

Computer Systems

# UD 07. WINDOWS ADMINISTRATION -PART 2-



COMPUTER SYSTEMS  
CFGS DAW

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## Nomenclatura

A lo largo de este tema se utilizarán distintos símbolos para distinguir elementos importantes dentro del contenido. Estos símbolos son:

 Importante

 Atención

 Interesante

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## 1. INTRODUCTION

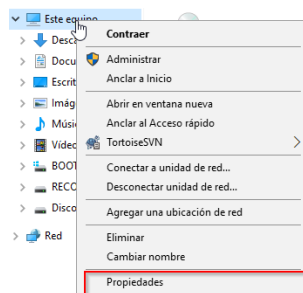
In this part we continue studying Windows operating system. It's mandatory to read and understand previous class notes to continue with part 2.

## 2. SYSTEM PROPERTIES

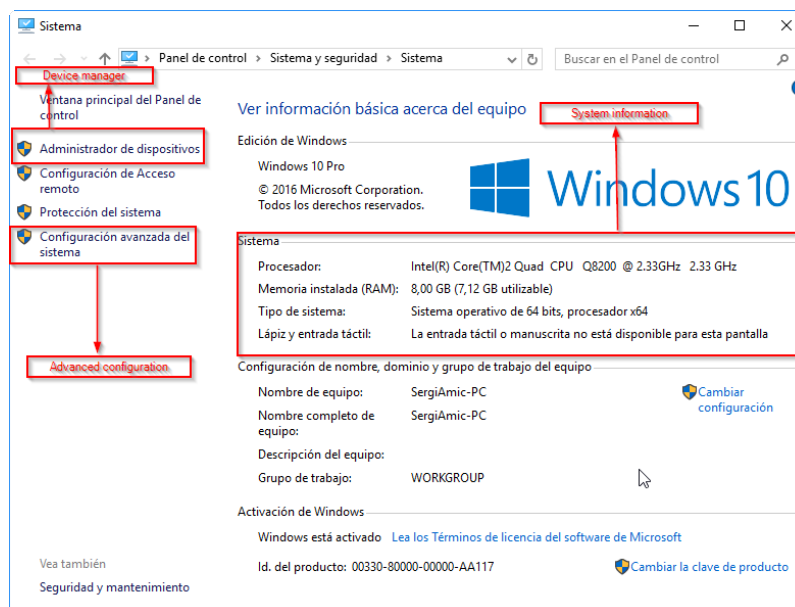
In this video you can watch several ways to go to “System properties” in Windows 10

<http://www.isunshare.com/windows-10/6-ways-to-open-computer-or-system-properties-in-windows-10.html>

The most common way to arrive is right click on “This PC” and then in properties.



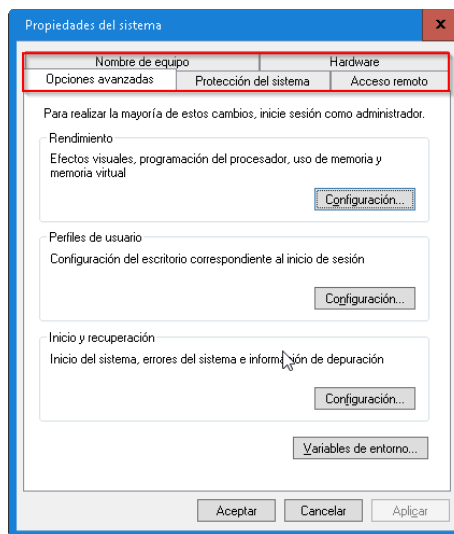
System properties is a menu where we can check our system specs like CPU, RAM, Windows version....



We are going to study two sections of System properties: “Advanced system settings” and “Device manager”

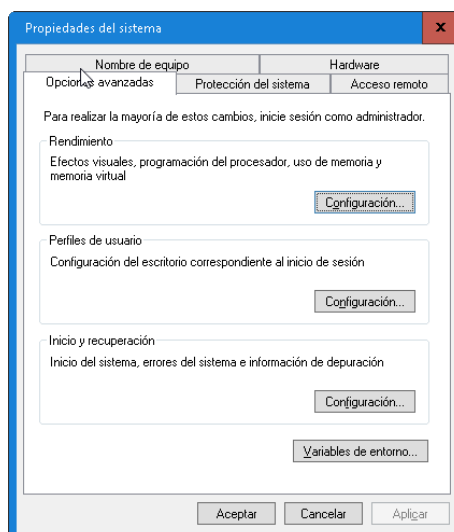
## 2.1 Advanced system settings

In “Advanced system settings” we have several tabs, each one with a lot of options to modify.



