be backed up manually through the Juris Management Console. Firms who want to automate the backup process to eliminate the nightly manual backup have the following two options:

- Upgrade the MSDE instance to the full version of Microsoft SQL Server 2000 (which allows the implementation of a scheduled SQL Maintenance Plan)
- Use an appropriate SQL agent for their backup software

Juris currently supports 2 third-party backup packages:

- Veritas Backup Exec from Symantec, versions 8.6 and higher
- BrightStor ARCserve Backup from Computer Associates, also versions 8.6 and higher.

Support for features and functions not specific to backing up the Juris/JBills databases should be requested from the appropriate software vendor.

Other software packages with SQL capabilities may be able to perform a valid backup of the Juris databases as well; assistance with configuring those packages may be available from Juris, Inc. on an Additional Services basis.

This document provides the special configuration steps you need to successfully use 3<sup>rd</sup> party SQL agents to back up the \JURIS MSDE instance. For more information on settings that don't relate to /JURIS MSDE backup, consult the documentation and support for the specific software.

NOTE: Firms that use full SQL Server 2000/2005 (rather than MSDE) do not need to follow the steps provided in this document. Full SQL Server allows the creation of a Maintenance Plan within Enterprise Manager to schedule a database backup, or alternately the use of the "sa" SQL login for attaching to the SQL instance from third-party backup packages. In such an environment, the SQL administrator need only verify that 1) the Juris & JBills databases are being backed up regularly and 2) the Juris/JBills transaction logs are being backed up & truncated as appropriate. Consult the documentation for SQL Server and/or the appropriate backup software for details.

# **BrightStor ARCserve 2000 (Advanced Edition)**

### Backing Up the Juris and JBills databases

There are some special setup considerations required when using BrightStor ARCserve 2000. The BrightStor ARCserve 2000 backup software should be installed as normal, and the SQL Agent should be installed on the machine where MSDE/Juris Server is installed. When installing the SQL Agent there are a few options that need to be changed.

When the following screen appears, choose Modify.

Configuration					×
Microsoft SQL Serv	ver Configuration	,			
Instance	Login ID	Authentication	V-SQL	Cluster User	[
JURIS	default	Win			<u>M</u> odify
-Network protoco	l chosen for rem	ote backup/restor	e		
Named Pip	bes				
C TCP/IP					
		< <u>B</u> ack	<u>N</u> ext >	Cancel	

The Authentication Mode must be changed to Mixed Mode and the Login ID should be entered as JurisRPT2 with password of JurisRPT2. (Firms using Juris version 2.0x should use the JurisRPT login with a blank password.) Choose OK.

odify Instance	×
Instance Name: JUR	IIS
- Authentication Mode	
○ <u>W</u> indows Authentication	on Mode
Mixed Mode (Windows	authentication and SQL Server authentication)
Login ID and Pas	sword for SQL Server:
Login ID:	JurisRPT
Password:	
Confirm Password	±
Please enter your cluster in	formation here:
Virtual Microsoft SQL Serve	er Name:
Windows NT Cluster Serve	er User Name:
Windows NT Cluster Serve	er Password:
Confirm Cluster Server Pas	sword:
	OK Cancel
nfiguration	
Microsoft SQL Server Configura	ation
Instance Login ID	Authentication V-SQL Cluster User
JURIS JurisRPT	Mixed
-Network protocol chosen for	remote backup/restore
Named Pipes	
	< <u>B</u> ack <u>N</u> ext > Cancel

The second step requires the use of the Domain Administrator account<sub>7</sub>. This account will be used with a Juris utility (DomainUser2.0.exe or DomainUser2.1.exe)<sup>8</sup> to allow access to the Juris and JBills databases for backup purposes. The DomainUser utility can be run from any directory on the Juris Server or a Juris Admin workstation. Double click on the DomainUser.exe and a screen similar to the following will appear.

×

🐭 Backup Operator Permisson Manager 📃 🔲 🗙				
Connected to the JURISLAB domain. Select the user that will be used to perform backup operations				
Name	Description			
Administrator GHOST_BSBTEST GHOST_JTEST_NT Guest JLAB JurisBackup JurisWeb	GHOST_BSBTEST GHOST_JTEST_NT JURIS FOR THE WEB			
All registered companies will be updated with backup privledges				

Highlight the Domain Administrator and choose OK.

This same **Domain Administrator Account** must also be used to change the Log On account for two services that were installed by the Brightstor Arcserve SQL Agent. <sup>9</sup> Go to Start-Settings-Control Panel-Administrative Tools-Services. Right click on the ARCserve Discovery service and click on Properties. Click the Log On tab and change the Log on as: from Local System account to This account using the **Domain Administrator Account** chosen with the DomainUser.exe from above.<sup>10</sup> (See print screen on the following page) Click Apply and Ok. Right click on the service again and choose Restart, which will restart the service. These same steps need to be followed on the Backup Agent RPC Server service.

<sup>7</sup> The System/Network Administrator should perform this step.

<sup>8</sup> The DomainUser utilities are available at www.juris.com.

When the Domain Administrator Account has a password change, that password must also be changed under the Services properties

listed above.

