User Guide

Valerus VMS
Application Server Redundancy

XX285-37-01

Introduction

The Valerus system provides the ability to setup a backup (redundant) Application Server that can take over system functionality in the case when the Application Server may fail. The sheet provides an overview on how to configure this redundancy solution and how to activate it when necessary.

Starting at Valerus version 19, an Events Database (SQL) is included and installed on the Application Server by default. When using a redundant Application Server, it is necessary to change the location of this database. Refer to the note at the end of the App Server Redundancy section for details.

System

The System menus include general system settings and allow modifications to the workings of the system, including the menu for setting up an App (Application) Server Redundancy.
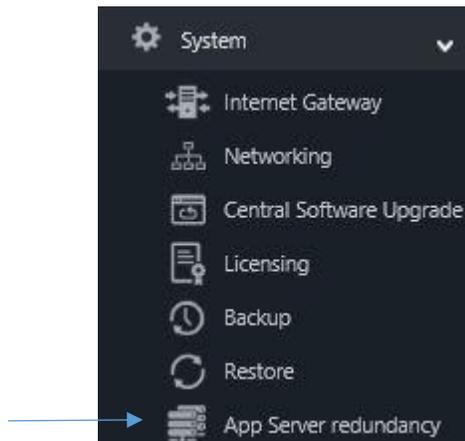
App Server Redundancy

The Valerus Application Server, which also functions as the web server, has a critical role in the system. Therefore, it is possible to add and define a redundant, backup server in the Valerus system in the event it experiences a failure. Once this backup server is defined, Valerus constantly replicates the system settings to this server. Note that this feature requires Valerus version 18. This backup server remains idle until it is needed. Refer to the Application Server Redundancy Function section in this manual for how to activate the Redundant Application Server if needed.

Note: In order to have a redundant Application Server, the system must be in the PRO tier. A redundant Application Server license must be ordered. Two activation keys will be provided, one for primary and one for the secondary Application Server; these keys will have the same number, but the secondary will end with RED and cannot be used on its own.