The most important functions are:

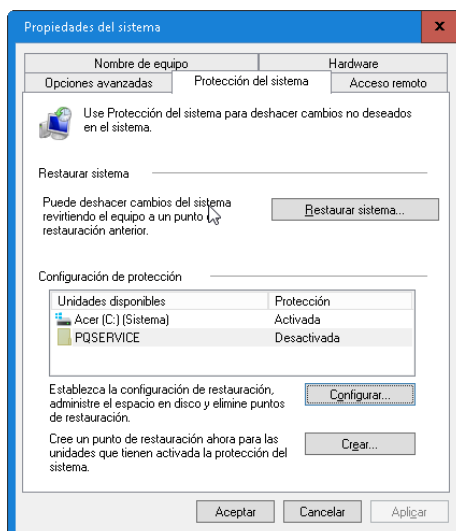
**Tab “Advanced options”:** you can configure several things, like user profiles, start and recovery, performance and environment variables.



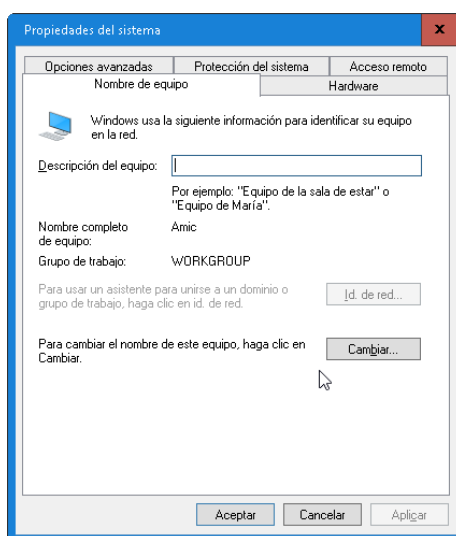
Most important features are:

- **Performance:** you can configure how many resources uses your desktop (for example, deactivating effects for low computers) and configure how your system uses virtual memory.
- **Environment variables:** there you can define environment variables. It is useful to configure a lot of applications, like development environments.

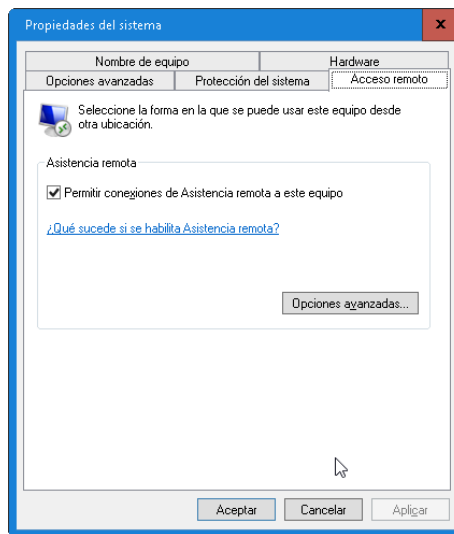
**Tab “System protection”:** you can configure things like “System restoration”. We recommend do not use system restoration (Disable it) and use other programs to make backups of your system, like “Clonezilla” <http://clonezilla.org/>.



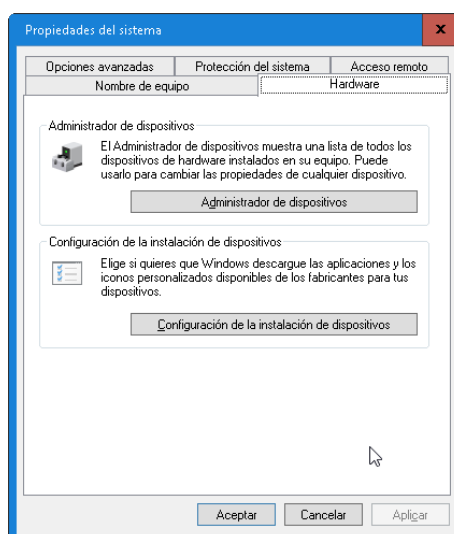
**Tab “Computer name”:** you can change computer name and also you can configure your Windows to be in a workgroup or to join a domain.



**Tab “Remote access”**: there you can configure if you can receive remote assistance (for example, to receive support through Internet).



