

## Contents

Problem.....	1
Solution .....	1

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## Backup Exec Step By Step guide to download and install the Remote Agent for Linux and UNIX Servers (RALUS) for AIX and Solaris platforms.

### Problem

This article provides instructions for downloading and installing the Backup Exec Remote Agent for Linux and Unix for AIX and Solaris platforms.

### Solution

The quick links listed below can be used to navigate through the installation instructions if required.

1. [System requirements and software compatibility](#)
2. [Download the Backup Exec Remote Agent for Linux and Unix Servers \(RALUS\) installation files for AIX and Solaris platforms](#)
3. [Install Backup Exec Remote Agent for Linux and Unix Servers \(RALUS\) for AIX and Solaris platforms](#)
4. [Uninstall Backup Exec Remote Agent for Linux and Unix Servers \(RALUS\) for AIX and Solaris platforms](#)
5. [Known limitations of RALUS for AIX and Solaris for this installable](#)

### System Requirements and software compatibility

#### Backup Exec 20.6 Media Server offers support for RALUS for AIX and Solaris

##### IBM

Operating System	OS Version	Service Packs	OS Platform
AIX	6.1	N/A	POWER
AIX	7.1	N/A	POWER
AIX	7.2	N/A	POWER

##### Sun

Operating System	OS Version	Service Packs	OS Platform
Solaris	10	N/A	SPARC
Solaris	11	N/A	SPARC
Solaris	11.4	N/A	SPARC

## Install RALUS for AIX and Solaris

Follow these steps to install the Remote Agent for Linux and UNIX Servers on AIX and Solaris:

**Note:** RALUS is an additionally purchased option and is enabled by installing the RALUS serial numbers on the Backup Exec media server.

**NOTE:** RALUS installed via this downloaded installable is supported with Backup Exec 20.6 release. Versions prior to Backup Exec 20.6 and lower only provides support as the Remote Agent for Linux Servers.

For Backup Exec 20.6, there is no separate download available for Linux platform, RALUS is included on the DVD, and can be found in the " **Linux**" folder present at the root of the DVD for Backup Exec.

It is also advisable to check the RALUS compatibility with AIX and Solaris host before installation.

### To install the Remote Agent for Linux and UNIX Servers on the AIX or Solaris host:

1. On a AIX or Solaris host, download the installation files from this technical note page.
2. Connect to the target host using a terminal session or Log On locally with super user, root, or administrator privileges.
3. Extract the contents of the installation files that were downloaded in Step 1 using the following command Figure 1a below:

**Note:** Do **not** extract the RALUS installer files on a Windows system and copy the resulting files to the Linux/Unix host. Doing so will cause difficult to diagnose installation errors. It is important to copy the **.gz** file to the Linux/Unix host and extract the files there as shown below.

**Note:** This is a one step command to **extract** and **untar** the file.

```
tar zxvf filename.tar.gz
or
tar -zxvf filename.tar.gz
```

**z** = Gunzip(uncompress) it before extracting, used on file ending in .tar.gz or .tgz  
**x** = Extract the contents of the TAR file  
**v** = Verbose - display contents as it is tarring or extracting  
**f** = Filename to follow

**Note:** If the file does not have ".gz" extension that means its already uncompressed and one has to just extract it using "**tar xvf**" command.

**Figure 1a:**

```
bash-3.2# tar zxvf Backup_Exec_RALUS_AIX_SOLARIS-1188.2712.tar.gz
```

Or, in two commands as shown in Figure 1b below:

Figure 1b:

```
bash-3.2# gunzip Backup_Exec_RALUS_AIX_SOLARIS-1188.2712.tar.gz
```

```
bash-3.2# tar xvf Backup_Exec_RALUS_AIX_SOLARIS-1188.2712.tar
```

**Note:** This is a two step command to **extract** and **untar** the file.

```
gunzip filename.tar.gz
```

```
tar xvf filename.tar
```

4. Navigate to the folder that was extracted in Step 3 as shown in Figure 2 below:

Figure 2:

```
bash-3.2# ls
RALUS64          installralus.pl  messages        rmalinst.conf   uninstallralus.pl
RALUSx86         installrams      perl            scripts          uninstallrams
VxIF             installrams.pl  pkgs            tools            uninstallrams.pl
installralus     installrmal     ralusinst.conf  uninstallralus   uninstallrmal
installralus.cmd installrmal.pl   ramsinst.conf   uninstallralus.cmd  uninstallrmal.pl
bash-3.2#
```

5. At the command prompt, type: `installralus` and press <Enter> in the directory that the install script is present shown in Figure 3 below:

```
./installralus
```

Figure 3:

```
bash-3.2# ./installralus
```

6. The installation screen appears: (Figure 4)

Figure 4:

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers
Enter the system names separated by spaces on which to install RALUS: ( hostname )
```

Type the Unix server IP address or Hostname and press **Enter** as shown in Figure above.

7 . RALUS performs the initial system check as shown in Figure 5 below:

**Figure 5**

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers

Enter the system names separated by spaces on which to install RALUS: ( hostname )

Checking system communication:

    Checking OS version on hostname ..... AIX 7.1
    Checking system support for hostname ..... AIX 7.1 supported by RALUS

Initial system check completed successfully.

Press [Return] to continue: █
```

Press **Enter** to continue.

