

## RALS™ System Anti-Virus/Endpoint Security Software Exclusions and Back-up Recommendations

### General Anti-Virus and Endpoint Security Software Recommendations:

- ◆ Install your organization's preferred anti-virus package immediately following connection to the network (or prior to connection if possible).
  - If using Sophos® Anti-Virus, avoid Sophos® Endpoint Security and Control for Windows (Web Intelligence component), which has been found to interfere with proper RALS™ System operation. Contact RALS for additional information.
- ◆ Ensure virus definitions are current and updated automatically.
- ◆ Configure the anti-virus application based on the recommendations in this document to ensure that performance of the RALS System is not impacted. The recommendations take into consideration the following:
  - Avoid scanning of non-executable type files, where altering or deleting an "infected" file (potentially a false positive detection) may cause significant harm to the system.
  - Avoid "real-time" scanning of non-executable type files that are frequently accessed/written as part of normal system operations to avoid the potentially significant performance impact to the system.
- ◆ If active/real-time scanning is enabled, set to scan files when modified only.
- ◆ Perform a manual full-scan after installation and configuration of the AV system to verify system is "clean."

System	File/Process Exclusions	Explanation
RCS (RALS Core System)	<b>Application files:</b> <ul style="list-style-type: none"> <li>• *.log files from D:\MAS and all sub-directories</li> <li>• .exe files from D:\MAS and all sub-directories.</li> <li>• *.txt files from D:\MAS\RALSIntf and all sub-directories</li> <li>• D:\Temp\LISEventLog.txt</li> </ul>	The files should be excluded from scanning to prevent interference with the RALS application  Optionally, exclude D:\MAS\*.
	<b>Database files:</b> The following file types are typically located in the RALS install directory: <ul style="list-style-type: none"> <li>• *.mdf</li> <li>• *.ldf</li> <li>• *.ndf</li> </ul> The default location is D:\MAS\RALSPlus\DB\Backup.	Reference: <a href="http://support.microsoft.com/kb/309422">http://support.microsoft.com/kb/309422</a>  Optionally, exclude D:\MAS\RALSPlus\DB\*.

	<b>Windows OS related:</b> <ul style="list-style-type: none"> <li>%windir%\SoftwareDistribution\Datastore\*.edb</li> <li>%windir%\SoftwareDistribution\Datastore\Logs\*.log</li> <li>%systemroot%\System32\Spool\*.*</li> </ul>	Reference: <a href="http://support.microsoft.com/kb/822158">http://support.microsoft.com/kb/822158</a>
	<b>IIS related:</b> <ul style="list-style-type: none"> <li>%systemroot%\IIS Temporary Compressed Files</li> <li>%systemroot%\system32\inetsrv</li> <li>*.log [in IIS logging directory location(s)]</li> </ul>	Reference: <a href="http://support.microsoft.com/kb/817442">http://support.microsoft.com/kb/817442</a>
	<b>File Share:</b> <ul style="list-style-type: none"> <li>After the RALS 8.0.0 and higher versions, customers will need to back up device files and reports on a nightly basis from the File Share directory.</li> <li>The default File Share location is D:\RALSFileShare.</li> <li>If an alternate local location or a remote location is used for the file share, the device files and reports will need to be backed up.</li> <li>Previously, these files and reports were included in the database and covered by database backups.</li> </ul>	
<b>RALS V-Host (Hyper-V host)</b>	<b>Hyper-V related:</b> <ul style="list-style-type: none"> <li>D:\VSystems and all sub-directories</li> <li>C:\ProgramData\Microsoft\Windows\Hyper-V and all sub-directories</li> </ul>	Reference: <a href="https://support.microsoft.com/en-us/help/3105657/recommended-antivirus-exclusions-for-hyper-v-hosts">https://support.microsoft.com/en-us/help/3105657/recommended-antivirus-exclusions-for-hyper-v-hosts</a>
<b>Customer Self-Hosted Virtual System</b>	Please consult your specific hypervisor manufacturer for recommended AV exclusion guidance.	
<b>i-STAT/DE System</b>	<b>Application files:</b> <ul style="list-style-type: none"> <li>C:\istat32\*.*</li> </ul>	The following files are excluded from scanning to prevent lockup of executables and DLLs by AV solution: <ul style="list-style-type: none"> <li>Core DE Application files</li> <li>DE database files</li> <li>i-STAT analyzer software files</li> <li>eVAS files are excluded</li> </ul>
	<b>Database files:</b> <ul style="list-style-type: none"> <li>C:\Program Files (x86)\SQL Anywhere 17\*.*</li> </ul>	The following files are excluded from scanning to prevent lockup of executables and DLLs by AV solution: <ul style="list-style-type: none"> <li>SQL Anywhere application files</li> </ul>

	<b>Internet Information Services:</b> <ul style="list-style-type: none"> <li>• C:\inetpub\wwwroot\ActiveX\*.*</li> <li>• C:\inetpub\wwwroot\IstatDeSystem\*.*</li> <li>• C:\inetpub\wwwroot\iSTATDMI\*.*</li> <li>• C:\Windows\system32\inetsrv\w3wp.exe</li> <li>• C:\Windows\SysWOW64\inetsrv\w3wp.exe</li> </ul>	<p>The following files are excluded from scanning to prevent lockup of executables and DLLs by AV solution:</p> <ul style="list-style-type: none"> <li>• DE web application files</li> <li>• IIS Worldwide web publishing service</li> </ul>
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**Note:** Abbott does not recommend a specific vendor or product for antivirus protection. If you require additional assistance configuring your antivirus application, please contact your software vendor.

## General Backup Recommendations:

- ◆ ARDx Informatics, Inc. does not provide an off-server backup method. If a system failure should occur, we depend on the IT backup from the night before to restore the data lost.
- ◆ On the RALS Server, the RALS SQL Database will back up every night at 3AM (Note: 3AM is the default but may be changed by customer) into the location: (D:\MAS\RALSPlus\DB\Backup).
  - The hospital IT staff will need to back up the files in the Backup folder at the time the automatic nightly backup has completed, using their backup software to a secure location, on a nightly basis.
- ◆ On the RALS-DE Server, the C:\AUTODEBACKUP directory will need to be backed up on a nightly basis.

Doing live VM based “snapshots” with the RALSTM Systems when the SQL database is installed locally is not recommended, and is not a supported approach for doing a system recovery.