Guide to Using TEAMS on Amazon EC2

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Configuring and Starting TEAMS AMI

If you have already purchased a subscription to TEAMS, please follow the rest of this document.

The following document provides additional information on using Amazon EC2 - <u>Amazon EC2</u> <u>Getting Started Guide</u>.

1. Start the launch wizard.

2. From a browser, open http://aws.amazon.com and click on the "Sign in to the AWS Management Console" button (Make sure you select the "Amazon EC2" tab after logging into the AWS Management Console). If you do not have an AWS account, click on "Create an AWS Account".



📃 Sign in to the AWS Management Console 🛛 📦 Create an AWS Account

3. Sign in to Amazon Web Services.

4. From the "Navigation" tab on the left, select the region closest to your location (at the moment, we only support "US East" and "Asia Pacific"). Then, click on "AMIs" and search for the TEAMS AMI in that region (see the table below):

Region	Hourly Subscription	Monthly Subscription
North America	ami-93ac6ffa	ami-71b27118
Asia Pacific	ami-9ced93ce	ami-82ed93d0

te La	unch 🛃 S	pot Request	🔒 Regis	ter New AMI	De-register	R Permissions
Viewin	ng: Public I	mages	•	Windows	▼ ami-e8ba	4a81
	Name 🦘	AMI ID		Source		
		ami-e8	ba4a81	teams-dp	-11.2.2.18/teams	s-dp-11.2.2.manifest

5. Choose the desired AMI and click on the "Launch" button. (NOTE: Spot Instance is NOT valid with paid AMIs. Do not select this option, even though AWS appears to offer that choice.)

6. On the "Request Instances Wizard", make sure you select "High CPU Medium (c1.medium, 1.7 GB)" from "Instance Type", leave the others at the default value, and click "Continue" until you come to the "Key Pairs" page.

•	zard	Canc
) DETAILS CREATE KEY PAIR CONFIGURE	FIREWALL REVIEW
HOUSE AN AMI INSTANCE I	DETAILS CREATE RET PAIR CONFIGURE	FIREWALL REVIEW
Provide the details for you "spot" instances.	ır instance(s). You may also decide wheth	er you want to launch your instances as "on-demand" or
Number of Instances:	1 Availability Zone: No	Preference -
Instance Type:	High-CPU Medium (c1.medium, 1.7 GB)	
Termination Protection:	Prevention against accidental termin	nation.
Note, launching a t1.micr	o instance requires that you select an AMI	I with an EBS-backed root device.
Launch Instances		
	ay for compute capacity by the hour wit sts into much smaller variable costs.	th no long term commitments. This transforms what are
© Request Spot Insta	ances	
	Into Your Virtual Private Cloud	
I aunch Instances		
© Launch Instances		
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© Launch Instances		

7. Proceed without a key pair:

• A key pair is a security credential similar to a password. For the TEAMS AMI, you do not need to use any key pair, thus select "Proceed without a Key Pair".

¥	Υ.	0			
HOOSE AN AMI	INSTANCE DETAILS	CREATE KEY PAIR	CONFIGURE FIREWALL	REVIEW	
lick Create &	Download your Key	Pair . You will then	be prompted to save the	aunches. To create a key private key to your comp	
-			want to deploy an Amaz	on EC2 instance.	
-	rate a key pair once rom your existin		want to deploy an Amaz	on EC2 instance.	
© Choose f			want to deploy an Amaz	on EC2 instance.	
 Choose f Create a 	rom your existin	g Key Pairs	want to deploy an Amaz	on EC2 Instance.	

8. Create a security group:

- A security group defines firewall rules for your instances. These rules specify which incoming network traffic should be delivered to your instance (e.g., accept web traffic on port 80). All other traffic is ignored. You can modify rules for a group at any time. The new rules are automatically enforced for all running instances.
- If you're new to Amazon EC2 and haven't set up any security groups yet, when the wizard displays the Configure Firewall page, the Create a new Security Group button is

selected by default, and typical firewall rules are already selected. Use the default rules for this tutorial.

