

KENET VIRTUAL COMPUTING LAB

User Registration and Virtual Machines Management Guide





Accessing the Lab

Go to URL: https://vlab.ac.ke

- ➢ If you are a new user click on sign up.
- ➢ If you have an existing account proceed to login.
- > Enter the registration details.

NB: It is recommended that you use your organisation email e.g. user@kenet.or.ke

> The login does not currently enforce a password policy so ensure you create a strong password.





- > After successful registration you will receive a verification email in your inbox.
- > Click on the verification URL to verify the registration request.
- > An admin will receive your request and proceed to activate your account.
- ➢ After successful activation you will receive an alert on the same.
- Proceed to Login:
- ➢ Go to url: https://vlab.ac.ke
- > Enter your login details and click on submit to Login:



\leftrightarrow \rightarrow C $$ Secure h	ttps://Viab.ac.ke/astakos/ui/login			☆ 🚳 🗊 🛂
Pithos Cyclades	synnefo dashboard			Sign in 🗦
	O WELCOME	LOGIN Classic login Email Password SUBMIT Forgot your password	Sign up	
	Copyright (c) 2017 KENET All rights reserved.	Term	s of service	

 \blacktriangleright You should now access the dashboard.





After successful login, the links to access the services are visible at the top cloud bar.

\leftrightarrow \rightarrow C \blacksquare Secure h	ttps://vlab.ac.ke/astakos/ui/landing	ד אַ 🕲 🖓 ד
Pithos Cyclades		mnjau@kenet.or.ke 🗸 📍
	Syme dashboard Overview Profile API access Usage Projects Contact	
	Pithos is the File Storage service. Click to start uploading and managing your files on the cloud.	
	Cyclades is the Compute and Network Service. Click to start creating Virtual Machines and connect them to arbitrary Networks.	
	Access the dashboard from the top right corner of your screen. Here you can manage your profile, see the usage of your resources and manage projects to share virtual resources with colleagues.	

Joining a project

- By default, access to other services is disabled by the implementation of zero quotas hence all users should join a project to gain access to all services and computing resources.
- > On the dashboard click on Projects:





Click on *Join a project* to Join a project:





- Click on the appropriate project to join.
- > In this case <u>isoc-course.kenet.or.ke</u> project for the ISOC online course.

Vlab Dashboard Project X							Θ	- 6	I X
\leftrightarrow \rightarrow C \blacksquare Secure http://www.secure.com/action/optics/action/optic	ps://vlab.ac.ke/astakos/ui/projects							☆	G :
	Create a new Project. Name it choose virtual resources to be and submit. Your application accepted, you and your collea deploy!	, describe its purpose, e granted to members, will be reviewed, and if gues are ready to	Request t instantly you. Sear request to administr now.	to be a member o gain access to th ch for public Proj o a private Projec rators will accept	roject and has to offer it a join its try to Join			-	
	create a project >		join a pr	oject >					
				C h					
	MT PROJECTS			Search:					
	Name 🗸	Status	Application	Expiration	Members	Action			
	isoc-course.kenet.or.ke	Active	16/08/2017	31/10/2017	0	Join			- 1
	System project	Accepted member	18/05/2017	18/05/2117	1				
	Showing 1 to 2 of 2 entries	Pagination 10 •			< Previo	ous Next>			
	Copyright (c) 2017 KENET All rig Powered by Synnefo v0.18.1	hts reserved.			Ter	ms of service			
https://vlab.ac.ke/astakos/ui/projects	a78bcf0e-87ad-4b6b-96d3-3f335129897d							4.00 B1	-
🗄 O 🗇 🧲	📄 🖨 <u> </u>						^ □ □ ♡ ◇	4:08 PM 8/16/201	7 3



Click on *join* to join the project:

Overview Protile A	API access Usage Proj	ects Contact		
isoc-course.kenet.c MODIFY - <u>IOIN</u>	or.ke		PROJECT ACTIVE	
PROJECT DETAILS				
Name Homepage url Description Creation date End Date Owner	isoc-course.kene https://isoc-infor ISOC-Online Cour 16/08/2017 31/10/2017 Me	t.or.ke um.afrinic.net/course se: Intro to Linux/DNS Cou	rse	
RESOURCES				
	Max per member	Total	Usage	
File Storage Space Hard Disk Storage CPUS RAM VMs Private Networks Public (Floating) IPs pending project applicat	0 bytes 10.0 GB 1 1.00 GB 1 0 1 1 1 1 1 1	0 bytes 500.0 GB 50 50.0 GB 50 0 50 Unlimited	 0% (0 bytes) 0% (0) 0% (0) 0% (0) 0% (0)	

- Kindly note that approval to join a project is not automatic; the project owner or administrator will receive the request and proceed with approval.
- > Once approved proceed to create a virtual machine.
- Quotas are enforced on the project level hence a user can only use specific number of computing resources as defined on the project, once they are exhausted the user cannot create any more virtual machines and will be forced to delete the existing virtual machine to reclaim resources.



