Getting Started with Equinix Metal

What's in this guide?

At Teradici we have tested our software extensively on Equinix Metal to give customers confidence that deploying everything from high-end graphics workstations to task-based user workloads in this environment will provide an easily managed and robust solution. In this guide we walk you through each step to deploy a GPU enabled workstation, with the Teradici graphics agent, and the horsepower to run the most demanding graphical and media editing applications on the market.

When you join Equinix Metal[™], you create a user account. This is where you can manage your personal profile, adjust your login and security settings, and manage your personal SSH and API keys.

- User accounts
- <u>Organizations</u>
- <u>SSH keys</u>

Deploy a server

At the heart of the platform is the ability to deploy, configure and manage bare metal servers across a global platform.

- <u>About our servers</u>
- Deployment options
- <u>Operating systems</u>

Now that you have the basics covered lets dive into an example:

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The goal of this example is to build out a GPU enabled physical server to use as a remote video editing workstation. Once you have your credentials for Metal proceed to step 1.

- 1. The first step once we have logged into the portal is to create a project. Click the 'New Project' link and name the project.
- 2. Once we have created a 'New Project' we can now start deploying! Click '+ New Server'





3. Choose the appropriate instance type (for this demo we have selected 'ON DEMAND')



Select the region, server specs, and operating system.
 *Notice that some selections can be deployed in less than 60 seconds! (Most are deployed in just a few minutes)

Deploy On Dema	and Servers	a Le	arn about our Servers	
Select Location				
Silicon Valley (SV)	Singapore (SG)	Sydney (SY)	Toronto (TR)	Wash
Selected: Silicon Valley				
Select Your Server c3.small.x86 \$0.50 / hour hr Intel(R) Xcon(R) E-2278G CPU @ 3.40GH z 2x480GB SSD 326B RAM 326B RAM 326 Box	c2.medium.x86 \$1.00 / hour tx AMD EPYC 7401P 24-Core Processor # 2.06Hz 2x 120GB SSD 2x 480GB SSD 64GB RAM 2x 10Gbps	c3.medium.x86 \$110 / hour tx AMD EPYC 7402P 24-Core Processor 2x 240GB SSD 2x 480GB SSD 64GB RAM 2x 10Gbps	S3.xlarge.x86 \$1.85 / hour 2x Intel(R) Zeon(R) Silver 4214 CPU @ 2.20GHz 2x 960GB SSD 2x 240GB NVME 12x 8TB HDD 192GB RAM 2x 10Gbps	m3.large \$2.00 / hoL tx AMD EPY Processor a 2x 240GB S 2x 38TB N 256GB RAM 2x 25Gbps
Selected: c3.small.x86		• •		
Select an Operating Sys Popular (4) for Containers (1)	tem VMWare/ESXI (1) Licensed (1)	Ali (10)		Learn about OS Typ
Custom iPXE	Debian os version Debian 9 👻	Rocky os version Rocky Linux 8	Ubuntu os version Ubuntu 20.04 LTS -	
Selected: Rocky Linux 8			🕴 = Deplo	ys in 60 seconds





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5. We can name the new server (Hostname) as well as select advanced configuration options before deploying.

**Note: The 'Add User Data' is particularly useful to add Terraform scripts/Powershell scripts/ etc for user applications.

	Hostname	
- 1 +	rocky8-casm	
	You can use: • Case-sensitive letters • Numbers • Hyphens • Dots	
Optional Settings		
Add User Data Use this to execute script/ after the server is ready.	package tasks or trigger more advanced configuration processes	
Configure IPs Make changes to IP alloca IPv6 address for free.		
Customize SSH Key Acces All available SSH keys are	ss deployed by default.	
Summary		
Location		Silicon Valley (S
Server		1 x c3.small.x8
os		Rocky Linux
Estimated Cost 🔞		\$0.50/





6. After just a minute or two our new bare metal Rocky Linux 8 server is deployed and ready to be configured!

**Important! Take note of the SSH root password as it will not be available to view after 24 hours!

letwork	(valid for 24h)	•••••••		
GP				
raffic	da-c3-small-x86-01 of deployed on February 28th, 2022 (9:1	n demand 5 AM UTC-08:00)		DALLAS (DA) DA11 🛛 🔊 Rocky Linu
SH Keys				
meline	MANAGEMENT IPS			
gs	ADDRESS =		GATEWAY =	TYPE #
elete	139.178.84.91	139.1/8.84.90/31	139.178.84.90	D Public IPv4
	2604:1380:4642:2500::1	2604:1380:4642:2500::/127	2604:1380:46	642:2500:: Public IPv6
	10.70.98.1	10.70.98.0/31	10.70.98.0	Private IPv4
	View Elastic IPs			
	INSTANCE DETAILS			HAPTWARE
	Hostname	d	a-c3-small-x86-01	PROCOCOC CDU C 2 400U
	Description			2278G CPU @ 3.40GHZ
	ID	00654dfa-5386-4e23-b9	7f-057f4e8e1be9	RAM 32GB
	Created by		Chris Butler	DISK 2 x 480GB SSD
	Switch Id		16529013	✤ NIC 2 x 10Gbps Bonded Ports
	Config		c3.small.x86	
	Location		Dallas (DA) - DA11	
	Edit Instance Details >			Inbound Outbound
	SERVER USAGE			76.3 Mb
	Hours of Server Usage		7 hour(s)	
	Billable Bandwidth		0 GB	0 KD
	Price Per Hour / MTD Usage	\$0.50/	/hour / \$3.50MTD	View Details
	All Usage			



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7. Now that our server is ready, we can go to https://docs.teradici.com to select the software we need for our project.



