

# Optimización y configuración de su computadora

En el siguiente tutorial, encontraremos paso a paso cómo asegurarnos que nuestra computadora esté en un ambiente adecuado para trabajar con nuestro BobCAD-CAM.

# Paso 1.

Vamos a revisar nuestro **administrador de tareas**. Para esto nos referimos a nuestra **barra de tareas**, realizamos un clic derecho y vamos a **administrador de tareas**. Si tienen el windows en español va a decir administrador de tareas; si lo tienen en inglés va a decir **task manager**. Los íconos y las funciones están localizadas en la misma posición.



# Paso 2.

Una vez abrimos nuestro **administrador de tareas**, vamos a ver la cantidad de memoria y cantidad de uso de la computadora que tenemos en estos momentos. Como pueden ver, el **procesador** en estos momentos está en un uso entre 9% y 5% y nuestra memoria ram está en un 23%. Vamos a observar cuáles son las operaciones que se están utilizando.



File Options View				-	U /	-
Processes Performance App history	Startup Users Details	Services				
Name	Status	6% CPU	× 23% Memory	0% Disk	0% Network	
> 📔 Camtasia Recorder 9		1.3%	199.5 MB	0.2 MB/s	0 Mbps	1
📧 Desktop Window Manager		0%	97.4 MB	0 MB/s	0 Mbps	
>      Antimalware Service Executable		0%	82.0 MB	0 MB/s	0 Mbps	
> 🔽 Sticky Notes (2)		0%	62.7 MB	0 MB/s	0 Mbps	
🐂 Windows Explorer	0%	60.8 MB	0 MB/s	0 Mbps		
> 🛅 Photos	0%	52.3 MB	0 MB/s	0 Mbps		
3DxProfileServer.exe	0%	26.9 MB	0 MB/s	0 Mbps		
> [] Microsoft Office Click-to-Run (	0%	26.1 MB	0 MB/s	0 Mbps		
> 💷 Windows Shell Experience Host		0%	23.8 MB	0 MB/s	0 Mbps	
(8) GoToMeeting (32 bit)		1.0%	22.4 MB	0 MB/s	0.1 Mbps	
> 🙀 Task Manager		0.2%	22.0 MB	0 MB/s	0 Mbps	
> 🔒 Microsoft Windows Search Inde	0%	21.0 MB	0 MB/s	0 Mbps		
🕐 Logi Overlay	() Logi Overlay			0 MB/s	0 Mbps	
Application Frame Host		0%	18.0 MB	0 MB/s	0 Mbps	
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### Paso 3.

Ahora, queremos revisar si hay algún programa que esté consumiendo memoria que no estemos utilizando. En el momento lo podemos cerrar haciendo clic en el programa y luego en **End Task** o **Finalizar Tarea**. De esta manera, podemos eliminar cosas innecesarias que pueden hacer que gaste más CPU o memoria RAM. El ambiente para trabajar con **BobCAD-CAM** debe estar con un máximo de CPU del 67% y la memoria RAM por debajo del 23%.



#### Paso 4.

Revisar los programas que se inician automáticamente cuando encendemos la computadora. Para ello, accedemos al menú de **Startup** o **Inicio**. Si hay algo aquí que no vayamos a utilizar lo podemos deshabilitar, de esta manera, solamente va a iniciar cuando yo lo requiera.



🙀 Task Manager			-		×
File Options View	-				
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Name	Publisher	Status	Startup impact		
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💐 ETD Control Center	ELAN Microelectronics	Enabled	Low		
👸 Google Update Core	Google LLC	Enabled	Medium		
GoToMeeting	LogMeln, Inc.	Enabled	High		
🔯 InstallShield	Flexera Software LLC	Enabled	Not measured		
😥 iTunesHelper	Apple Inc.	Enabled	Medium		
🛃 Java Update Scheduler	Oracle Corporation	Enabled	Medium		
🛞 LogiOptions.exe (UNICODE)	Logitech, Inc.	Enabled	High		
Microsoft OneDrive	Microsoft Corporation	Enabled	High		
NVIDIA Update Backend	NVIDIA Corporation	Enabled	Medium		
ġ PowerlSO Virtual Drive Man	Power Software Ltd	Enabled	Low		
🗊 SOLIDWORKS Background D	Dassault Systèmes Solid	Enabled	High		- 1
			1000		

•	Microsoft OneDrive	Microsoft Corporation	Enabled	High	
3	NVIDIA Update Backend	NVIDIA Corporation	Enabled	Medium	
0	PowerISO Virtual Drive Man	Power Software Ltd	Enabled	Low	
5	SOLIDWORKS Background D	Dassault Systèmes Solid	Enabled	High	
1	Starter Module		Enabled	High	
9	Steam Client Bootstrapper	Valve Corporation	Enabled	High	
1	Todoist	Payist Payments Inc	Disabled	None	
Ð	Windows Security notificati	Microsoft Corporation	Enabled	Medium	-

