

AR.c Community Guide

Install and configure the AR.c
Framework



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Overview

The purpose of the Amberreef AR.c introduction is to give you the opportunity to see the value in automating your App-V packaging and building an application virtualisation knowledgebase. The ability to script build any configuration into the package engines and to manage the lifecycle of your application estate.

Prerequisites

Download the software from www.amberreef.co.uk/downloads

- For the purpose of this guide you will require a minimum of 2 virtual machines and a file share.
- All VM's where AR.c framework components are to be installed will require .Net 4.0+

Minimum requirements:

ID	Function	Description
VM1	AR.c console and client	OS: Windows 7 Install App-V 4.6 and App-V 5.0 SP1+ clients (see AR.c client) Install AR.c console and AR.c client
VM2	AR.c engine	OS: Windows 7 Install App-V 4.6 and App-V 5.0 SP1+ sequencer (see AR.c engine)
FS1	File share location	Create a file share location that all VMs will be able to access and all "user accounts" will have R/W/D permissions to.

More Functional requirements:

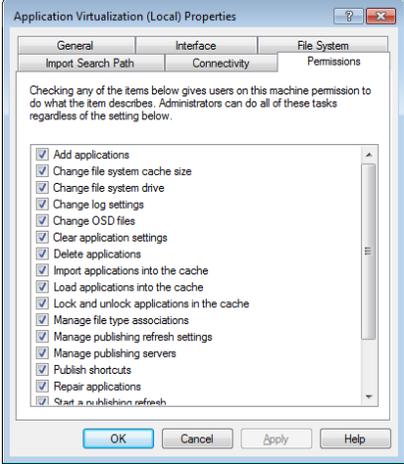
ID	Function	Description
FS1	File share location	Create a file share location that all VMs will be able to access and all "user accounts" will have R/W/D permissions to.
VM1	AR.c console and client	OS: Windows 7 Install App-V 4.6 and App-V 5.1 SP1+ clients (see AR.c client) Install AR.c console and AR.c client
VM2	AR.c engine	OS: Windows 7 Install App-V 4.6 and App-V 5.0 SP1+ sequencer (see AR.c engine)
VM3	AR.c engine	OS: Windows 7 Install App-V 4.6 and App-V 5.0 SP1+ sequencer (see AR.c engine)
VM4	AR.c engine	OS: Windows XP Install App-V 4.6 sequencer (see AR.c engine)

Install and configure

AR.c console

The first step is to install the App-v clients (4.6 and 5.0 SP2+) onto VM1. The following configurations will need to be added to the clients:

App-V 4.6:

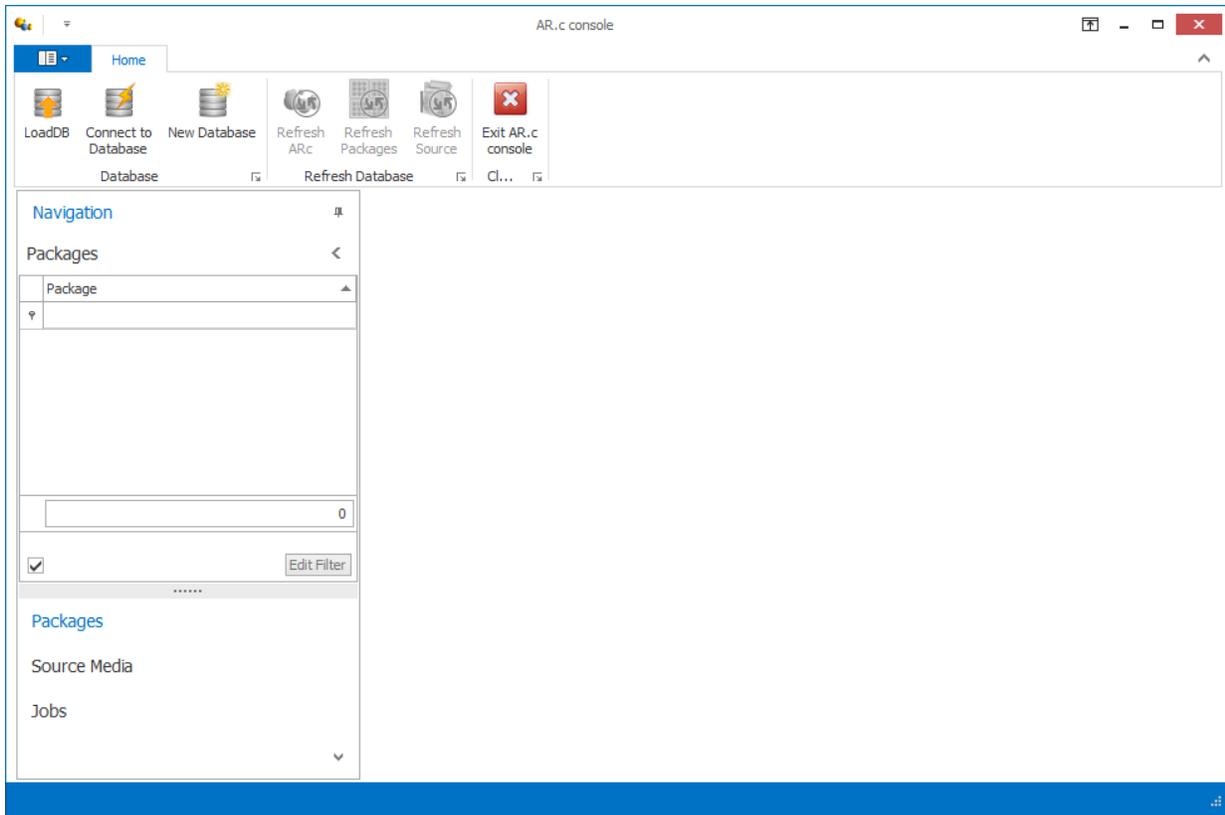
[AllowIndependentFileStreaming]=1	This is either set during the installation of the client or in the Registry: HKLM\Software\Microsoft\Softgrid\4.5\Client\Configuration Or HKLM\Software\Wow6432Node\Microsoft\Softgrid\4.5\Client\Configuration
[AddApp]=1	Set either in the Registry under \softgrid\4.5\client\permissions or in the client UI: ACTION Properties Permissions:
[ClearApp]=1	
[DeleteApp]=1	
[LoadApp]=1	
[UnloadApp]=1	
	

App-V 5.0 SP1+

- Run Powershell as administrator:
- Type "Set-ExecutionPolicy unrestricted"
- Choose "Y"
- Type "Get-ExecutionPolicy" to ensure the setting is applied

Install and configure AR.c console

- Extract the AR.c console installers from the downloaded zip file.
- Run Setup.exe
- choose all defaults
- After the installation is complete run the AR.c console from "Start | All Programs | Amberreef | AR.c | AR.c console":



Create AR.c database

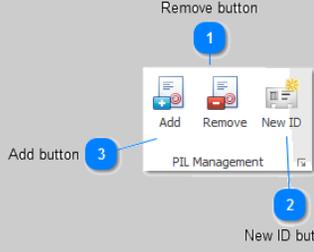
Image	Description
<p>1</p>	<p>Select the "New Database" button.</p>
<p>2</p>	<ul style="list-style-type: none"> • Either browse to the File share defined in the prerequisites or type the location into the "Database Location". • Ensure that the user creating the database has Full access to the file share (if the desktop is not in a domain but the file share is, consider using explorer to browse to the share and enter details of a domain user with full access. "choose remember my details") • Click Create. <p>(N.B. Shortcode is a 2 letter representation of your organisation (e.g. Amberreef – AR) – this is used for the PackageID and SFT_MNT and Primary virtualisation Directories when creating packages.)</p>

License

Once the Database is created and before you can begin you will need to request your license.



Select the Settings tab and choose "Open Settings":