Virtual Machines Provisioning Engine (Cyclades)

Click on the Cyclades tab on the top cloud bar to access the Cyclades interface:

/ C Vlab	× /	<u> </u>								Θ	- 0	X
	ure https://v	lab.ac.ke/	'cyclades/u	ui/							\$	G :
Pithos Cyclades				New Machine	•	iP	٩		machines	pkimani@i	kenet.or.ke	2 ~
					From this Machines The pane VMs yet. The wizar	vv (VMs). el is current Start by clic rd will guide	v will be able to m ly empty, because y cking the orange but you through the who	anage your Virtual ou don't have any ton on the top left. le process.				
						Co	pyright (c) 2017 KENE					
https://vlab.ac.ke/cyclades,	/ui/#						Merca by <u>Symmerc</u> 40 .18.1					
O	e 🔒	E)	9	w						~ 한 탄 (4:41 PM 3 ³⁾⁾ 8/16/2013	, 3

- Click on New Machine to create a new VM:
- Under Images select Public:



- You should see a list of all available images with their description and a time tag e.g. 2 hours, 2 weeks, 1 month and 1.5 months.
- The description fits the time a particular VM is supposed to run from creation time, the lab is automated to auto delete the VM after the appended time has elapsed.
- As the ISOC course runs for a maximum of one month, however select the FreeBSD ISO with a time span of a month and a half (1.5).
- Select the image of your choice (in this case FreeBSD 11.0) and click confirm then next to continue:





On the create machine window click on the drop down and ensure you select *isoc-course.kenet.or.ke* project:





Once you select the *isoc-course.kenet.or.ke* project, the computing resources are selected (maximum for this particular project). Leave the resources as selected and click next.

C Vlab ×		0 – 0 ×
← → C		☆ 🙂 :
Pithos Cyclades		pkimani@kenet.or.ke 🗸 💧
(Create new machine dose	
	1/ 2 Flavor Select CPUs, RAM and Disk Size 3 4 5	
	isoc-course.kenet.or.ke	
	Predefined CPUs (1 left) Choose number of CPU cores	
	Small Medium 2x	
	Large Memory size (1.00 GB left) Choose memory size	
	512M8 1GB 2 GB 4 GB	
	Disk size (10.00 GB left) Choose disk size	
	5 GB 10 GB 20 GB 40 GB	
	Storage Select storage type	
	ext_archipelago	
	previous next	
		-
🖷 O 🖽 🤤 🗮 🌖		へ 钿 記 (か) 5:19 PM 8/16/2017 🖏

> Click next to proceed with setting up networking.



➢ Click on create new to request for a new IP.

← → C ① https://vlab.ac.ke/cyclades/ui/				☆ 🚳 🖬 🛂 🗄
Pithos Cyclades				mnjau@kenet.or.ke 🗸
Pithos Cyclades	Create new machine 1 2 3 Networking Available networks Select the networks you want your machine to get connected to. © Internet (public IPV4) © 197.137.64.254 197.137.64.10 197.137.64.11	Networking configuration Connect machine to networks 4 5	5	mnjau@kenet.or.ke ∨
	+ <u>creste</u> <u>v</u>	10 10 10 0/24		
https://vlab.ac.ke/cyclades/ui/#	previous	- next		

➢ If an IP address is already reserved and selected, click next to continue







- Click next to name your VM.
- Under machine name you can delete the default generated name for the VM and input any custom name of your choice.



Click next to review the summary of the VM the click on *create machine* to initialize the VM creation.



C Vlab X					Θ	- 0	×
\leftarrow \rightarrow C \blacksquare Secure https://vlab.ac.ke/cyclades/ui/						☆	9 :
Pithos Cyclades					okimani@ke	net.or.ke	~ *
	reate new machine 1/2/3/4 Machine name Nyanjau-ISOC-N Image Freebad 11.0(1 month) rrweBS 11.0-REASE-p8	5 confirm confer Master Flavor CPUs 1x Memory 1024 MB	close Confirm your settings In that the options you have selected are correct SSH Keys No keys selected IP Addresses	5			
c c	OS Freebsd	Storage ext_archipel	197.137.64.8 System project				
s and a second se	Size 2.00 GB	type	Networks				
	Kernel FreeBSD 11.0	Machine Tags	No private networks selected				
	Project isoc- course.kenet.or.ke previous	No tags selected	create machine				
📲 O 💷 🤤 🚍 🖨 🌖 🗐	_			,	< 雪 中 40)	5:51 PM 8/16/2017	3

You will immediately get a display window displaying the machine password. "Write down your password now: *******" and will prompt you for a confirmation that you have written down your password.

NB: Do not forget to copy the password

You can change this password to a password of your choice upon initial login.



- The Virtual machine will now move to building state and once all background customization tasks are done the VM will change to running state and ready for use.
- > VM running



- To connect to your VM, click on the desktop icon and a window with connection details will be displayed.
- Once a VM is created a FQDN (fully qualified domain name) is automatically created referencing to the IP address you selected during the VM creation steps.
- > Use the details to SSH to your machine either by using putty or any SSH client.
- > The platform also provides console access to the VM.
- > By hovering your mouse on the VM you will notice a menu of actions on the right hand side.



> Click on *console* then *confirm* to gain physical access to the VM.



> You can the proceed to login and begin the ISOC course.





Manually destroying a VM

- > Highlight on the VM and click on the destroy menu item on the right side.
- Click on *confirm* to permanently destroy the VM.

\leftarrow \rightarrow C (i) https://Vlab.ac.ke/cyclades/ui/			☆ 🚳 🖬 🛂 🗄
	synnefo		^
		machines	
•	New Machine +	E Kon E list single	
	System project) / System project) / sint-44 viaba acke Info v disks v IPs v	Running	
	martin-bsd-vm-00 [System project] / sn-20viet acke info + disks + IPs +	Running Console Resize Confirm	
	martin-vm [enet.orke] ≠ snt-57vtab ac ke into ▼ disks ▼	Running	

