Exporting Amazon Lightsail snapshots

Note
You can export Amazon Lightsail instance and block storage disk snapshots to Amazon Elastic Compute Cloud (Amazon EC2). This lets you take advantage of the wider range of instance types available in Amazon EC2, and use the full range of services available in Amazon Web Services (AWS).

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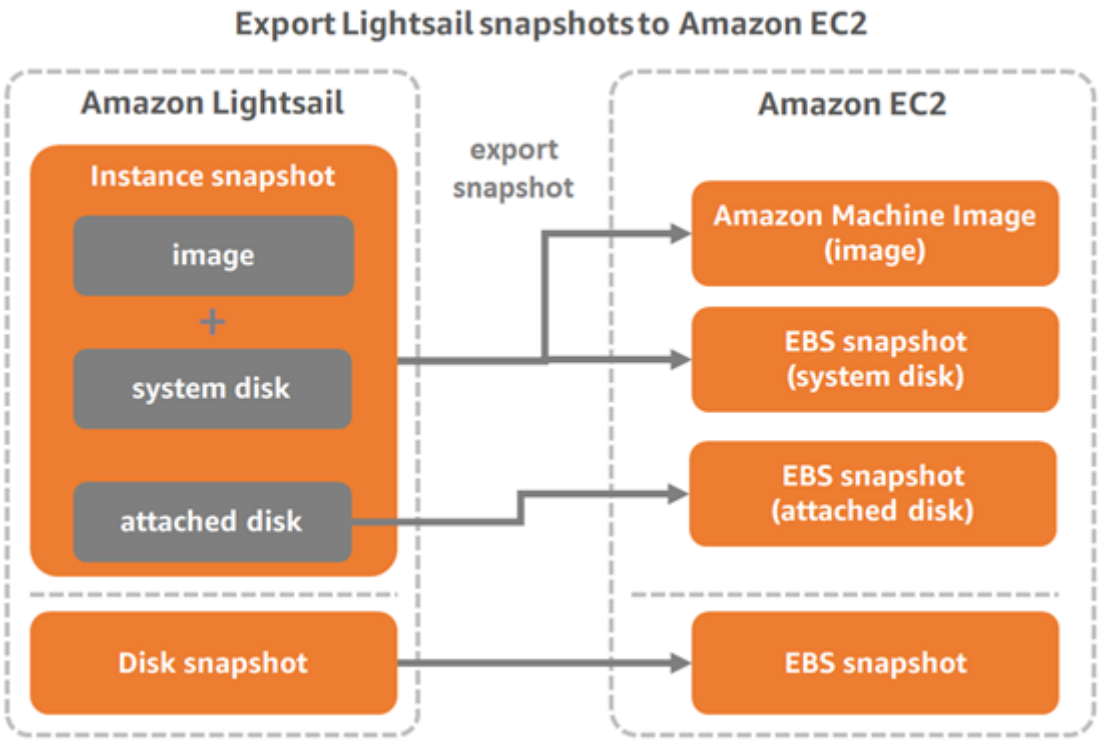
Lightsail instance and block storage disk snapshots can be exported to Amazon EC2 using one of the following methods:

- The Lightsail console. For more information, see Exporting Amazon Lightsail snapshots to Amazon EC2.
- The Lightsail API, AWS Command Line Interface (AWS CLI), or SDKs. For more information, see the ExportSnapshot operation in the Lightsail API documentation, or the export-snapshot command in the AWS CLI documentation.

You can export instance snapshots of any operating system and blueprint, and block storage disk snapshots of any size. Snapshots are exported to the same AWS Region from Lightsail to Amazon EC2.

Note
To export snapshots to a different Region, first copy the snapshot to a different Region in Lightsail, then perform the export. For more information, see Copying snapshots from one AWS Region to another in Amazon Lightsail.

Exporting a Lightsail instance snapshot results in an Amazon Machine Image (AMI) and an Amazon Elastic Block Store (Amazon EBS) snapshot being created in Amazon EC2. This is because Lightsail instances are comprised of an image and a system disk, but both are grouped together as a single instance entity in the Lightsail console to make them more efficient to manage. If the source Lightsail instance had one or more block storage disks attached to it when the snapshot was created, then additional EBS snapshots for each attached disk will be created in Amazon EC2. Exporting a Lightsail block storage disk snapshot results in a single EBS snapshot being created in Amazon EC2. All exported resources in Amazon EC2 have their own distinct unique identifiers that are different than their Lightsail counterparts.