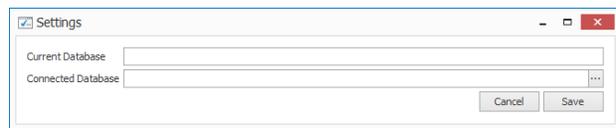
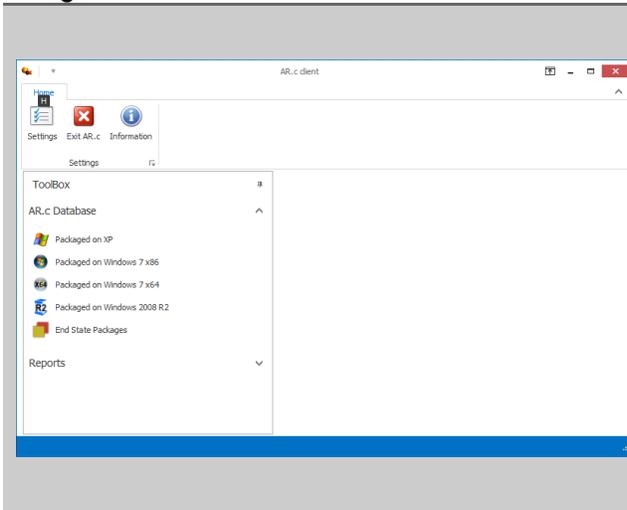
1	Image	Description
		<p>Select "New ID" button:</p>
		<p>On the new PID Request form choose "Save" and save the XML file to a convenient location</p>
		<p>Email the saved XML file to info@amberreef.co.uk with the subject field "Community License Request".</p> <p>(N.B. Please use your company address when emailing the request. We are unable to accept requests from the likes of @gmail, @hotmail etc.)</p>
		<p>You will receive a return mail that will contain your free 10 Package licenses. Once you have received this save the files and select the "Add" button. Browse to each file and import the licenses into the database.</p>
		<p>Whilst you are waiting for the returned License file you can continue to install and configure the remaining components.</p>

AR.c client

On VM1 (same VM as you installed the AR.c console):

- Extract the AR.c client installers from the downloaded zip file.
- Run Setup.exe
- choose all defaults
- After the installation is complete run the AR.c console from "Start | All Programs | Amberreef | AR.c client | AR.c client":

Image



Description

When installed on the same OS as the AR.c console the AR.c client will default to use the same database (file share) as the console.

If you have installed the AR.c client on an OS without the AR.c console you will need to configure the client to connect to an AR.c Database. Follow the below instructions in this case.

Select the "Settings" button on the "Home" tab.

Type or Browse to the AR.c Database file share defined previously and choose "Save".

(N.B. if the client has been connected to a different AR.c database this will be shown in the "Current Database" field)

AR.c engine

On VM2 (and VM3/VM4 if you are building a larger environment) the first step is to install the App-v sequencers (4.6 and 5.0 SP1+). The following configurations will need to be added to the sequencers:

- Disable UAC (Set to "Never Notify")

App-V 4.6

If you are installing on an x64 OS you MUST to use the x64 version of the sequencer.

No extra configurations are required after a default installation.

App-V 5.0 SP1+

If you are installing on an x64 OS you MUST to use the x64 version of the sequencer.

For performing the conversion function from SFT to APPV formats you must perform the below steps in both the X64 and X86 powershell consols.

- Run Powershell as administrator:
- Type "Set-ExecutionPolicy unrestricted"
- Choose "Y"
- Type "Get-ExecutionPolicy" to ensure the setting is applied

Adding full automation capability

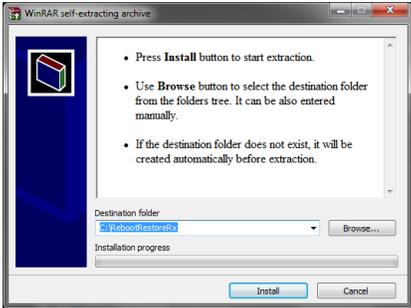
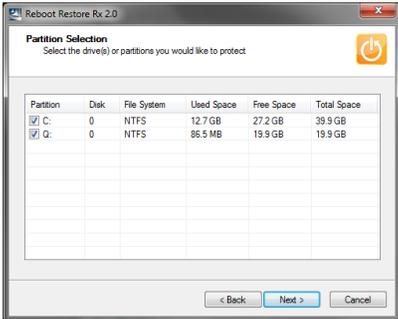
To enable full automation of the AR.c engines we recommend one of the following downloads.