8 . RALUS will check and install the following rpms on the Unix server as shown in Figure 6 below:

**Figure 6:**

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers

installralus will install the following RALUS filesets on AIX target system: hostname

VRTSralus      Veritas Backup Exec for Windows Servers Remote Agent for Linux/Unix Servers

Press [Return] to continue: █
```

Press **Enter** to continue.

9. Installation requirement checks completed successfully as shown in Figure 7 below.

**Figure 7:**

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers

Checking system installation requirements:

Checking RALUS installation requirements on AIX target systems: hostname

Checking RALUS installation requirements on hostname :

    Checking file system space ..... required space is available

Installation requirements checks completed successfully.

Press [Return] to continue: █
```

Press **Enter** to continue.

10. The installation utility will ask for the Media Server IP address or Hostname to display the remote agent as a selection in the media server's backup selection tree as shown in Figure 8

below.

**Note:** A host name can be used, however make sure that the Unix server can resolve the host name properly. Its recommended to add the Windows host entry in the `/etc/hosts` file on the Unix server.

**Figure 8:**

```
Remote Agent Media Server Configuration

To display the Remote Agent as a selection in a media server's backup selection tree, and to be able to
specify a local network for use between the Remote Agent and a media server, enter the names or IP add
resses of the media servers that you want the Remote Agent on 'bnrvio8lp2' to communicate with.

    An IP Address: XXX.XXX.XXX.XXX
    A Host Name: COMPUTERTNAME

Enter a directory host:MediaServerHostName
```

11. To display the remote agent on more than one media server choose "Y" and press Enter or Simply type "N" and press Enter to continue.

**Figure 9:**

```
Remote Agent Media Server Configuration

To display the Remote Agent as a selection in a media server's backup selection tree, and to be able to
specify a local network for use between the Remote Agent and a media server, enter the names or IP add
resses of the media servers that you want the Remote Agent on 'bnrvio8lp2' to communicate with.

    An IP Address: XXX.XXX.XXX.XXX
    A Host Name: COMPUTERTNAME

Enter a directory host:MediaServerHostName
Do you want to add another name or address for this agent? [y, n] (n)
```

12. Confirm the Media Server IP address or Hostname by typing "Y" and press Enter, else press "N" and re-type the IP or Hostname as shown. (Figure 10)

**Figure 10:**

```
Remote Agent Media Server Configuration

Hostnames and/or IP addresses verification for 'hostname ':

    Address: MediaServerHostName

Is this information correct? [y, n] (y)
```

13. The installation utility will now ask to create "beoper" group as shown. (Figure 11)

**Figure 11:**

```
Remote Agent User Group Setup

To perform backups, you must have a 'beoper' user group. This user group can be created only if you are
not using NIS server. Your system 'hostname' will be scanned to detect a NIS server, group and membe
rship.

Press [Return] to continue: █
```

**Note:** beoper is a group that is used by Remote Agent for Linux and Unix Servers to authenticate the Backup Exec logon account, as the members of this group are given permissions to back up and restore the Linux server.

Press **Enter** to continue.

14. If the beoper group is not found, the installation utility will ask to create one. (Figure 14)

**Figure 12:**

```
Remote Agent User Group Setup

To perform backups, you must have a 'beoper' user group. This user group can be created only if you are
not using NIS server. Your system 'hostname' will be scanned to detect a NIS server, group and membe
rship.

Press [Return] to continue:
  Checking if system uses NIS server: ..... No

The installer will now check your system for the 'beoper' user group and root membership.

Press [Return] to continue:
  Checking for 'beoper' user group: ..... Found
  Checking for 'root' user membership in 'beoper' user group: ..... Found

Your system 'hostname' already has a required user group and membership.

Press [Return] to continue: █
```

Type **"Y"** and press **Enter**.

15. Installation utility shows successful installation of RALUS. (Figure 13)

Read the information and press **Enter**.

**Figure 13:**

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers

Installing Veritas Backup Exec Remote Agent for Linux/Unix Servers on hostname :

  Installing VRTSralus 12.5.2213.0 on hostname ..... done 1 of 1 steps

Veritas Backup Exec Remote Agent for Linux/Unix Servers installation completed successfully.

Press [Return] to continue: █
```

16. The RALUS configuration has also completed successfully as shown. (Figure 14)

**Figure 14:**

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers

Configuring Veritas Backup Exec Remote Agent for Linux/Unix Servers:

  Creating configuration files on hostname ..... Done

You must establish a trust relationship between the media server and the Linux or UNIX computer. Add the
remote computer to the User-defined Selections in the backup selections list on the media server. Expand
the selection tree to ensure that the trust relationship is validated.

Veritas Backup Exec Remote Agent for Linux/Unix Servers configured successfully.

Press [Return] to continue: █
```

Read the information and press **Enter**.