<sup>10</sup> The account used should be preceded by the domain name as shown on the print screen below.

ARCserve Discovery Ser	vice Properties (Local Computer) 🛛 🤗 🗙
General Log On Reco	very Dependencies
Log on as:	
C Local System accour	nt
Allow service to in	DOMAIN&Administrator
Inis account:	
Password:	**********
<u>C</u> onfirm password:	**********
You can enable or disabl	e this service for the hardware profiles listed below:
Hardware Profile	Service
Profile 1	Enabled
	<u>Enable</u>
	OK Cancel Apply

When you use BrightStor ARCserve 2000 ..., there are some steps that need to be followed. Browse out to the Juris/MSDE server and expand that selection. [how?] There will be a Microsoft SQL Server selection listed. Right click on the Microsoft SQL Server and choose Security.

The following screen will appear. Enter JurisRPT2<sub>11</sub> as the User Name with a password of JurisRPT2 and choose OK. (Juris 2.0x users should use the JurisRPT login with a blank password.)

Security		? ×	1		
Security for Microsoft S	QL Server - JURIS				
<u>U</u> ser Name	User Name JurisRPT				
<u>P</u> assword					
To specify a domain account on NT, use the following syntax: DomainName\UserName. To specify a local account, enter the UserName. To specify a UNIX account use UNIX User Name.					
ОК	Cancel	<u>H</u> elp			

Expand the Microsoft SQL Server selection and choose both Juris and JBills as shown below.



Right-click on the Juris or JBills database and the following options will appear. When backing up the database, these should be left to the default settings.<sup>12</sup>

12 The Database Consistency Check option will not function correctly when backing up the Juris or JBills databases. The Verify option from the Juris Management Console should be used instead once the backup has completed



If prompted for a username/password when starting the backup, Juris 2.1+ users should use JurisRPT2 as the Login/Username with a password of JurisRPT2. Juris 2.0x users will use JurisRPT with a blank password.

There will need to be two separate backup jobs created: One to backup the databases (Juris and JBills) and the second to backup and truncate the transaction log files. The job to truncate the log files does not have to be performed on a nightly basis, but should be performed at least a couple of times a month. This can be done by simply creating a second backup and changing the Backup Options shown above from "Database-Complete" to "Transaction Log." Consult the BrightStor ARCserve documentation for more information.

#### **RESTORING:**

The Restore process can be completed as normal per the backup software documentation. The Database Restore Options should be left as default<sub>13</sub>. The restore process will prompt two logins and passwords. The first is will be a security login. The JurisRPT2 (password of JurisRPT2) or JurisRPT user (blank password) should be entered here as shown below.

13 The Database Consistency Check option will not function correctly when restoring the Juris or JBills databases. The Verify option from the Juris Management Console should be used instead once the Restore has completed.

Security		<u>? ×</u>
Security for \\JTEST_2	KBSB\Microsoft S	QL Server - JURIS
<u>U</u> ser Name	JurisRPT	
<u>P</u> assword		
To specify a do following syntax To specify a loo To specify a Uf	main account on I « DomainName\U cal account, enter NIX account use L	NT, use the serName. the UserName. JNIX User Name.
ОК	Cancel	<u>H</u> elp

The second login will be for a session name and password. This username/password may need to be changed to the Domain Administrator. Example shown below:

Session User Name and Password						
For each tape session, enter: - Username and password for the machine to which the files are restored. - Session password for password-protected tape sessions only. - IP or IPX address for agent restore only.					OK Cancel	
						<u> </u>
Media	Sess. #	Path		User Name	Pa	Help
Media creat	0005	NUTEST.	_2KBSB\dbasql@JURIS	Administrator	******	
Media creat	0006	NUTEST	_2KBSB\dbasql@JURIS	Administrator	*****	
•					Þ	

## BrightStor ARCserve Version 914 & 11

Install the BrightStor ARCserve backup software as normal.<sup>15</sup> When installing the SQL Agent onto the Juris/MSDE server, the Account Configuration must be changed as shown in below. The Authentication for the \JURIS instance must be changed to SQL and JurisRPT2 (password: JurisRPT2) for Juris 2.1+ users or JurisRPT (blank password) for Juris 2.0x users must be entered as the Login ID.

<sup>14</sup> BrightStor ARCserve 9 is capable of backing up local and remote databases. ARCserve 2000 can only backup remote databases. <sup>15</sup> BrightStor ARCserve 9 requires a patch to be fully function with Juris. The latest update for ARCserve v.9 (currently v.9.01) and patch QO38957.CAZ (available from the ARCserve website) need to be installed to allow backups of the Juris and JBills databases. The software patch is the result of Juris, Inc. and Computer Associates working together to make sure that ARCserve v.9 allowed full

BrightStor ARCserve v.11 requires a special registry setting to be able to properly backup Juris and JBills. In registry key HKLM\Software\ComputerAssociates\BrightStor ARCserve Backup\Base\Task\Common\DBAgentsSettings\ add a DWORD value named DBLocalAsRemote with a value of 1.

backup capability for Juris clients using MSDE. The software patch may be added to a future ARCserve 9 update. Check the ARCserve update documentation for details.