Note
Lightsail uses an AWS Identity and Access Management (IAM) service-linked role (SLR) to export snapshots to Amazon EC2. For more information about SLRs, see Using service-linked roles for Amazon Lightsail.

The export process can take a while. It depends on the size and configuration of the source instance or block storage disk. Use the task monitor in the Lightsail console to track the status of your export. For more information, see Task monitor in Amazon Lightsail.

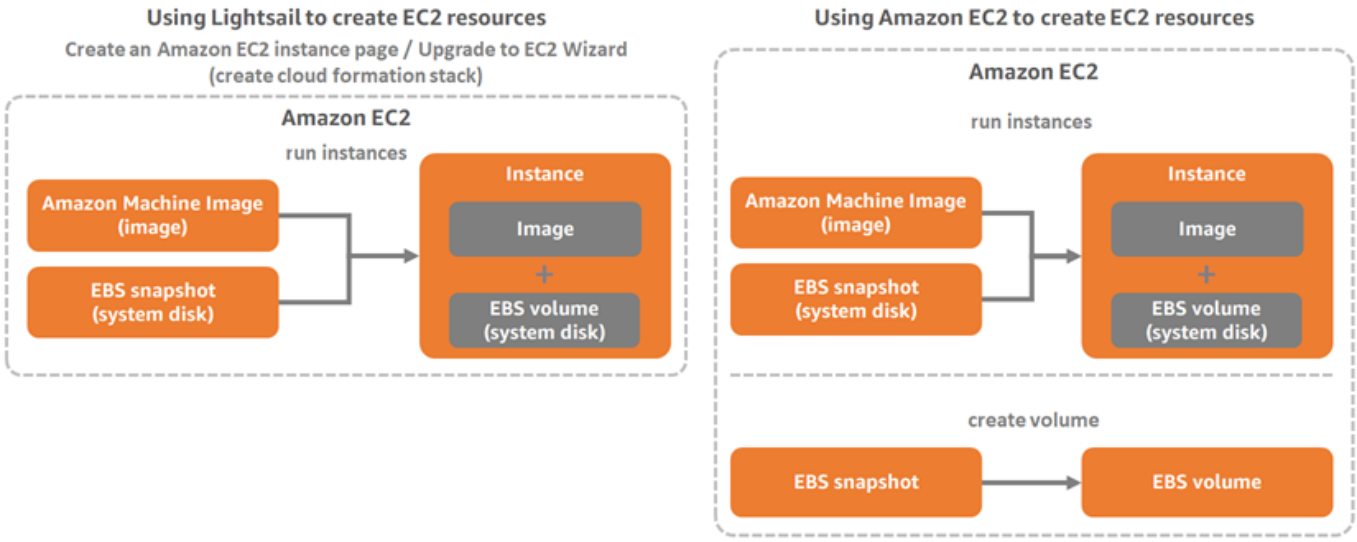
Creating Amazon EC2 resources from exported Lightsail snapshots

After a Lightsail snapshot is exported and available in Amazon EC2 (as an AMI, EBS snapshot, or both), you can create Amazon EC2 resources from the snapshot using one of the following methods:

- The **Create an Amazon EC2 instance** page in the Lightsail console, also known as the Upgrade to Amazon EC2 Wizard. For more information, see Creating Amazon EC2 instances from exported snapshots in Amazon Lightsail.
- The Lightsail API, AWS CLI, or SDKs. For more information, see the CreateCloudFormationStack operation in the Lightsail API documentation, or the create-cloud-formation-stack command in the AWS CLI documentation. **Note**
  Lightsail can be used to create Amazon EC2 instances from exported instance snapshots, but it cannot be used to create EBS volumes from exported block storage disk snapshots. For this, you must use the Amazon EC2 console, API, or AWS CLI. For more information, see Creating Amazon EBS volumes from exported Amazon Lightsail disk snapshots.
- The Amazon EC2 console, Amazon EC2 API, AWS CLI, or SDKs. For more information, see Launching an Instance Using the Launch Instance Wizard or Restoring an Amazon EBS Volume from a Snapshot in the Amazon EC2 documentation.

Creating an Amazon EC2 instance from an exported instance snapshot (AMI and EBS snapshot) results in a single EC2 instance being launched. The AMI and EBS snapshot that resulted from exporting the Lightsail

instance snapshot are automatically linked together to form the EC2 instance. The exported Lightsail block storage disk snapshot (EBS snapshot) can be used to create an EBS volume in Amazon EC2.



Note
Lightsail uses a CloudFormation stack to create instances and their related resources in EC2. For more information, see AWS CloudFormation stacks for Amazon Lightsail.