**Tab “Hardware”**: you can access to device manager and run a manager to add new devices.

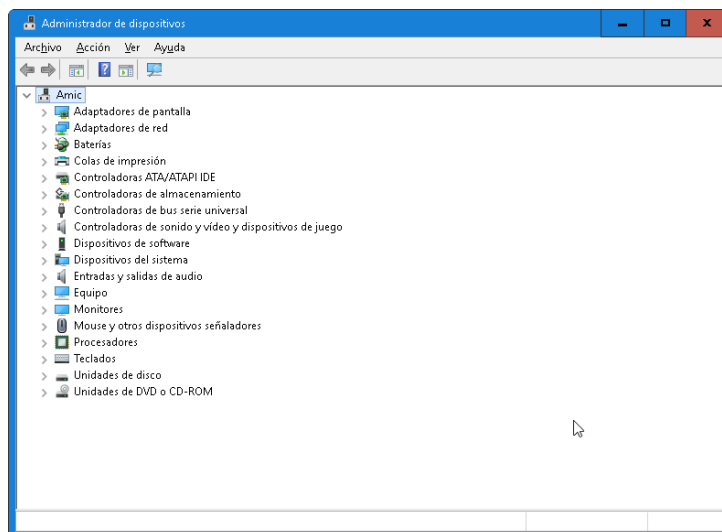


## 2.2 Device manager

Device manager is menu to manage devices of our computer.

In this Video you can watch several ways to go to “Device Manager” in Windows 10

<https://www.youtube.com/watch?v=nEyQMq7bwIY>



Basic management is explained in <https://www.youtube.com/watch?v=kXIDFUIWUDs>

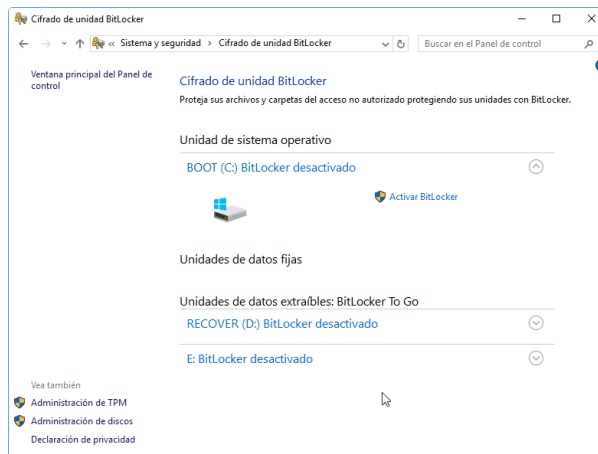
The main operations that we can do are:

- Enable/Disable a device: useful when a component is causing trouble.
- Update driver of a device.
- Check state of a device.
- Uninstall components: several times is useful to uninstall a device to run again Windows auto configuration. It can solve a lot of problems.
- Some devices let you to do an advanced configuration (Example, configure energy saves in a WIFI device). Those features depend on the installed driver.

### 3. SECURITY MANAGEMENT

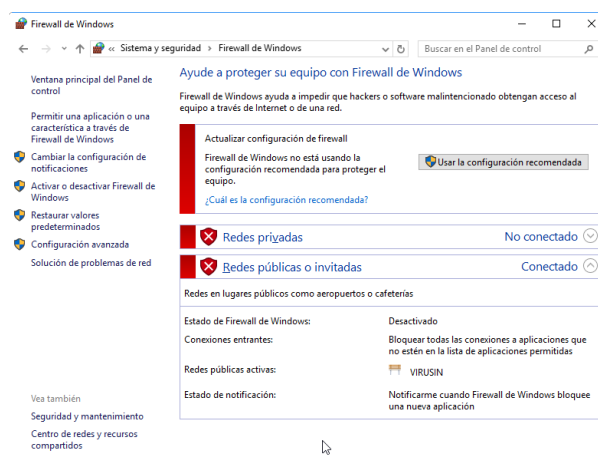
Windows 10 has several tools related to security. We are going to explain the most important tools available:

- **BitLocker:** BitLocker is a utility to cipher hard disk information. In this video you have information of how to use BitLocker to cipher a hard disk <https://www.youtube.com/watch?v=nLh0jSfv6jA>