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For our Rocky Linux 8 server we will be installing the Teradici 'CAS Manager' 22.01 software.

**Note: you will need login credentials to access the necessary downloads from: <u>Find your component | Teradici Documents and Downloads</u>

A document describing the steps needed for installation can be found here: <u>What is CAS Manager? - Teradici CAS Manager</u>

Once you have completed the CAS Manager install its time to create an end-user machine, see 'Client Machine setup'.

Client Machine setup

For the second part of our installation we will follow the same process and deploy a dedicated Windows 2019 Server instance with an Nvidia GPU for graphics rendering. In Equinix Metal this is their g2.large.x86 instance type.

**Note: You may have to contact Equinix Sales to unlock this server type.

Overview	deployed on January 24th 2022	(10:15 AM LITC-09:00)			DALLAS (DA) DFW2
Network	deployed on Junuary 24th, 2022	(10.15 AM 010-00.00)			Windows 2019 Standard
BGP	MANAGEMENT IPS				
Traffic	ADDRESS \$	NETWORK \$	GATEWAY \$		TYPE \$
SSH Keys	147.28.141.54	147.28.141.52/30	147.28.141.53		Public IPv4
limeline	2604:1380:4040:e00::1	4:1380:4040:e00::1 2604:1380:4040:e00::/127 2604:1380:			Public IPv6
ags	10.32.141.2	10.32.141.0/30	10.32.141.1		Private IPv4
Delete	View Elastic IPs				
	INSTANCE DETAILS			HARDWARE	
	Hostname		test1	PROC	2 x Intel Xeon Gold 6126
	Description				192GB
	ID	ID d1a3e1ce-2104-4687-afdd-3cbaa508e113			
	Created by		Audrea Danskin	DISK	2 x 480GB SSD
	Switch Id		e54e83b1	A► NIC	2 x 10Gbps Bonded Ports
	Config		g2.large.x86		
	Location	Dal	as (DA) - DFW2	24-HOUR TRAFF	IC TREND



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This powerful physical machine will allow us to run high end graphics workloads (like Adobe Premiere, Blender, Epic Unreal Engine, etc) and access them via Teradici PCoIP to give us a local machine experience remotely!

- 1. Our first task for our new Windows 2019 server is to login via RDP and update all the Windows components as well as install the appropriate Nvidia driver. This step is critical and you will likely need to also install the NVidia Grid components (<u>see NLP Dashboard (nvidia.com</u>))
- 2. Once we have updated the Windows components and drivers we are ready to install the host software, Teradici Graphics Agent for Windows.
 - a. If this step completes successfully, it is verification that the Nvidia drivers and Grid software were correctly installed
 - b. If you get a warning that a suitable GPU is not installed or a yellow dot in the upper right hand corner of your screen, it is generally a Grid configuration issue see <u>vGPU Resources for</u> <u>Design & Visualization | NVIDIA</u>

Cloud Access Sof	tware	2022.01 -	General	documentation	× Graphics Agent for Windows
Securely deliver high-performance desktops to knowledge workers and power users requiring even the most graphics-intensive applications. Cloud Access Software is built on industry-leading PCoIP® technology, empowering a rich user-experience and the flexibility to deliver desktops from any public cloud or data center to a variety of endpoint devices.		Cuick Start Guide Architecture Guide Session Planning Guide		The PCoIP Graphics Agent for Windows enables Teradici customers to deliver virtual Windows desktops or custom applications to remote users as part of Teradici Cloud Access Software. The PCoIP Graphics Agent is installed on a GPU-powered	
			E Work- Guide	From-Home	virtual machine. End users connect to their remote desktop via a PCoIP client, either directly or via a connection broker
PCoIP Hosts PCoIP hosts capture and securely deliver the host machine's pixel output to PCoIP clients.	Graphics Agents Graphics Agent for Windows 22.01 Standard Agents Standard Agent for Windows 22.01	Graphics Age Standard Age	nt for Linux 22.01	Graphics Agent for macOS 22.01	Graphics Agent for Windows 22.01.1 ▼ This release supports the following operating systems:
PCoIP Clients PCoIP clients enable you or your users to connect securely to a remote desktop.	Software Clients	Software Client	for macOS 22.01	Software Client for Linux 22.01	Release Notes Administrators' Guide Knowledge Base
	Mobile Clients Mobile Client for IOS Tablets 3.6	Mobile Client for A Tablets and Laptor	undroid ps 21.01		



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3. Launch the Teradici PCoIP software client and create a new connection to the Windows 2019 Server machine

e [*] Teradici PCoIP Client			- 🗆 X
Host Address or Code:	147.28.141.54	NEXT	
*Connection Name:	Fauliaix Matal Cliant Machine		
connection Name:	Equility Meral Client Machine		
CANCEL S	AVE		
			teradici

4. Once connected we can run our high intensity graphics applications using all the power of our Equinix Metal server as if we were local!



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