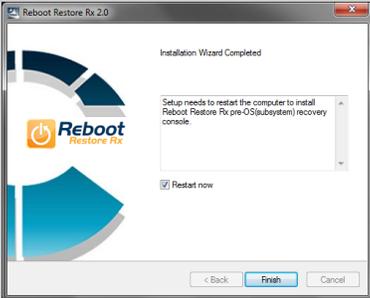
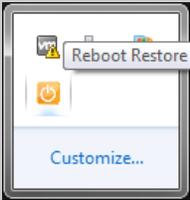
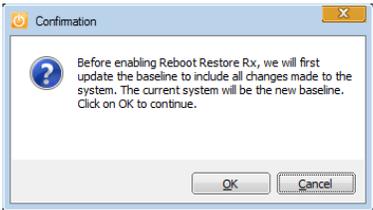
- [HorizonDataSystems RebootRestoreRX](#) (Freeware)

- [HorizonDataSystems DriveVaccine \(Trial\)](#)
- [HorizonDataSystems RollbackRX\(Trial\)](#)

Installing RebootRestoreRX:

Download the installer from the link provided above.

Step	Image	Description
1		Download the installer from the Link above
2		On VM2-4 run the installer
3		Select next
4		<p>Select the drives that you want to be included in the revert operation. In the example to the right we have selected the C:\ and the App-V 4.6 SFT_MNT Q:\ drive.</p> <p>(N.B. Rollback RX will only recognise logical drives. To achieve this in a VM use only one virtual HDD. If necessary extend the original drive and create a new logical partition for the Q:\ drive. You will then be able to include Q:\ in the revert process.)</p>

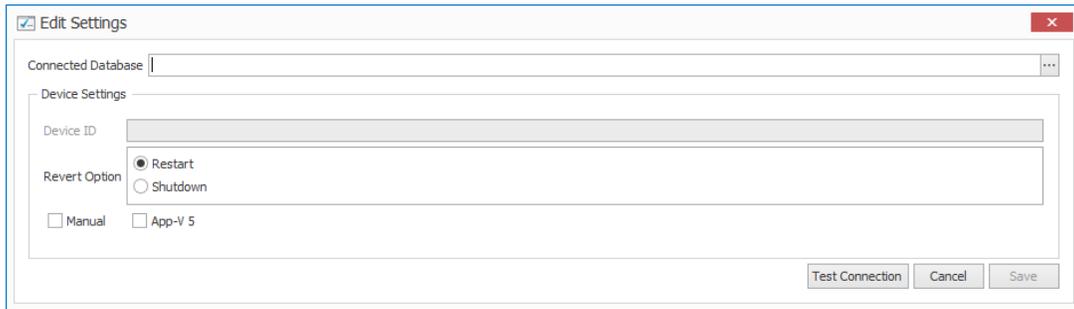
5		<p>Agree to the EULA and at the end of the installation click finish and reboot the VM.</p>
	<p>REBOOT when asked.</p>	<p>It is necessary to reboot the device when asked. This allows RebootRestoreRX to fully configure and create the initial "Baseline"</p>
6		<p>In the taskbar you will now see a new icon. Before installing AR.c engine or performing alterations in the future. Select the icon and choose disable. After the installation / update right click and choose enable.</p>
7		<p>After the installation / configuration / update right click and choose enable.</p> <p>Update the baseline. The VM will now revert to a clean state on every reboot.</p>

Install and configure AR.c engine

If you are planning to fully automate the AR.c engine(s) follow the instructions for RebootRestoreRX above. Before installing AR.c engine as below, **disable** RebootRestoreRX.

- Set the user for AutoLogin (we recommend [Sysinternals AutoLogon](#)) and ensure they are a Local Administrator of the VM. If using VMware Workstation auto login can be configured in the VM Settings | Options Tab | Autologin.
- Reboot to Ensure AutoLogin is configured
- If the VM is **not** in a domain and the AR.c Database file share is, browse to the file share and when prompted for credentials enter appropriate User details and select "Remember my credentials". Alternatively create a Map drive using alternative credentials and select "Re-connect at login".
- Extract the AR.c engine installers from the downloaded zip file.
- Run Setup.exe
- choose all defaults

- After the installation is complete run the AR.c engine from "Start | All Programs | Amberreef | AR.c engine | AR.c engine":



- Enter the AR.c Database file share / map drive details in the "Connected Database" textbox
- If you are planning to "Fully automate" then select "Reboot" for "Revert Options". If you are planning to use manual revert options available in the Hypervisor then select "Shutdown".
- If you are creating App-V 4.6 Sequences leave all remaining settings. For App-V 5 sequences select the App-V 5 check box.
- The "Manual" option will allow you greater control of the packaging process. (Come back and experiment with that later once you have created your sequences.)
- Select "Test Connection". If the AR.c engine is able to recognise the details as a valid AR.c database you will then be able to click "Save".
- Close the AR.c engine form
- "ENABLE" RebootRestoreRX and reboot / shutdown the VM(s)