- On the Configure Firewall page of the wizard, enter a name for your security group and a description. Use the drop-down at the bottom left and select RDP and click on Add Rule button. The following image shows what your screen may look like after creating the security group.
- NOTE In order to connect to the instance using RDP, outbound connections on port 3389 needs to be enabled. Please contact your system administrator for further information. Alternatively, you can try connecting from your home.

equest Instar	nces Wizard			Cance
¥	<u>v</u> v	·)	
IOOSE AN AMI	INSTANCE DETAILS CREATE	KEY PAIR CONFIGURE	FIREWALL REVIEW	
or we can help y	ou create a new security gr	oup to allow access to y	ed on your instances. You may use an ex your instances using the suggested port e Security Groups page. All changes take	s below. Add
Choose one	e or more of your exis	ting Security Group	S	
Oreate a ne	w Security Group			
1. Name your S	ecurity Group TEAMS	, ,		
		>		
2. Describe you	r Security Group			
3. Define allow	ed Connections			
Application	Transport	Port	Source Network (IPv4 CIDR)	Actions
HTTP	TCP	80	All Internet	Remove
RDP	TCP	3389	All Internet	Remove
Select	• -	-	All Internet Change	Add Rule

10. Review your settings and launch the instance:

- After you configure the firewall, the wizard continues to the Review page where you can review the settings and launch the instance.
- Click the Launch button at the bottom of the screen.

equest Instances V		<u>u</u>		Cancel
*	E DETAILS CREATE KEY PAIR	CONFIGURE FIREWALL	REVIEW	
Diance review the inferr	nation below, then click Launch.			
AM	🗄 🎊 Windows AMI ID ami-747	70841d (i386) Edit AMI		
Number of Instances	: 1			
Availability Zone	No Preference			
	High-CPU Medium (c1.mediu	<mark>m)</mark>		
Instance Class				
Termination Protectio	n Disabled	Edit Insta	nce Details	
Monitoring				
	: Use Default			
	: Use Default			
User Data	•	Edit Adva	inced Details	
Key Pair Name	: QSI-Windows.32.2008	Edit Key	Pair	
Security Group(s)	: default	Edit Firev	vall	
Back		Launch		

A confirmation page is displayed to let you know your instance is launching.

Laun	ch Instance Wizard	aunch Instance Wizard Cancel						
	Your instances are now launching. Note: Your instances may take a few minutes to launch, depend	ing on the software you are running.						
	> View your instances on the Instances page							
Othe	r EC2 Features							
indepe storag	nes olumes provide off-instance storage that persists endently of the life of an instance. Add a persistent ge device to an instance using the Elastic Block Store Volumes page.	Elastic IPs Elastic IP addresses allow you to remap a public IP address to any instance in your account. Elastic IPs also enable you to engineer around problems by quickly remapping your Elastic IP address to a replacement instance.						
	to the Volumes Page	> Go to the Elastic IPs Page						

11. Click *Close* to close the confirmation page, and then click *Instances* in the navigation pane to view your instance's status. It takes a short time for an instance to launch. The instance's status will be *pending* while it's launching.

	Instance	AMI ID	Root Device Type	Туре	Status 🔺	Lifecycle	Public DNS
1.	👰 i-4b216c20	ami-97b950fe	instance-store	m1.small	🥚 pending	normal	

12. After a short period (typically 10 to 15 minutes), your instance's status switches to *running*. You can click *Refresh* or the F5 key to refresh the display.

Instance	AMI ID	Root Device Type	Туре	Status 🔺	Lifecycle	Public DNS
👰 i-4b216c20	ami-97b950fe	instance-store	m1.small	running	normal	ec2-72-44-53-2

Once your instance's status is *running*, you can connect to it. Please see the next section to find out the status of your instance.

Connecting to the TEAMS AMI Instance

Connecting to the instance using Remote Desktop:

- **NOTE** even if the "Status" displays "running", it may be a while before you can connect to it. Click on the "Instance Actions" menu and choose ""Get System Log". If the log displays "Windows is ready", then you are ready to connect.
- **NOTE** The System Log window does not refresh automatically. You need to close the window and re-open to check the status of the AMI instance.
- NOTE In order to connect to the instance using RDP, outbound connections on port 3389 needs to be enabled. Please contact your system administrator for further information. Alternatively, you can try connecting from your home.

