

High Availability Configuration

This White Paper is only applicable for Nemesis 63x and Nemesis 83x series (G5 series), which uses Proxmox as the virtualization layer. It also assumes that the audience has knowledge in virtualization and basic understanding of Proxmox.

Initial Configuration

ISAAC® Nemesis G5 series come preconfigured with two hosts, respectively named isaac-nemesis-1 and isaac-nemesis-2. Each host has the same storage configuration, with the same volume names.

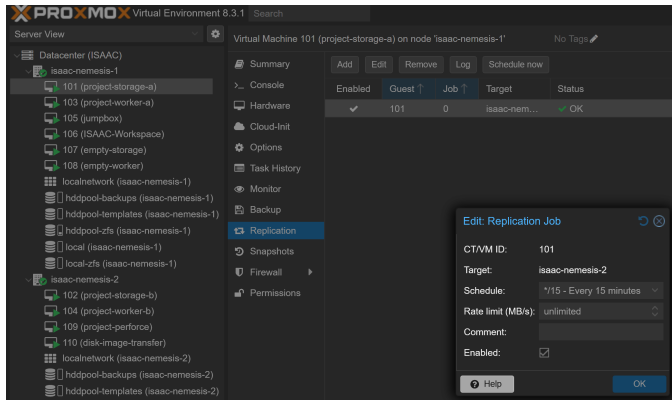
The HA mode in Proxmox utilizes VM disks replication to ensure the data are present and synced in all the hosts involved in HA for a virtual machine or a LXC container¹.

The identical volumes' name is a precondition for a virtual machine HA to operate as expected under Proxmox, since the virtual disks of the virtual machine must have the same mount path.

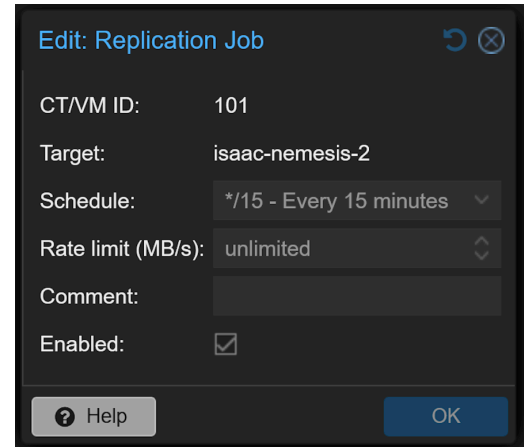
Step 1. Disk Replication

The first step is to configure a replication job for the virtual machine you want to set to HA mode.

- Select the target virtual machine, click on the Replication tab and click on the 'Add' button. This will open the configuration dialog for the replication job.

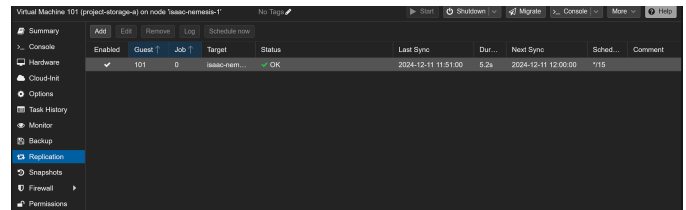


- On the configuration dialog:



- In the CT/VM ID field, select the virtual machine to replicate.
- Select the target host. As Nemesis series have two hosts, this setting will only have the other host as available option.
- The Schedule setting defines the replication frequency. We recommend using 15 minutes.
- Click Ok.

- Once configured, the replication job is listed in the Replication tab.

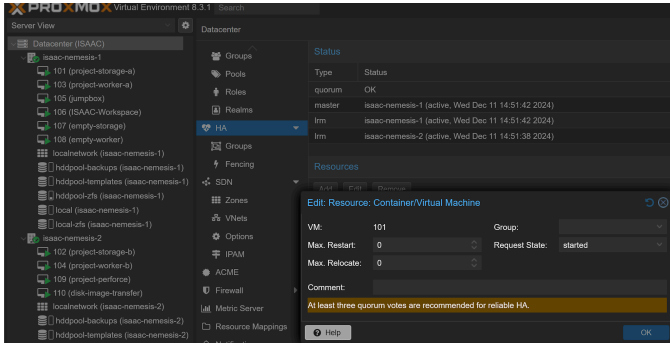


- The job is listed indicating the current replication status as well as the previous and next job run times.
- The 'Schedule Now' button can be used to immediately trigger the replication if required.

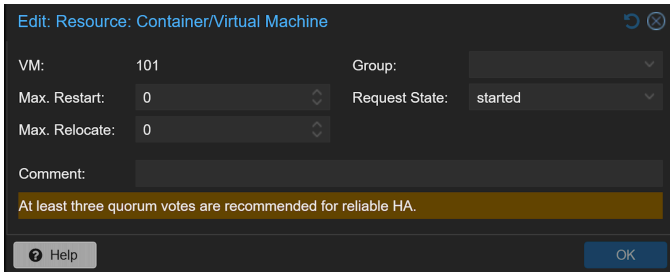
Step 2. HA Configuration

Once the virtual machine replication job is set up, the second step consists in setting up HA mode for the virtual machine.

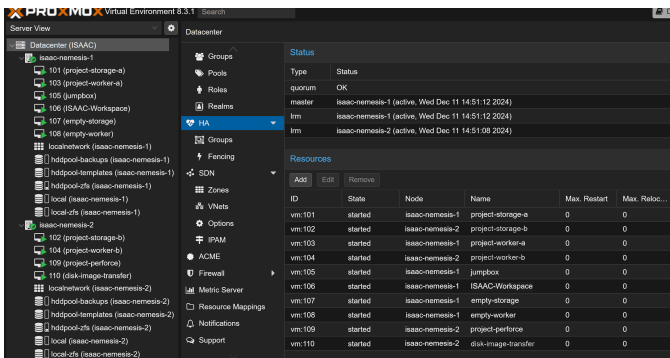
- Select the Datacenter top menu, click on the HA Tab, and under Resources click 'Add'. This will open the configuration dialog for HA.



- On the configuration dialog:



- Select the virtual machine (VM) to set in HA.
 - Set the Request State to 'started', to enable relocating the resource in started mode².
 - Leave the other options as default (the attempt to relocate and start the resource will happen until it succeeds.)
- The resource tab lists the virtual machines, with their current state and node they are in.



(1) This document outlines the process for a virtual machine, but the same process is applicable for a LXC container.

(2) High Availability (HA) Request Mode always applies to the virtual machine, not only on node failure.