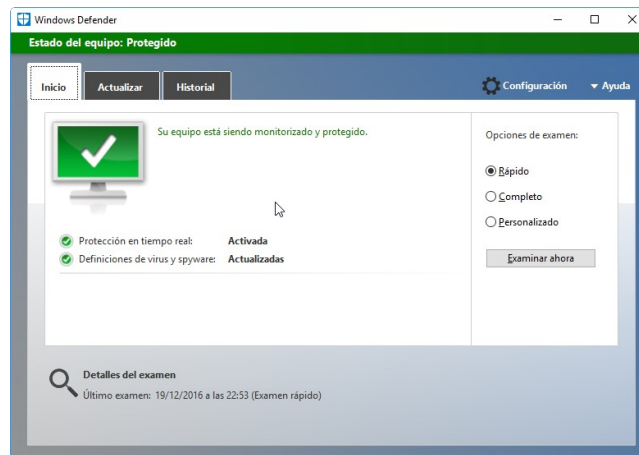
- **Firewall:** a firewall is a tool that monitors connections in our system and decides if a connection is accepted or denied. Firewall could be enabled or disabled.
  - In this video you can watch how to enable/disable firewall on Windows 10 <https://www.youtube.com/watch?v=QhbzE6EBCno>
  - In this video you can watch how to add a rule on the firewall <https://www.youtube.com/watch?v=2AcqibSJ8ng>

⚡ If you have problems with a connection, the first step you have to do is disable your firewall to confirm if it is the problem.





- **Windows defender:** Windows defender is an anti-virus created by Microsoft. Nowadays is a good alternative to other products like AVG, Avast, ....
- To use it properly, you have to update virus databases and periodically run a scan.
- In this video you can watch how to run a scan <https://www.youtube.com/watch?v=dy7rHgPcbQc>

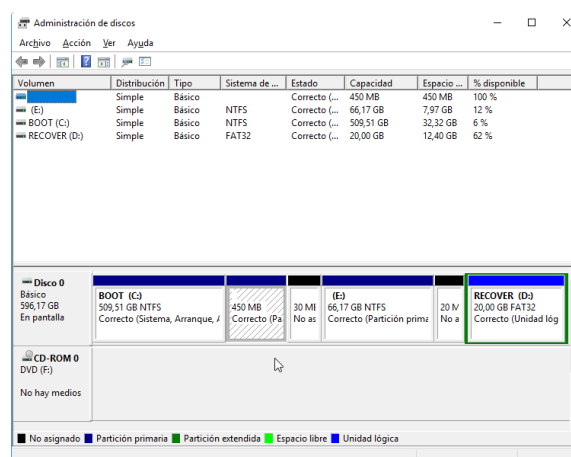


## 4. DISK MANAGEMENT

Disk management is menu to manage hard disk of our computer.

In this Video you can watch several ways to go to “Disk Management” in Windows 10.

<http://www.isunshare.com/windows-10/7-ways-to-open-disk-management-in-windows-10.html>



Disk management has several important operations like:

- Create/Delete a partition.
  - In this video you can watch how to create a partition <https://www.youtube.com/watch?v=f8WzSRQ2NtY>
- Shrink/Expand a partition.
  - In this video you can watch how to shrink and how to expand a partition <https://www.youtube.com/watch?v=tJiakVgAtn4>
- Create and manage Virtual Units (a file that works as a virtual unit).
  - In this video you can watch how to manage Virtual Units <https://www.youtube.com/watch?v=gDLtOehX7NQ>

## 5. MSCONFIG

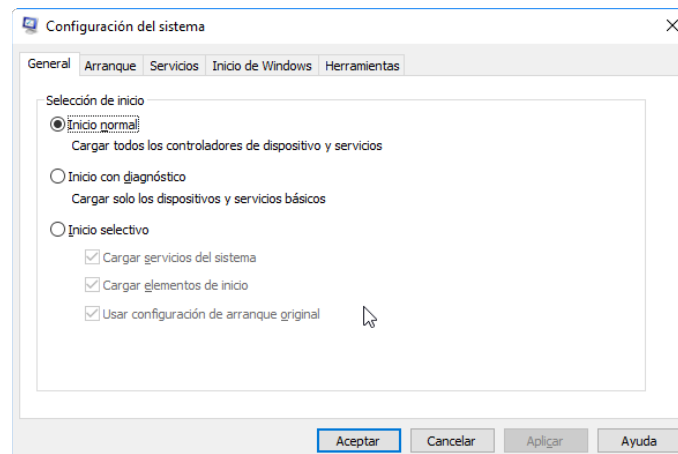
Msconfig is a place where you can configure several things related with Windows 10 startup.

There are several ways to run Msconfig. The most common way is going to “Run” (Windows key + R) and type “msconfig”.