The process to create Amazon EC2 resources from an exported snapshot can take a while. It depends on the size and configuration of the source instance. Use the task monitor in the Lightsail console to track the status of this task. For more information, see Task monitor in Amazon Lightsail.

Choosing an Amazon EC2 instance type

Amazon EC2 offers a wider range of instance options than are available in Lightsail. In Amazon EC2, you can choose instance types that are optimized for compute (C5), memory (R5), or a balance of both (T3 and M5). Lightsail provides these options in the **Create an Amazon EC2 instance** page; however, more instance type options are available if you use Amazon EC2 to create new instances from an exported snapshot.For more information about EC2 instance types, see Instance Types in the Amazon EC2 documentation.

Before you create EC2 instances from exported snapshots, it is important to understand the instance price differences between Lightsail and Amazon EC2. For more information about instance pricing, see the Lightsail pricing and Amazon EC2 pricing pages.

Lightsail and Amazon EC2 instance type compatibility

Some Lightsail instances are incompatible with the current generation EC2 instance types (T3, M5, C5, or R5) because they are not enabled for enhanced networking. If your source Lightsail instance is incompatible, you will need to choose a previous generation instance type (T2, M4, C4, or R4) when creating an EC2 instance from your exported snapshot. These options are presented to you when creating an EC2 instance using the **Create an Amazon EC2 instance** page in the Lightsail console.

To use the latest generation EC2 instance types when the source Lightsail instance is incompatible, you need to create the new EC2 instance using a previous generation instance type (T2, M4, C4, or R4), update the networking driver, and then upgrade the instance to the desired current generation instance type. For more information, see Updating Amazon EC2 instances for enhanced networking.

Connecting to Amazon EC2 instances

You can connect to Amazon EC2 instances similar to how you connect to Lightsail instances. This means using SSH for Linux and Unix instances and RDP for Windows Server instances. However, the browser-based SSH/RDP client that you might have used in the Lightsail console might not be available in Amazon EC2 depending on the browser version that you're using, so you may need to configure your own SSH/RDP client to connect to your EC2 instances. For more information, see the following guides:

- Connecting to a Linux or Unix instance in Amazon EC2 created from an Amazon Lightsail snapshot
- Connecting to a Windows Server instance in Amazon EC2 created from an Amazon Lightsail snapshot

Securing Amazon EC2 instances

After you create an EC2 instance from an exported Lightsail snapshot, you may need to perform a few actions to improve the security of your new instances. The actions are different depending on the operating system of your EC2 instance.

Securing Linux and Unix instances in Amazon EC2

If you create a Linux or Unix instance in Amazon EC2 from an exported snapshot using EC2 (the EC2 console, the EC2 API, AWS CLI for EC2, or SDKs for EC2), the new EC2 instance may contain residual SSH keys from the Lightsail service. We recommend removing these keys to better secure the new instance.

For more information, see Securing a Linux or Unix instance in Amazon EC2 created from an Amazon Lightsail snapshot.

Securing Windows Server instances in Amazon EC2

After you create a Windows Server instance in Amazon EC2 from an exported snapshot, any user in your AWS account with access to Lightsail and EC2 will be able to retrieve the default administrator password first assigned to the source instance, which is also the password for the new EC2 instance. For increased security, we recommend that you change the default administrator password for your Amazon EC2 instance, if you haven’t already done so.

For more information, see Securing a Windows Server instance in Amazon EC2 created from an Amazon Lightsail snapshot.

Exporting Lightsail snapshots and creating resources in Amazon EC2

To get started with exporting snapshots, and creating Amazon EC2 resources from them, see the following guides:

- Task monitor in Amazon Lightsail
- AWS CloudFormation stacks for Amazon Lightsail
- Exporting Amazon Lightsail snapshots to Amazon EC2
- Creating Amazon EC2 instances from exported snapshots in Amazon Lightsail
- Creating Amazon EBS volumes from exported Amazon Lightsail disk snapshots
- Updating Amazon EC2 instances for enhanced networking
- Connecting to a Linux or Unix instance in Amazon EC2 created from an Amazon Lightsail snapshot
- Connecting to a Windows Server instance in Amazon EC2 created from an Amazon Lightsail snapshot

- Securing a Linux or Unix instance in Amazon EC2 created from an Amazon Lightsail snapshot
- Securing a Windows Server instance in Amazon EC2 created from an Amazon Lightsail snapshot
- Copying snapshots from one AWS Region to another in Amazon Lightsail
- Using service-linked roles for Amazon Lightsail