Backup Agent for SQL Server Configuration 📃 🚺 Sharing 🔫 🔀				
Account Configuration Please provide SQL Server Account information.				
Instance	Authentication	Login ID	Password	Confirm passw
JURIS Click here to add a new In	SQL authen	JurisRPT		
		< <u>B</u> ack	<u>N</u> ext >	<u>S</u> kip

When making a backup with BrightStor ARCserve v.9, right-click on the JURIS instance.



Choose Security and enter User Name JurisRPT2<sub>16</sub> with a password of JurisRPT2 (for Juris 2.1x) or JurisRPT with a blank password (for Juris 2.0x).

Security		🕒 Sharing 👻 🗙
Security for	Microsoft SQL Server - JU	RIS
<u>U</u> ser Name	JurisRPT	
<u>P</u> assword		
To specify a Wi syntax: Domain To specify a loc Backup User Na To specify a Lin BrightStor ARCs	ndows domain account, us Name/UserName. al account, enter the Brigh ame. ux/Unix server account, er erve Backup User Name.	e the following tStor ARCserve nter only the
To log on to a N	etWare server, enter the fu	ull NDS context.
<u>0</u> K	<u>C</u> ancel	Help

<sup>16</sup> JurisRPT2/JurisRPT must have Backup/Restore rights for the two Juris databases. Use JUT21119.exe for Juris 2.1+ or JUT2070.exe for Juris 2.0x (both available in the Client Downloads area of Juris.com) if needed to assign the proper rights.

Right click on the instance again and change the Remote Protocol from TCP/IP to Named Pipes.17

Remote Protocol	🕒 Sharing 👻 🗙
Select a Remote Protocol	
<u>0</u> K	<u>C</u> ancel

Expand the Juris instance, choose the Juris and JBills databases. Right-click on each database to open the Backup Agent Options and choose the type of backup being made, Database or Transaction Log. The default options for either should not be changed.

gent Backup Options		🕑 Sharing 👻 🗙
Database Backup Options		
Database - Complete		
O Database - Differential		
C Files/Filegroups		Browse Files/Filegroups
C Files/Filegroups - Differential		
C Transaction Log		
<u>     Bemove inactive entries from tran</u>	nsaction log, after ba	okup.
C Do not remove inactive entries fr	om transaction log, afl	ter backup.
C Bagkup only the log tail and leav	e the database in an i	unrecovered mode.
Database Consistency Check		
🔲 Before backup	Check the phy of the database	ysical consistency
🔲 Aft <u>e</u> r backup	Do not check	indexes
Continue with backup, if DBCC fails		
	OK	Cancel Help

Complete the backup as normal. Enter the appropriate credentials if prompted when starting the backup.

17 In an environment where ARCserve is installed on the same server as MSDE, the server must be added

as a "Preferred Server/Machine" and the backup job configured to use that instance of the server in order for ARCserve to allow configuration of a Remote Protocol. Consult your ARCserve documentation for more details.

Se	curity and Agent Infor	mation			Sharing 👻 🤶 🗙
ł	Please edit or confirm the fo or this job.	llowing security	and agent in	formation	OK
[	Object	User Name	Password	Agent	Cancel
	UTEST_2K    JTEST_2K    JTEST_	administrator JurisRPT	*****		<u>S</u> ecurity
					Agent
l	•			Þ	<u>H</u> elp

**Restoring** When restoring the Session User Name and Password dialog box will appear. The DBA Agent information must be changed for both Juris and JBills as shown below.

Backup Agent Restore Options
BrightStor ARCserve Backup Automatic Selection Automatically selects all other required sessions and options for the current session
Restore            • Database             • Files or filegroups               • Files or filegroups
C Stop before log mark     C Stop at time     Date: 5/21/2004 ▼ Time: 8:26:31 AM ⊕
Restore database files as:
Jbills9999001_log C:\Program Files\Microsoft SQL Server\MSSQL\$JURIS\Data\JB
Recovery Completion State © Leave database operational. No additional transaction logs can be restored.
C Leave database nonoperational, but able to restore additional transaction logs.
C Leave database read-only and able to restore additional transaction logs.
Undo file name: C:\MSSQL7\BACKUP\UNDO.DAT Browse
Database consistency check         After restore         Do not check indexes         Check the physical consistency
OK Cancel Help

Also, the Session User Name and Password settings should be edited so that ARCserve is connecting via the DBAgent as JurisRPT2 with a password of JurisRPT2 (for Juris 2.1+) or JurisRPT with a blank password (for Juris 2.0x), and the Machine is connecting as Administrator with the appropriate password.

Session User Name and Password						
For each tape session, enter: - User Name and Password for the DBAgent to which the files are being restored. Machine DBAgent						
E M	1edia	Session	Path	Agent User Name	Agent Password	
Т	EST [E995]	0003	VJCDLAB-2KSVR	JurisRPT		
T	EST [E995]	0004	\UCDLAB-2KSVR	JurisRPT		
	<u>0</u> K		Cancel	Edit	<u>H</u> elp	