Making Andy run faster, use less system resources, and run games better is fairly simple. If you know what you are doing.
Sometimes it's even as simple as running **ImportOVA** from **HandyAndy>Settings.**
Other times, it takes a little more than that.

1. Enable Virtualization:

To enable Virtalization, you need to access your system's BIOS. Typically when you first turn on your PC or laptop, a screen pops up briefly with instructions on how to enter the "BIOS" or "Setup". Usually the key is either F2 or Del (Check BIOS Doc - Andy Support for keys for every computer manufacturer).
If you are using Windows 8.x on a UEFI BIOS, do the following to access your system's BIOS:

Open PC **Settings>General>Advanced Startup>Restart Now**
Then **Troubleshoot>UEFI Firmware Settings**

Once you are in, you will need to find the setting that says either Virtualization, Intel Virtual Technology, VT-x (if you have an Intel CPU), SMV, or AMD-v (if you have an AMD CPU) then enable it.
After doing this, make sure to fully shut down your computer, then turn it back on again. Some motherboard/BIOS configurations need a cold reboot to apply the setting.
You have to run ImportOVA from HandyAndy>Settings to reset the machine at this point.

Original documents: Andy FAQ, BIOS Doc - Andy Support

2. Turn off Hyper-v:

In the latest versions of Windows (starting with 8.x), Microsoft started including Hyper-v on some Windows versions. Hyper-v can hog Virtualization, and not let other apps use it (like Andy!).
Therefore, it might need to be manually turned off. To do so, follow these steps:
- **Winkey+X**
- Command prompt (admin)
- **dism.exe /Online /Disable-Feature:Microsoft-Hyper-V**
- Reboot

3. Power plan:

On laptops, choosing a "balanced" or "power-saving" mode could reduce the power of the CPU significantly by reducing its clock speeds. By doing so, it also limits Andy's performance.
To fix this, set Windows' power plan to **High Performance** or make your own power plan that does not reduce CPU performance.

4. Set up the machine correctly:

There are two settings that matter in Virtualbox; CPU cores and Allocated RAM. To change these

settings go to **HandyAndy>Andy Launcher** then choose the machine you want to configure and click **Settings.**

The rules are simple:
CPU:
- Number of allocated cores should not exceed the number of physical cores you have.
- Number of cores should be the highest possible, without breaking rule 1.
- These are virtual cores, so do not expect to monitor them using any kind of system monitor.

RAM:
- The amount of allocated RAM should never exceed 3072 MB.
- The amount of allocated RAM should never exceed half of your system's RAM.
- Keep in mind that the machine will use up to the set amount of RAM, but the Andy binary can use additional RAM as needed.
- Make sure to leave your system enough RAM to function properly. Giving Andy too much RAM can cause your system to fall back to cache, which will hinder its performance.

5. Running Andy on an Optimus laptop:

Optimus is a technology used by Nvidia on most Windows laptops running its graphics card. The idea is to save power by running regular applications using the Intel integrated GPU and get extra performance for graphics-intensive games and applications by using the Nvidia GPU
The Optimus driver usually comes with preset application profiles, but there isn't one for Andy yet. So you will have to do it manually, this is how:
- Open **NVIDIA Control Panel**
- Go to **Manage 3D Settings** and navigate to **Program Settings**
- Click the **Add** button
- Add 'andy.exe' from Andy's directory with **High-performance NVIDIA processor** setting.
- Apply changes and exit NVIDIA Control Panel.
- Open Andy and enjoy better performance and regulated RAM usage.

Original documents: [Optimus Post - Andy Support](#)

6. Temperatures and Throttling:

Electronic components have electric current flowing through them constantly, which causes them to heat up. Heat, however, can kill electronic components. Therefore, they always need to be cooled. That is what all the fans in your system are for.
CPUs run the highest risk of damage, since they dissipate the most heat. That is why when the cooling system fails, temperatures rise and the CPU tries to protect itself by slowing down and even shutting down parts of itself; This is called **throttling**.
In order to avoid throttling, you will need to monitor your system's temperatures and maintain your cooling setups. For a laptop, it is recommended to get it internally cleaned at least once every two years (more frequently if used in a dusty environment or a house with cats or dogs).

Monitoring temperatures can be done using **Speccy** or **Core Temp** (or any similar software).

7. Install Andy on SSD systems

If you are installing Andy on a computer with an SSD as the system drive, you might want to move the virtual machine to a secondary HDD to save space and write-cycles.
To do so, follow these instructions:

!WARNING! this will reset Andy and you will lose all data inside it.
- Open Virtualbox and go to **File>Preferences>General**
- Change the default machine folder to any folder you like, preferably something dedicated to Virtualbox machines only.
- Go to **HandyAndy>Settings** then choose **ImportOVA** to reset the machine.

Original documents: [SSD Install - Andy Support](#)

This concludes this subject. Hopefully after applying these tips your Andy will be faster than the fastest tablet on the market today. If not, feel free to join [our support group on Facebook](#) for more help. **Enjoy Andy!**