CSC4005 Virtual Machine

CSC4005 Virtual Machine is designed to help you write your code and compile your code on your PC. You can also debug your program on it. After you finish your parallel programs, you can transfer them to High Performance Computing clusters for large scale experiments.

To setup a virtual machine, you need to download **Virtual Machine OVA File** and **Virtual Machine Softwares**.

CSC4005 Virtual Machine OVA File

centOS 7 with GUI and parallel programming environment

https://cowtransfer.com/s/f9a13414e68e47

Both Windows and Mac (Intel chip) users should download it.

Virtual Machine Softwares for MacOS

VMware Fusion Player for MacOS (free):

https://cowtransfer.com/s/4893a1d2ba474c

VirtualBox for MacOS (free)

https://cowtransfer.com/s/3bedf8bd4c4046

For MacOS users only. Please download both softwares to determine which one suit you better.

Virtual Machine Softwares for Windows

VirtualBox for Windows (free)

https://cowtransfer.com/s/49eafa9e9b7045

VMWare Workstation 15 for Windows (30-day evulation version):

https://cowtransfer.com/s/729822383bf443

For Windows users only. Please download both softwares to determine which one suit you better.

Importing VM to VMware Fusion / Workstation

1. Open VMware.



2. Press "+" button and choose "Import"



	Choose Virtual	Configuration	Importing	O Finish	
De	Machine				-
Re	cent items:				··) ~
	csc4005-v6				
	Type: Other			Show in Finde	er
		Choos	e File		

- 4. Press "Continue".
- 5. Choose a place to store your VM (that disk should have at least 15GB space)

	Choose an Existing	Virtual Machine	
	Save As: csc4005-v6.vm	warevm	
Recer	Tags:		~
	Where: Virtual Machi	nes 📀 🗸	
	Share this virtual machine with ot	her users on this Mac	
	Some features will be limited when sha Sharing is only available when the virtu shared folder.	ring a virtual machine. al machine is saved in a	
		Cancel Save	
	Choose Fi	le	
		Go Back	

6. A warning may appear, just press "Retry"

5	The import failed because /Volumes/ BOOTCAMP/Users/bokaixu/Documents/ csc4005-v6.ova did not pass OVF specification conformance or virtual hardware compliance checks.
	Click Retry to relax OVF specification and virtual hardware compliance checks and try the import again or click Cancel to cancel the import. If you retry the import, you might not be able to use the virtual machine in VMware Fusion.
	Do not show this message again
	Cancel

7. Finished.

The con	figuration of the virtu	iSh al machine is now co	mplete.
Choose Virtual Machine	Configuration	Importing	Finish
	Virtual Machi	ne Summary	
Gues	t Operating System (Other	
	Memory 4	1 GB	
	Networking S	Share with my Mac (N	IAT)
	Networking S	Share with my Mac (N	IAT)
To change the default	t virtual machine setti virtual machine n	ngs, click Customize ow, click Finish.	Settings. To run the
	Customize	Settings	
? Cancel		G	o Back Finish

8. Launch that VM

		-v6
CentOS Linux (3.10.0-1160.76.1.)	el7.x86_64) 7 (Core)	
CentOS Linux (3.10.0-1160.el7.x	36_64) 7 (Core)	
CentOS Linux (0-rescue-45b93260	7d05a646bf9f7c43fa74 <mark>e79e)</mark> 7	/ (Core)
Use the \uparrow and \downarrow keys to change	the selection.	
Press 'e' to edit the selected	item, or 'c' for a command	prompt.
The selected entry will be started	automatically in 4s.	

9. Wait until the following UI appears, (which may take few minutes)



username: csc4005, password: csc4005

11. You will see a desktop



- 12. Done!
- 13. When you finish your job, you can just pause that VM, rather than shutdown, because lauching needs much more time than resuming.



Importing VM to VirtualBox

1. Open VirtualBox



2. Press "Import" and choose csc4005-v6.ova

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Please choose the source to import appliance from. This can be a local file system to import OVF archive or one of known cloud service providers to import cloud VM from.

Source: Local File System

Please choose a file to import the virtual appliance from. VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below.

File: C:\Users\bokaixu\Documents\csc4005-v6.ova

Expert Mode Next

Cancel

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3. Confirm configuration (no need to modify)

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Appliance settings

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These are the virtual machines contained in the appliance and the suggested settings of the imported VirtualBox machines. You can change many of the properties shown by double-clicking on the items and disable others using the check boxes below.