System Log: i-db9fd1b1	Cancel 🗙
<rdpcertificate> <dn>CN=1-db9fdlb1, 0U=EC2, 0=Amazon.com</dn><thumbprint>CABB0142D7AF3D5333D1B1A05D0E2E209608BB0 </thumbprint></rdpcertificate> 9/3/2010 3:29:38 PM: Message: Ec2Config Service is rebooting the instance. Please be patient. 9/3/2010 3:30:47 PM: Message: Windows is Ready to use	8
Close	۴.

1. Right-click on the instance to get a menu; select "Connect" from the menu.

🐻 Launch Insta						
	nce Instance Actions 💌	Reserved Instances	-			
Viewing: All Ins	stances 👻 🗸	All Instance Types	•			
Instance	AMI ID	Root Device	Туре	Status 🔺	Lifecycle	Public DNS
🔽 👔 i-cf91	Instance Management Connect Get System Log Create Image (EBS A Bundle Instance (S3 Get Windows Passw Launch More Like Thi	AMI) ord s	m1.small	running	normal	ec2-184-72-199-8.compute-1.
1 EC2 Instan	Disassociate IP Addro Instance Lifecycle Terminate Reboot CloudWatch Monitoring Enable CloudWatch					

2. Follow the instructions in the next dialog box. It is important to note the instance's public DNS name. We recommend you download the shortcut file (a .rdp file) and edit it.

Console Connect - Remote Des	sktop Connection	Cancel 🗙
Instance: i-cf91dda5		
Use Remote Desktop Connection so pre-installed on most Windows oper	ftware to connect to your instance. Remote Desktop Connection ating systems.	is
To access your instance using Rem	ote Desktop Connection you can follow one of these two options:	
OPTION 1: Shortcut File	OPTION 2: Step-by-Step Instructions	
Click the link below to download the Remote Desktop config file which you can either open to connect to your instance or save to your desktop as shortcut.	 Open the Remote Desktop Connection client. On Windows XP, go to Start -> All Programs -> Accee -> Communications -> Remote Desktop Connection. On Windows Vista, go to Start -> All Programs -> Accessories -> Remote Desktop Connection. Connect to your instance using instance's public DNS [ec2-184-72-199-8.compute-1.amazonaws.com]. 	
when the instance was launched and is a	ou will need your Windows Administrator password. A default password was railable encrypted in the system log. You can access and decrypt this passw word" tool, which is available via right-click or under the "More Actions" butt Close	ord by

3. Right-click and select edit to edit the .rdp file you downloaded in the step above.

Remot	Remote Desktop Connection				
General	Display Local Resources Programs Experience Advanced				
Logon s	settings				
	Enter the name of the remote computer.				
	Computer: 101-185-222.compute-1.amazonaws.com 🔻				
	User name: TEAMS				
	You will be asked for credentials when you connect.				
	Allow me to save credentials				
Connec	tion settings				
	Save the current connection settings to an RDP file or open a saved connection.				
	Save Save As Open				
	Connect Cancel Help Options <				

- 4. Set the user name to "TEAMS".
- 5. Click on the "Local Resources" tab, then click on the "More" button.

Nemote De	esktop Connection	C C	
	Remote Deskt Connectior	op 1	
General Dis		Programs Experience	e Advanced
0	Configure remote audio se	ttings.	
Keyboard	Apply Windows key comb		
\sim	Only when using the full s	screen	•
	Example: ALT+TAB		
-Local devic	es and resources		
-	Choose the devices and re your remote session.	esources that you war	nt to use in
	Printers	Clipboard	
	More		
Options		Connect	<u>H</u> elp

6. From the list of "Drives", select a local drive that you would like to make available when you remote log in to the machine. This will facilitate moving files between your local computer and the remote desktop.

Remote Desktop Connection
Remote Desktop Connection
Local devices and resources
Choose the devices and resources on this computer that you want to use in your remote session.
Smart cards Forts
 Drives Local Disk (C:) DVD RW Drive (D:) Data (E:) Drives that I plug in later Other supported Plug and Play (PnP) devices
Which Plug and Play devices can I use in my remote session?
OK Cancel

Adjust the "Experience" according to your connection speed.