Import packages

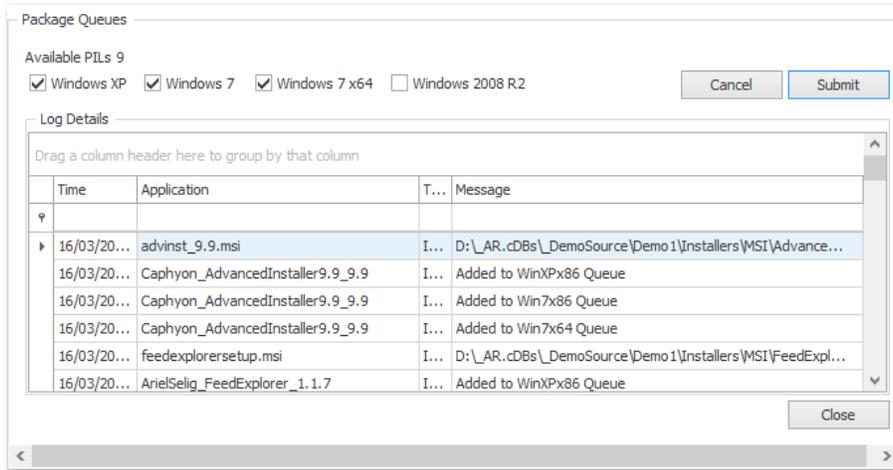
- Launch the AR.c console

Step	Image	Description
1		Locate the "Source" ribbon group and select "Auto Import"

- o If you have knowledge of the EXE silent installation parameters. (consider a free tool like "Universal Silent Switch Finder" (Read about it [here](#), download it [here](#))) you can add the silent parameter here (e.g. /s or /silent)
- o To remove installers that you do not want added as packages but have been discovered. Use the Grid Navigator at the bottom. (You can multi-select items with the CTRL key)

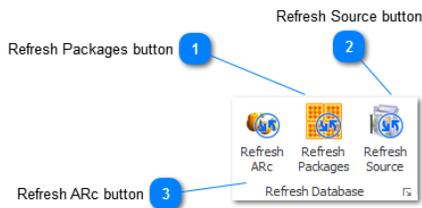


- Once you are happy with the Auto Import List select the "Packaging Queues". Select the Queues appropriate to the OSEs that you have created for your AR.c engines. (As a recommendation for a trial select XP/Win7/Win7x64 to be safe). Choose the "Submit" button. Submitting will copy the source media

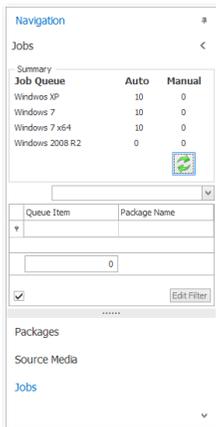


into the AR.c database "Source" folder, create a "Package" in the database for each installer imported and create "Queue Items" for the AR.c engines to collect and run the sequencer jobs against.

- Check the information in the Log regarding the import of all packages and click "Close" to return to the main AR.c console GUI.
- Locate the "Refresh Packages" and "Refresh Source" buttons and click them.



- Select the "Jobs" option in the "Navigation" bar and "refresh" the Job Queues. You can monitor the