#### Paso 5.

Otro menú que debemos revisar es el de **Services** o **Servicios**. Los servicios son operaciones que el programa o el sistema operativo va a estar realizando en el fondo. Vamos a **Open Services** o **Abrir Servicios** en la parte inferior y aquí nos van a aparecen todos los servicios que vamos a estar realizando en automático y todos los que tenemos deshabilitados. Los servicios que tenemos **deshabilitados**, son los que no queremos que se ejecuten; la opción **manual**, permite que solamente se ejecuten cuando nosotros le digamos; y la opción **automático**, los va a ejecutar automáticamente.

Queremos detener las operaciones que windows esté corriendo en el fondo, para que no nos pongan el computador lento. Algunas de las operaciones que queremos dejar ya sea en **manual** o **deshabilitadas** son **Windows management services**, **Windows backup y Windows update**. Si estas operaciones se activan mientras se está realizando la programación de una pieza compleja, esto podría generar problemas, por lo que no debemos dejarlas en automático.

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🔅 Bonjour Service	3320	Bonjour Service	Running	
BrokerInfrastructure	992	Background Tasks Infrastructure Ser	Running	DcomLaunch
BTAGService	2092	Bluetooth Audio Gateway Service	Running	LocalServiceN
BthAvctpSvc	1352	AVCTP service	Running	LocalService
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### Paso 6.

Algo que debemos tener en cuenta son los **antivirus**. Cuando estamos trabajando con BobCAD-CAM el **antivirus** querrá revisar cada uno de los archivos que se abran, si usted abre una pieza este querrá analizarla, lo que puede crear un conflicto. Por este motivo, recomendamos deshabilitar el antivirus mientras se trabaja con BobCAD-CAM. Para su tranquilidad, **Windows defender** (el antivirus que viene automáticamente con **Windows 10**), evita la aparición de alguna vulnerabilidad en el sistema (este no lo vamos a deshabilitar).

# Paso 7.

Otro programa que vamos a utilizar es **resmon** o **Resouce Monitor**. Este, nos va a abrir una ventana que nos muestra la memoria RAM y su uso. Como podemos ver, ahora el uso de la memoria RAM está al 23%, un buen ambiente para trabajar con BobCAD-CAM. Si vemos que la memoria RAM está al 60% o 70%, debemos cerrar los programas que no estemos utilizando para evitar problemas o demoras al programar las piezas.



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# Paso 8.

Revisar la capacidad de nuestra computadora. Para ello, abrimos el menú **Archivos** o **Files**, luego le daremos clic derecho en **This PC** y seleccionaremos la opción de **Properties** o **Propiedades**. Es muy importante que el **windows** sea **original**. Si tienen un windows pirata, lo más probable es que no tenga las últimas actualizaciones que se requieren para que BobCAD-CAM trabaje correctamente.

Es recomendable tener una computadora con mínimo las siguientes características:

- Intel core i7 de cuarta generación (el primer número representa la generación).
- 8 GB de memoria RAM (preferible 16 GB)
- Tarjeta gráfica de al menos 2GB o 3GB. (Si no tiene una computadora que cuente con una tarjeta gráfica,

está utilizando memoria RAM para realizar operaciones de gráficas, esto hace que el software se vuelva inestable).



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# Paso 9.

Para revisar la tarjeta gráfica de nuestra computadora vamos a seleccionar en la parte izquierda, el menú **Device Manager**, luego, en la ventana que se abre vamos a darle clic a **Display adapters.** En este caso nos muestra que tenemos una tarjeta gráfica NVIDIA GeForce GTX 870M.



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		NVIDIA GEForce GTX 870M VD/CD-ROM drives Human Interface Devices

### Paso 10.

Es recomendable contar con el **panel de control de su tarjeta gráfica**. Para ingresar al **panel de control** nos vamos a la parte inferior derecha de la computadora y le damos clic al icono de nuestra tarjeta gráfica (en este caso de una Nvidia). Si no cuenta con él, debe descargarlo directamente de la **página de internet de su tarjeta gráfica**. Ya estando dentro del panel de control, nos dirigimos **Program Settings** en donde nos va a permitir definir cuáles son los programas que van a estar utilizando nuestra tarjeta gráfica. Seleccionamos la opción **Add** y en la ventana que se abre verificamos que esté BobCAD-CAM, si no está ahí, seleccionamos la opción **Browse** o **Buscar** y ahí seleccionamos **disco local => archivos de programa => BobCAD-CAM** => **BobCAD-CAM** (la versión que tengamos) => **BobCAD** y le damos clic en abrir.