Virtual System 1				
🍀 Name	csc4005			
冒 Guest OS Type	🞽 Red Hat (64-bit)			
CPU	4			
RAM	4096 MB			
🄌 USB Controller				
🕪 Sound Card	CH AC97			
📑 Network Adapter	Intel PRO/1000 MT Desktop (82540EM)			
📑 Network Adapter	Intel PRO/1000 MT Desktop (82540EM)			
Storage Controller (IDE)	PIIX4			
🔷 Storage Controller (IDE)	PIIX4			
🗸 🔶 Storage Controller (SATA)	AHCI			
返 Virtual Disk Image	csc4005-v6-disk001.vmdk			
🦰 Base Folder	C:\Users\bokaixu\VirtualBox VMs			
🔂 Primary Group	/			
Machine Base Folder: C:\Use	ers\bokaixu\VirtualBox VMs			\sim
MAC Address Policy: Include o	nlv NAT network adapter MAC addresses			•
Additional Options: 🛃 Import	hard drives as VDI			
Appliance is not signed				
		Restore Defaults	Import	Cancel

4. Wait until it finishes



5. Launch VM

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💱 Oracle VM VirtualBox Manager		_		\times
File Machine Help				
Tools	New Settings Discard Start			
64 csc4005	eneral General	📃 Preview		
🐸 🕐 Powered Off	Name: csc4005 Operating System: Red Hat (64-bit)			
	I System			
	Base Memory: 4096 MB Processors: 4 Boot Order: Hard Disk Acceleration: VT-x/AMD-V, Nested Paging, PAE/NN, KVM Paravirtualisation		csc4005	
	Display			
	Video Memory: 123 MB Graphica Controller: VMSVGA Remote Desktop Server: Disabled Recording: Disabled			
	Storage			
	Controller: IDE IDE Secondary Device 0: [Optical Drive] Empty Controller: SATA SATA Fort 0: csc4005-v6-disk001.vdi (Normal, 15.00 GE)			
	🅼 Audio			
	Host Driver: Windows DirectSound Controller: ICH AC97			
	Network			
	Adapter 1: Intel PRO/1000 MT Desktop (NAT) Adapter 2: Intel PRO/1000 MT Desktop (NAT)			
	🤌 USB			
	USB Controller: OHCI Device Filters: 0 (0 active)			
	Shared folders			
	None			
	Description			
	NOR4			

6. Wait a few minutes

🐸 csc4005 [Running] - Oracle VM Virt — 🛛	\times
File Machine View Input Devices Help	
You have the Auto capture keyboard option turned on. This will cause the Virtual Machine to automatically	7 🙁 🔽
CentOS Linux (3.10.0-1160.76.1.el7.x86_64) 7 (Core) CentOS Linux (3.10.0-1160.el7.x86_64) 7 (Core) CentOS Linux (0-rescue-45b932607d05a646bf9f7c43fa74e79e) 7 (Core)	
Use the ↑ and ↓ keys to change the selection. Press 'e' to edit the selected item, or 'c' for a command prompt. The selected entry will be started automatically in 2s.	
	Right Ctrl
7 Wait until the following III appears	

7. Wait until the following UI appears



- 8. Login. Username: csc4005, password:csc4005
- 9. GUI desktop appears



- 10. Done!
- 11. When you finish your job, you can just pause that VM, rather than shutdown, because lauching needs much more time than resuming.

Close Virtual Machine	?	×
You want to: Save the machine state Solution of the shutdown signal Power off the machine		
OK	Cancel	Help

💱 Oracle VM VirtualBox Manager		_	\times
File Machine Help			
Tools	New Settings Discard Start		
64 csc4005	General	📃 Preview	
Saved	Name: csc4005 Operating System: Red Hat (64-bit)	2 Annual Ann	
	II System	ũ 🖮	
	Base Memory: 4096 MB Processors: 4 Boot Order: Hard Disk Acceleration: VT-x/AMD-V, Nested Paging, PAE/NX, KVM Paravirtualization		
	Display		- In
	Video Memory: 128 MB Graphic Controller: VMSVOA Bemote Desktop Server: Disabled Recording: Disabled		
	Storage		
	Controller: IDE IDE Secondary Device 0: [Optical Drive] Empty Controller: SATA SATA Port 0: csc4005-v6-disk001.vdi (Normal, 15.00 GB)		
	🕼 Audio		
	Host Driver: Windows DirectSound Controller: ICH AC97		
	P Network		
	Adapter 1: Intel PRO/1000 MT Desktop (NAT) Adapter 2: Intel PRO/1000 MT Desktop (NAT)		
	🖉 USB		
	USB Controller: OHCI Device Filters: O (O active)		
	Shared folders		
	None		
	Bescription		
	none		

Best,

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