- Be sure to have the IP address of the current Application Server, the IP address of the secondary redundant server and a free IP address in the same network range at hand to setup redundancy.
- Click Configure from the opening Redundant Application screen. A Settings form will pop up.
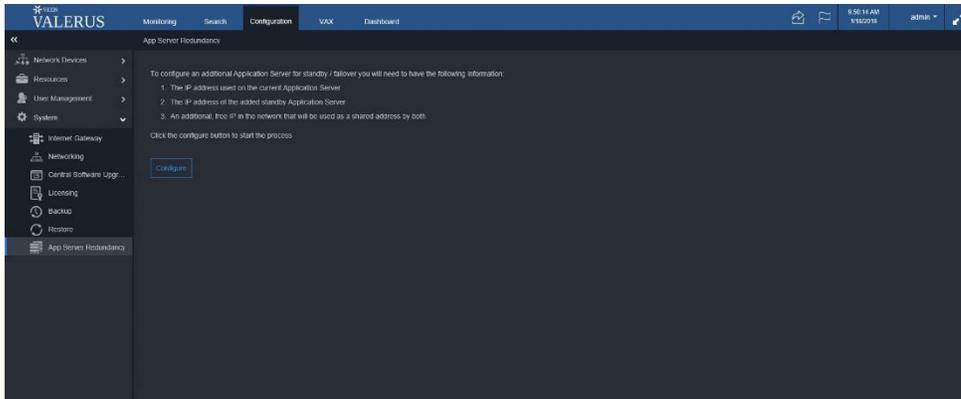
- The information on the active Application Server is filled in by default. You can enter a name for the redundant server (Backup displays by default but can be changed) and its IP address. Select Next. Valerus will attempt to connect to both servers and will send a notification if a problem is detected.
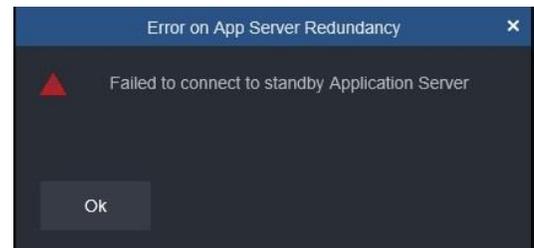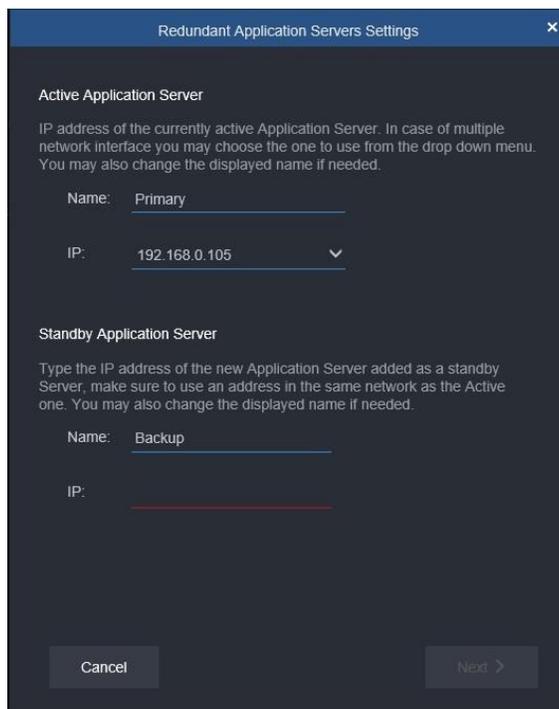
- Enter a Shared IP address; this IP will be used by the active server, whichever one it is, allowing Valerus users to always browse to the same address instead of having to know which server is active at any given time. This IP address must be a free IP on the same network as the servers. When entered, Valerus will connect to this IP. If the address entered is not valid, Valerus will prevent using this IP, so there will be no confusion. There is an Advanced tab provided in case the default settings need to be edited. Clicking it will allow you to modify the Subnet and Gateway addresses if needed as well as select the network if there are multiple network connections for the PCs.
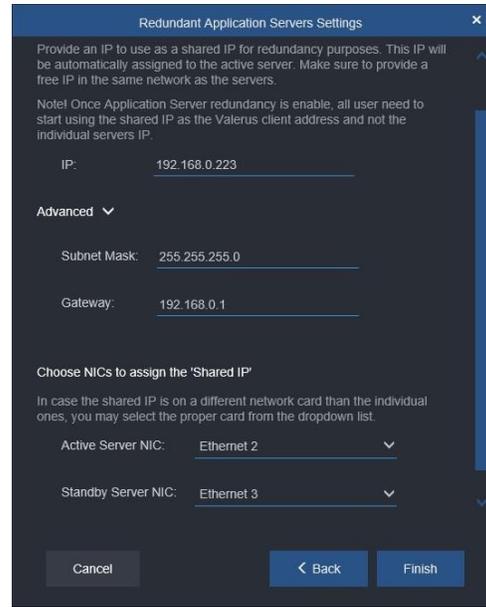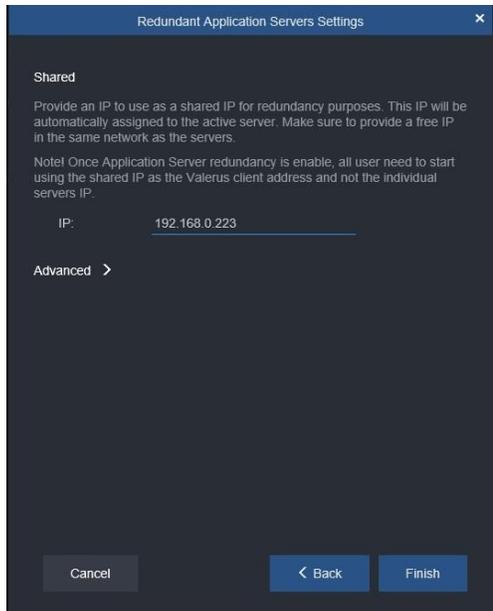
- Click Finish. Two servers, an active Application Server and a Standby Application Server, are now configured (both should have a green check mark indicating they are online and ready).
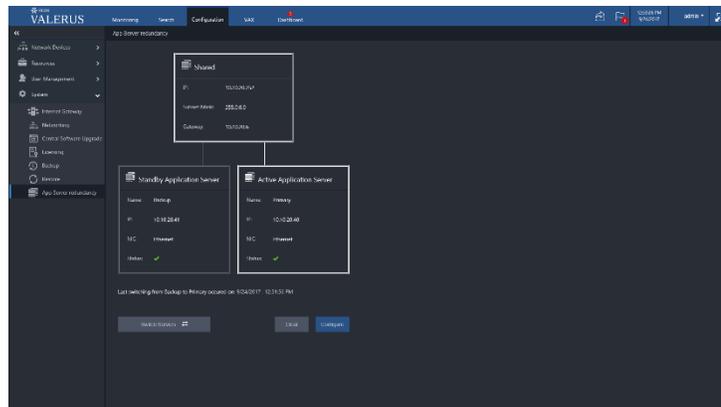
- You can switch between Application Server and Standby Server from this screen by clicking the Switch Servers button. If you want to switch, click Confirm on the notification. This option requires both servers to be online and cannot be used if one has failed.