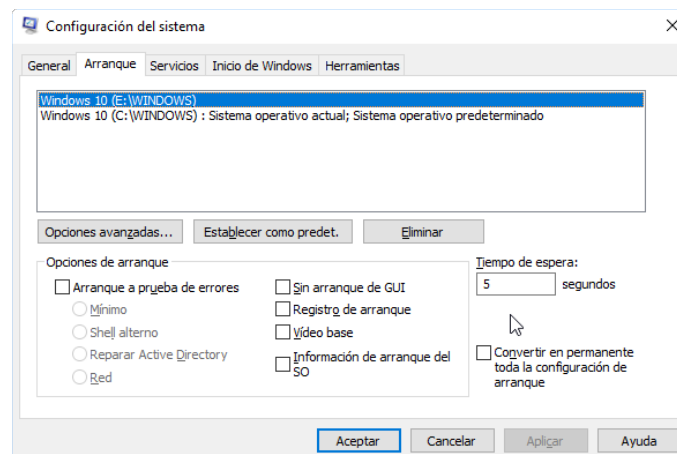
In this video you can watch other method to access to Msconfig <https://www.youtube.com/watch?v=D0X29Jt2CKY>

Msconfig has several tabs:

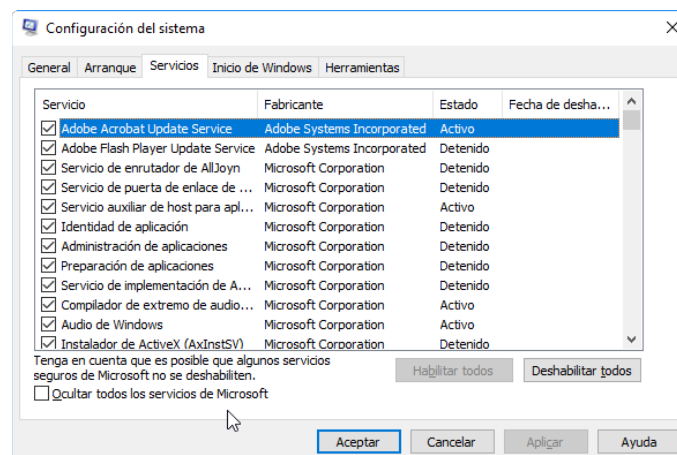
- **General:** you can select how to boot your system (complete, diagnosis) or select which components load.



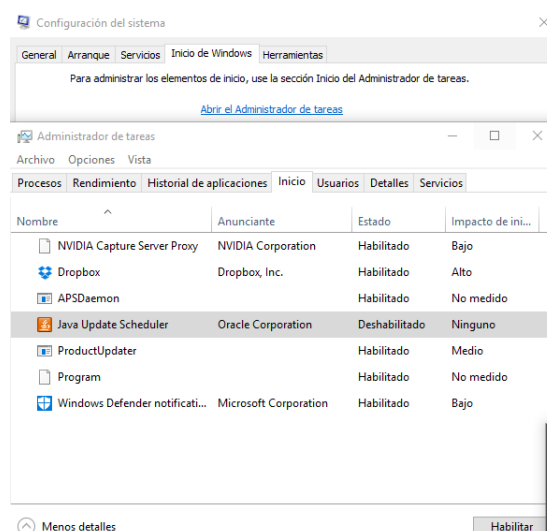
- **Boot:** you can configure Windows 10 boot manager.



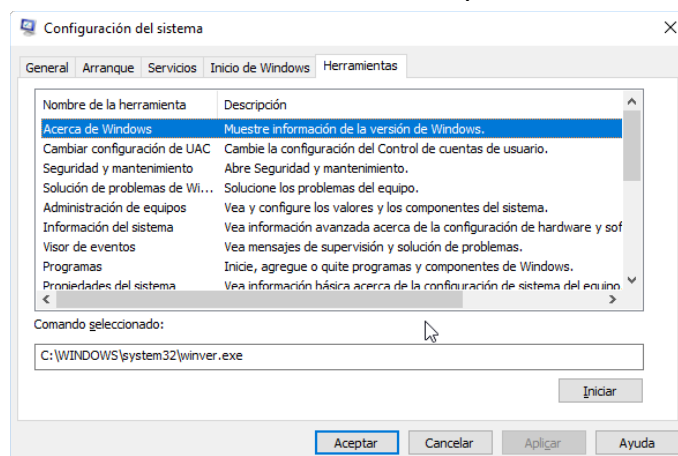
- **Services:** you can select services that will be started automatically when you start your computer.



- **Start:** you can enable/disable applications that runs when Windows starts.



- **Tools:** you can use this tab as a shortcut to several system tools.



## 6. ADDITIONAL MATERIAL

[1] Windows Training

<https://www.microsoft.com/en-us/learning/windows-training.aspx>

## 7. BIBLIOGRAPHY

[1] Windows 10

[https://en.wikipedia.org/wiki/Windows\\_10](https://en.wikipedia.org/wiki/Windows_10)

[2] Microsoft support

<https://support.microsoft.com/>