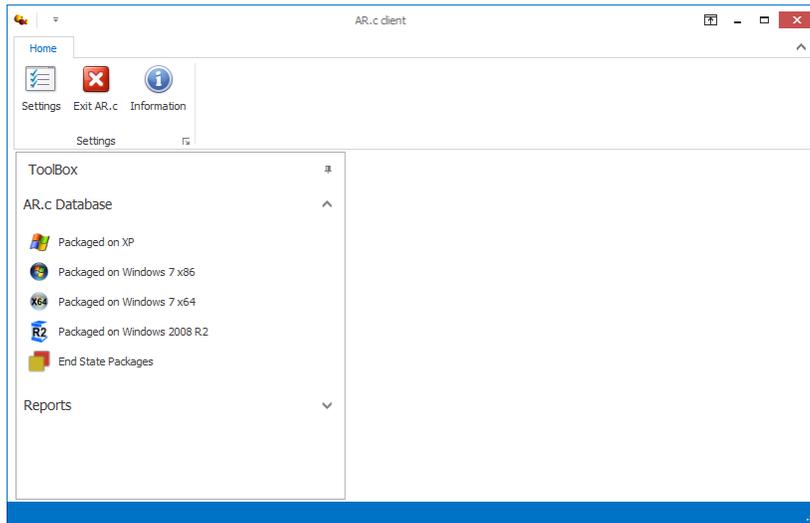


status of the packaging jobs by clicking the refresh button on a regular basis.

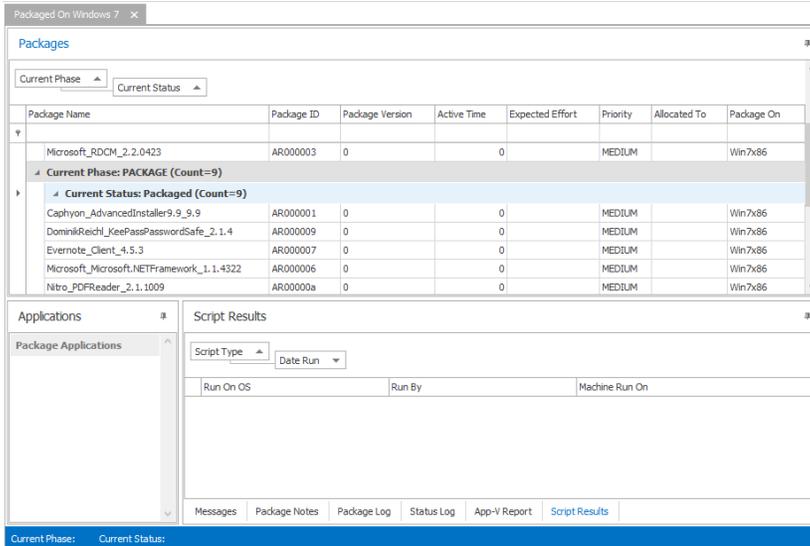
- You are now ready to turn on the AR.c engines you configured earlier. For a video overview of the AR.c engine see [AR.c engine introduction](#).

Test packages

Launch the AR.c client.



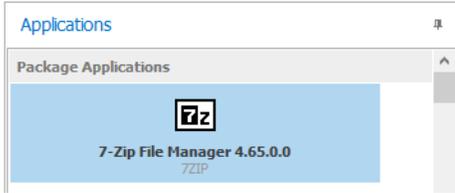
- Select the "Packaged on" option for your AR.c engine type from the ToolBox panel.
- Select a package from the "Packages" form



- Choose the "Check out" button from the "Package" ribbon group



- Run the application by double clicking on the Application Icon:



- Read the App-V sequencer Report to see if there are any likely areas of concern:

App-V Report

Drag a column header here to group by that column

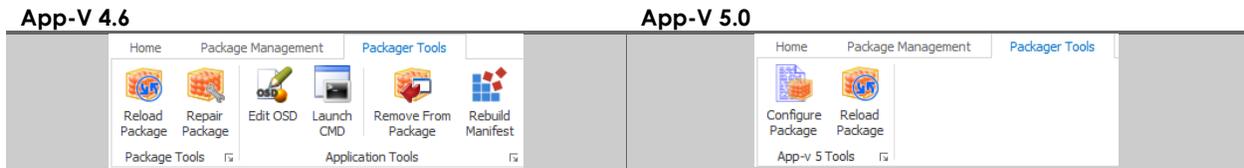
CODE	SEVERITY	MODULE
7	INF	Detectors
65538	INF	Sequencer
196610	WRN	Front-End Component
196612	WRN	Front-End Component

Messages Package Notes Package Log Status Log App-V Report Script Results

- Run relevant tests and determine the appropriate "Phase" for the application to be placed under



- Perform any Relevant "Remediation" steps using the "Packager Tools" Menu:



- After all relevant actions have been performed on the package, Check it back in and select another package.

Package remediation tools

Community Questions

If you have any questions or support issues please send an email to info@amberreef.co.uk.