Remote Desktop Connection					
Remote Desktop Connection					
General Display Local Resources Programs Experience Advanced					
Performance					
Choose your connection speed to optimize performance.					
High-speed broadband (2 Mbps - 10 Mbps)					
Allow the following:					
Desktop background					
Eont smoothing					
☑ Desktop composition					
Show window contents while dragging					
Menu and window animation					
✓ Visual styles					
Persistent bitmap caching					
Reconnect if the connection is dropped					
Options Connect Help					

Log in using the following information:

- Username: TEAMS
- Password: eiK5uXQg

We recommend changing the password, please set a strong password that you will be able to remember.

NOTE: You may see several messages regarding certificates after clicking Connect. Please

ignore the messages and continue with the Remote Desktop Connection.

NOTE: If another user is already logged in and you log in with the same username, the logged-in user will be unexpectedly shut down from his/her session.

Start using TEAMS!

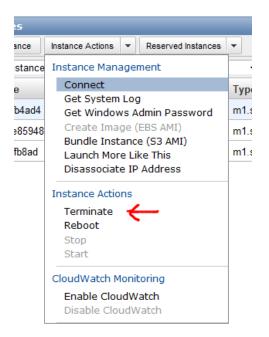
Copy file from your local computer to the AMI using drag and drop (your local hard drive shows up as a disk on the AMI)

- NOTE 1: Drive D has lot of free space. Feel free to create folder here.
- **NOTE 2**: While it is tempting to try to work off your local disk, performance is awful! So copy the files to the AMI and work off the AMI disks.
- **NOTE 3**: To copy files between your local disk and the AMI, it is highly recommended that you zip up the folders and then copy them over. It takes an enormous amount of time to copy lots of small files -- and TEAMS models are lots and lots of small files.
- **NOTE 4**: Remember, you will lose all the data in the AMI when you shutdown the instance. ALWAYS remember to copy your work back to your local computer before you shutdown the AMI.

Shutting Down the AMI Instance

Since you are getting billed by the hour, once you are done using TEAMS, you should "terminate" the AMI instance.

- **NOTE** Logging off or shutting down Windows using the "Shut Down" menu is not enough, you will continue to get billed by the hour, even though you are not using the computer.
- NOTE If you terminate a running instance, you will LOSE ALL DATA STORED IN THAT INSTANCE! If you have saved your work in that instance, make sure you copy the data to your own local computer, before you terminate the instance.
- 1. **First, copy all the important files** from the remote computer into your local desktop. This task becomes easier if you have mapped one of your local disk onto the remote desktop, as specified earlier under the section, "Connecting to the AMI instance".
- 2. Next, log off from the remote desktop.
- 3. **Finally, from the Amazon EC2 Console**, check the instance you would like to terminate, and select "Terminate" from the Instance Action menu.



Your instance will now terminate and you will no longer be billed for further hours.

Once you terminate the instance, **all the data in the AMI will also be lost**! Remember to copy your files back to your local computer before shutting down.

Creating Persistent Storage

You can create persistent storage and attach it like a hard drive to the AMI. Data in this drive will survive even when you terminate the instance, and you can start a new instance later and attach this drive to the new instance, much like you would use a memory stick. But there is a nominal charge from Amazon for this service (\$0.10 per month per GB + \$0.10 per million IO. For a 10GB partition, budget about \$20/month).

The steps are as follows:

- 1. **From the AWS Management Console**, select Volumes, then select "Create Volume". Choose the size of the Volume (10GiB is usually plenty). Remember to choose the same zone (e.g., us-east-1a) as the zone your AMI is running.
- 2. **Once creating of the Volume is complete**, right click on it to attach it to the running instance, similar to how you would plug in a memory stick.
- 3. You will probably have to reboot the AMI to see the new disk. In AWS Management Console, go back to "Instance" and right click on the AMI to select Reboot. Once it reboots, and you reconnect, you should see the new volume as an additional drive (E:), and you can store all your models here.