- At this time, make sure to instruct all users to browse to the shared IP, and not to the server's assigned IP; this will ensure that on failure they keep their connection.
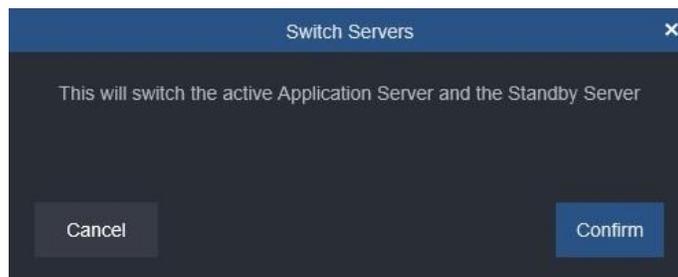
- If you need to delete the Application Server Redundancy, the shared IP will be deleted as well. The following message will display. Confirm to delete.
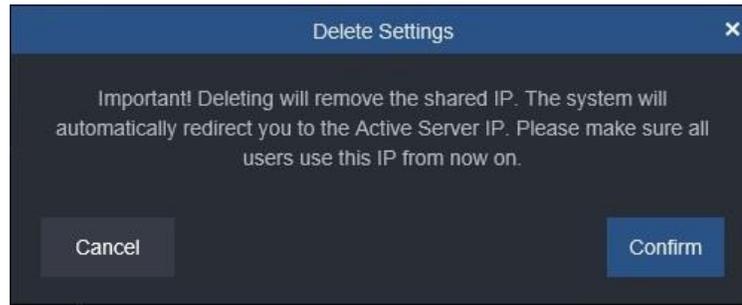
Note: Starting at Valerus version 19, an Events Database (Microsoft® SQL™) is included and installed on the Application Server by default. Valerus also provides the ability to connect to and use a different Microsoft SQL server for those who have their own server or want the database to run on a different PC than the one on the Application Server. To avoid the situation where, if the Application Server PC fails (and the Events Database along with it), the redundant server takes over and will not be able to access and save events, the Events Database **MUST** be configured to run on a separate unit that is accessible to both the Application Server and the redundant Application Server (the events will continue to be saved to that database). To change the location of the Events Database go to the configuration page; refer to the User Guide for details on how to do this.
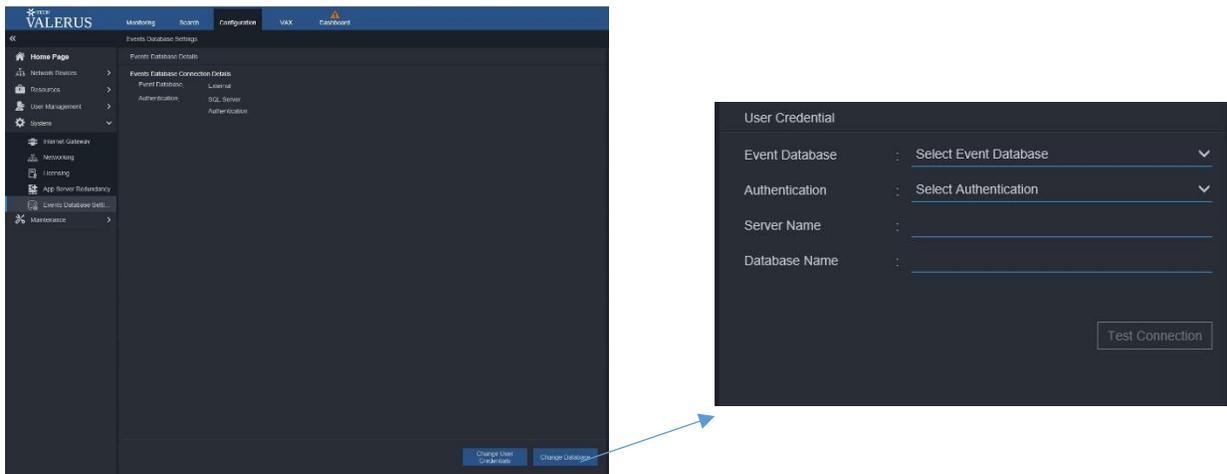
Using the Application Server Redundancy Function

