Here are basic steps to upgrade your domain controllers from Windows 2008 to Windows 2012R2.

Step 1 Prep the forest

1. Open the Windows 2012 R2 DVD or mounted .iso file and type in adprep /forestprep for the domain prep it will be adprep /domainprep
2. Check the Schema version of Active Directory Directory Services after running adprep by running regedit, and going to:

Computer\HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\services\NTDS\Parameters and noting the current Schema version

Step 2. Add Windows 2012 R2 AD controller

1. Install a new Windows 2012 R2 domain controller with AD DS services, etc
2. Run DC promo to make it a new domain controller

Step 3. Verify your new Windows Server 2012 Domain Controller

1. There are 3 places you need to verify your new domain controller. These places are AD users and computers, DNS Manager, and AD sites and services.

Step 4 Transfer your FSMO roles

1. Within AD users and computers move your operation masters to the new AD controller

Step 5 Remove your Windows 2008 domain controller

1. Run DC promo and remote this domain controller
2. **This is critical. MAKE SURE** “**Delete the domain because this server is the last domain controller in the domain” is UNCHECKED**
3. Follow the remaining prompts
4. When done go to new domain controller and clean up AD old references to the old domain controller

Step 6. Raise Domain Functionality Level

1. When all your domain controllers are upgraded to 2012 R2. You can now raise the domain function level.