17. Finally, Veritas Backup Exec Remote Agent for Linux and Unix Server has completed successfully. (Figure 15)

**Figure 15:**

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers

Veritas Backup Exec Remote Agent for Linux/Unix Servers configured successfully.

Press [Return] to continue:
The response file is saved at:

  /var/tmp/vxif/installralus1107230529/installralus1107230529.response

The installralus log is saved at:

  /var/tmp/vxif/installralus1107230529/installralus.log

bash-3.2# █
```

18. By default the **VRTSralus.init** service is stopped, Follow steps mentioned below Fig 16 to start the service.

`/opt/VRTSralus/bin/VRTSralus.init start`

19. Go to the Backup Exec media server and check the remote selections listed on the Backup tab. Expand the Unix icon: the ROOT account.

**Figure 16:**

```

bash-3.2# /opt/VRTSralus/bin/VRTSralus.init start
-n Starting Symantec Backup Exec Remote Agent
-n .
-n .
-n .
-n .
-n .
-n .

Starting Symantec Backup Exec Remote Agent: [ OK ]
bash-3.2#
bash-3.2# /opt/VRTSralus/bin/VRTSralus.init stop
-n Stopping Symantec Backup Exec Remote Agent

Stopping Symantec Backup Exec Remote Agent: [ OK ]
bash-3.2#

```

## RALUS configuration file.

The **ralus.cfg** file can be edited for either troubleshooting or configuration purposes as shown.

The file is located in the following location: **/etc/VRTSralus/ralus.cfg**

Config file details as shown in Fig. 17:

Figure 17:

```

Software\Symantec\Backup Exec For Windows\Backup Exec\Agent Browser\TcpIp\AdvertisementPort=6101
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Agents\Advertise All=1
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Agents\Advertise Now=0
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Agents\Advertisement Purge=0
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Agents\Advertising Disabled=0
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Agents\Advertising Interval Minutes=240
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Agents\Agent Directory List 1=MediaServerH
ostName
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Agents\Auto Discovery Enabled=1
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Agents\Security Disabled=1
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\Logging\RANT NDMP Debug Level=0
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\RALUS\Encoder=
Software\Symantec\Backup Exec For Windows\Backup Exec\Engine\RALUS\VfmPath=/opt/VRTSralus/VRTSvxms
~

```

For more information regarding RALUS, please refer to the Related Documents section given below.

## Uninstall RALUS for AIX and Solaris

1. At the command prompt, type: **uninstallralus** and press <Enter> in the directory that the install script is present shown in Figure 18 below:

```
./uninstallralus
```

Figure 18:

```
bash-3.2# ./uninstallralus
```

2. The uninstallation screen appears as shown in Figure 19:

Figure 19:



```
Veritas Backup Exec Remote Agent for Linux/Unix Servers
Enter the system names separated by spaces on which to uninstall RALUS: (hostname )
```

Type the Unix server IP address or Hostname and press **Enter** as shown in Figure above.

3. Uninstallation requirement checks completed successfully as shown in Figure 20 below.

Figure 20:

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers
Checking system uninstall requirements:
Checking RALUS uninstall requirements on AIX target systems: hostname
Checking RALUS installation requirements on hostname :
    Checking VRTSralus package ..... 12.5.2213.0 installed
    Checking VRTSralus dependencies ..... no dependencies
uninstallralus is now ready to uninstall RALUS packages.
Press [Return] to continue:
```

4. Uninstallation completed successfully as shown in Figure 21 below.

Figure 21:

```
Veritas Backup Exec Remote Agent for Linux/Unix Servers
Uninstalling Veritas Backup Exec Remote Agent for Linux/Unix Servers on hostname :

    Uninstalling VRTSralus 12.5.2213.0 on hostname ..... done 1 of 1 steps
Veritas Backup Exec Remote Agent for Linux/Unix Servers uninstall completed successfully.
Press [Return] to continue:
    Killing RALUS threads and processes ..... Done
    Removing RALUS linkedname in rc5.d ..... Done
    Removing RALUS linkedname in rc3.d ..... Done
    Removing RALUS linkedname in rc2.d ..... Done
    Removing RALUS init script ..... Done
The response file is saved at:

    /var/tmp/vxif/uninstallralus1108002750/uninstallralus1108002750.response
The uninstallralus log is saved at:

    /var/tmp/vxif/uninstallralus1108002750/uninstallralus.log
bash-3.2#
```

## Known limitations of RALUS for AIX and Solaris installable

1. The Agent installed via this downloadable package does not support secure SSL communications between the Media Server and the Agent. Support for SSL will be available in a future release of RALUS for AIX and Solaris
2. There is a known issue on AIX 6.1 when the File folder depth exceeds 28 levels. This issue is being worked upon and will be addressed in a future release.
3. Testing of backup and restore of file sizes beyond 2GB has not been carried out on AIX 6.1 and AIX 7.1.
4. Client side deduplication is not supported with these agents. It is recommended that client side deduplication is unselected for the job when targeting a job to dedupe storage. Jobs with client side deduplication enabled will automatically fallback to server side deduplication with a message in the job log.
5. There is a known issue on AIX platforms when protecting remote NFS3 mount points. This issue is being worked upon and will be addressed in a future release.