If the Application Server fails, it will be indicated on the interface with a red X on the Application Server icon at the top of the interface. After the switch is made to the redundant server, an icon will display to indicate that the system is now working on the secondary server.

Any user already logged in while the server failed (and the redundant has not been activated) will remain logged in to the functioning Valerus system, but a user attempting to login will not be able to do so and will get a message that the Application server is unavailable. Additionally there will be no access to Configuration available.

Controlling either Application Server's state (active or standby) is done with the click of a button (cold swap). If the primary server fails, you will need to access the backup server desktop (directly on the PC or using remote desktop or similar). Go to your system tray and right click the Application Server icon (green); if the icon is not in the system tray, you can run it by clicking on the Windows key, type application server and click on the Application Server utilities icon that displays. From the list that displays, select Redundancy to open the Redundancy panel.
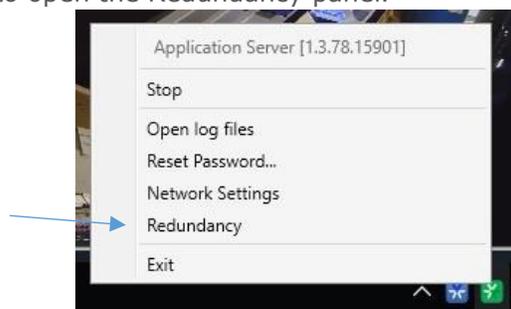
From here, you will be able to click to make the Local Application Server Active, as it was in standby mode before (being the redundant server). The secondary redundant server will now take over. When the primary Application Server is repaired or replaced and brought back online, you will be able to click Redundancy again and make it Standby while the primary will be made Active.
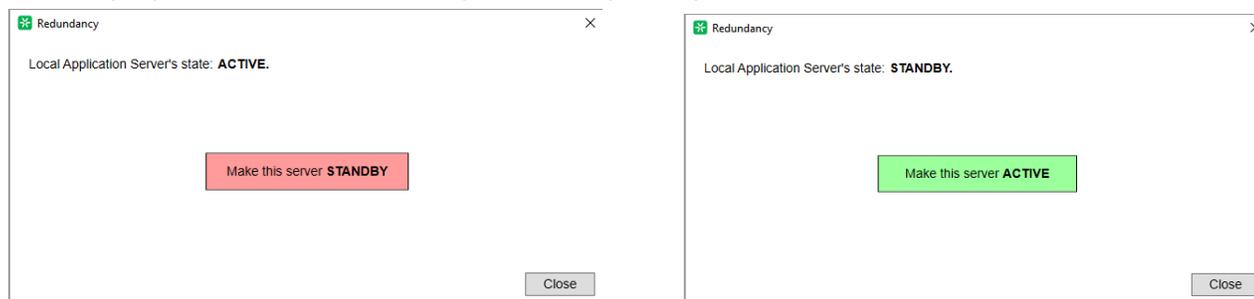
It is important to remember that only one of this pair should be Active at any given time and that normally the primary should be the Active one.

VICON INDUSTRIES INC.

For office locations, visit the website: www.vicon-security.com