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# Paso 11.

Otra manera para correr el programa con la **tarjeta gráfica**, es darle clic derecho al icono de **BobCAD**, seleccionar **Run with graphics processor** y dar clic en la opción de nuestra **tarjeta gráfica** (en este caso **NVIDIA**).



# Paso 12.

Si tenemos **windows 10** actualizado el programa debe funcionar sin ningún problema, pero si tenemos **windows 7** o **windows 8** es recomendable realizar los siguientes pasos. Debemos de dar clic derecho en **BobCAD** y abrir la opción de **Propiedades**. Luego nos dirigimos a **Compatibilidad** y vamos a seleccionar **Aplicar para todos los** 

# BobCAD-CAM

usuarios. Por último vamos a presionar en la casilla de **Ejecutar el programa como administrador** y seleccionamos **Aplicar.** Esto va a permitir que se abra como administrador y que funcione en un mejor ambiente.

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	NZ			
	OK Cancel Apply			

# Paso 13.

Revisar si tenemos instalada la última actualización de BobCAD-CAM. Para ello, vamos al menú **Archivo** dentro de **BobCAD-CAM**, seleccionamos la opción **Ayuda** y en la parte inferior del logo de BobCAD-CAM nos aparecerá la versión que tenemos junto con la **actualización** (en este caso la 3130). Es necesario que se comuniquen con **soporte técnico** para revisar si tienen la **última actualización**.



Archivo Inicio Diseño 2D	
Nuevo Nuevo	
📑 Abrir	Acerca de BobCAD-CAM
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🔣 Guardar Como	Porciones del programa © 3Dconnexion, Inc
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Ayuda	
Ajustes de Arte	
Aline Bredeterriteder	

### Paso 14.

Si queremos revisar que computadora es la mejor que podemos adquirir pueden utilizar la página web <u>https://www.cpubenchmark.net/</u> para el **CPU** y <u>https://www.videocardbenchmark.net/</u> para la **Tarjeta gráfica**. Dentro de ambas páginas vamos a seleccionar **High End Chart**, para que nos muestre los mejores componentes. Aquí podemos comparar básicamente la potencia, precio y especificaciones de los diferentes tipos de **Procesadores** o **CPU** y **Tarjetas gráficas**. Al igual si queremos comparar nuestros componentes con los actuales procesadores y tarjetas gráficas utilizamos **Ctrl+F** para buscar el nombre de nuestro procesador o tarjeta gráfica (Paso 8 y 9). Recuerden que **no es necesario** tener los mejores y más modernos CPU y Tarjeta Gráfica (revisar Paso 8 para ver los requisitos mínimos).

# BobCAD-CAM





Video Card Benchmarks Hard Drive Benchmarks RAM PC Systems Android iOS / iPhone

ideo Cards and 3,900+ Models Tested -

#### ly!

Solved into the thousands of benchmark results that PerformanceTest users have posted to its web site and produced four charts to performance of different video cards (less frequently known as graphics accelerator cards or display adapters) from major Ti, n/dida, Intel and others. Higher quality video cards improve overall system performance for many computing activities such as and software development. Recently introduced AT video cards is user bar ATI Radeen MJD) and n/dia graphics cards (such Vidia Quadro FX) using the PCI-Express (or PCI-E) standard are common in our high end video card charts.



Most Popular Benchmarks





High End Video Card Chart

SeForce RTX 2080 SUPER	19,592	699.99
SeForce RTX 2080	19,399	629.99
😂 Quadro RTX 8000	18,467	4,741.49*
😆 TITAN RTX	18,373	2,489.99
SeForce RTX 2070 SUPER	17,951	499.99
😆 TITAN V	17,883	2,149.99*
😂 Radeon VII	17,821	599.99
SeForce GTX 1080 Ti	17,518	800.08
STITAN V CEO Edition	16,988	NA
Sadeon RX 5700 XT 50th Anniversary	16,889	NA
😂 Quadro RTX 5000	16,815	NA
SeForce RTX 2070	16,522	399.99
📚 Radeon RX 5700 XT	16,473	379.99
😂 Quadro RTX 4000	16,296	899.00*
SeForce RTX 2060 SUPER	16,263	389.99
SeForce RTX 2080 (Mobile)	15,807	NA
😂 Quadro RTX 6000	15,800	6,300.00*
😂 Quadro P6000	15,557	2,749.99*
😆 NVIDIA TITAN Xp	15,336	1,398.68*
Radeon RX Vega 64	15.168	389.99