

Use instance metadata to manage your EC2 instance

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`ami-id` The AMI ID used to launch the instance. 1.0 `ami-launch-index` If you launch multiple instances using the same `RunInstances` call, this value indicates the launch order for each instance. The value of the first instance launched is 0. If you launch instances using Auto Scaling or EC2 fleet, this value is always 0. 1.0 `ami-manifest-path` The path to the AMI manifest file in Amazon S3. If you used an Amazon EBS-backed AMI to launch the instance, the returned result is `unknown`. 1.0 `ancestor-ami-ids` The AMI IDs of any instances that were rebundled to create this AMI. This value will only exist if the AMI manifest file contained an `ancestor-amis` key. 2007-10-10 `autoscaling/target-lifecycle-state`

Value showing the target Auto Scaling lifecycle state that an Auto Scaling instance is transitioning to. Present when the instance transitions to one of the target lifecycle states after March 10, 2022. Possible values: `Detached` | `InService` | `Standby` | `Terminated` | `Warmed:Hibernated` | `Warmed:Running` | `Warmed:Stopped` | `Warmed:Terminated`. See [Retrieve the target lifecycle state through instance metadata](#) in the *Amazon EC2 Auto Scaling User Guide*.

2021-07-15 `block-device-mapping/ami` The virtual device that contains the root/boot file system. 2007-12-15 `block-device-mapping/ebs` *N* The virtual devices associated with any Amazon EBS volumes. Amazon EBS volumes are only available in metadata if they were present at launch time or when the instance was last started. The *N* indicates the index of the Amazon EBS volume (such as `ebs1` or `ebs2`). 2007-12-15 `block-device-mapping/ephemeral` *N* The virtual devices for any non-NVMe instance store volumes. The *N* indicates the index of each volume. The number of instance store volumes in the block device mapping might not match the actual number of instance store volumes for the instance. The instance type determines the number of instance store volumes that are available to an instance. If the number of instance store volumes in a block device mapping exceeds the number available to an instance, the additional instance store volumes are ignored. 2007-12-15 `block-device-mapping/root` The virtual devices or partitions associated with the root devices or partitions on the virtual device, where the root (/ or C:) file system is associated with the given instance. 2007-12-15 `block-device-mapping/swap` The virtual devices associated with `swap`. Not always present. 2007-12-15 `events/maintenance/history` If there are completed or canceled maintenance events for the instance, contains a JSON string with information about the events. 2018-08-17 `events/maintenance/scheduled` If there are active maintenance events for the instance, contains a JSON string with information about the events. For more information, see [View scheduled events that affect your Amazon EC2 instances](#). 2018-08-17 `events/recommendations/rebalance` The approximate time, in UTC, when the EC2 instance rebalance recommendation notification is emitted for the instance. The following is an example of the metadata for this category: `{"noticeTime": "2020-11-05T08:22:00Z"}`. This category is available only after the notification is emitted. For more information, see [EC2 instance rebalance recommendations](#). 2020-10-27 `hostname` If the EC2 instance is using IP-based naming (IPBN), this is the private IPv4 DNS hostname of the instance. If the EC2 instance is using Resource-based naming (RBN), this is the RBN. In cases where multiple network interfaces are present, this refers to the `eth0` device (the device for which the device number is 0). For more information about IPBN and RBN, see [EC2 instance hostnames and domains](#). 1.0 `iam/info` If there is an IAM role associated with

the instance, contains information about the last time the instance profile was updated, including the instance's LastUpdated date, InstanceProfileArn, and InstanceProfileId. Otherwise, not present. 2012-01-12 iam/security-credentials/ role-name If there is an IAM role associated with the instance, role-name is the name of the role, and role-name contains the temporary security credentials associated with the role (for more information, see [Retrieve security credentials from instance metadata](#)). Otherwise, not present. 2012-01-12 identity-credentials/ec2/info Information about the credentials in identity-credentials/ec2/security-credentials/ec2-instance . 2018-05-23 identity-credentials/ec2/security-credentials/ec2-instance Credentials for the instance identity role that allow on-instance software to identify itself to AWS to support features such as EC2 Instance Connect and AWS Systems Manager Default Host Management Configuration. These credentials have no policies attached, so they have no additional AWS API permissions beyond identifying the instance to the AWS feature. For more information, see [Instance identity roles for Amazon EC2 instances](#). 2018-05-23 instance-action Notifies the instance that it should reboot in preparation for bundling. Valid values: none | shutdown | bundle-pending . 2008-09-01 instance-id The ID of this instance. 1.0 instance-life-cycle The purchasing option of this instance. For more information, see [Amazon EC2 billing and purchasing options](#). 2019-10-01 instance-type The type of instance. For more information, see [Amazon EC2 instance types](#). 2007-08-29 ipv6 The IPv6 address of the instance. In cases where multiple network interfaces are present, this refers to the eth0 device (the device for which the device number is 0) network interface and the first IPv6 address assigned. If no IPv6 address exists on network interface[0], this item is not set and results in an HTTP 404 response. 2021-01-03 kernel-id The ID of the kernel launched with this instance, if applicable. 2008-02-01 local-hostname In cases where multiple network interfaces are present, this refers to the eth0 device (the device for which the device number is 0). If the EC2 instance is using IP-based naming (IPBN), this is the private IPv4 DNS hostname of the instance. If the EC2 instance is using Resource-based naming (RBN), this is the RBN. For more information about IPBN, RBN, and EC2 instance naming, see [EC2 instance hostnames and domains](#). 2007-01-19 local-ipv4 The private IPv4 address of the instance. In cases where multiple network interfaces are present, this refers to the eth0 device (the device for which the device number is 0). If this is an IPv6-only instance, this item is not set and results in an HTTP 404 response. 1.0 mac The instance's media access control (MAC) address. In cases where multiple network interfaces are present, this refers to the eth0 device (the device for which the device number is 0). 2011-01-01 metrics/vhostmd No longer available. 2011-05-01 network/interfaces/macs/ mac /device-number The unique device number associated with that interface. The device number corresponds to the device name; for example, a device-number of 2 is for the eth2 device. This category corresponds to the DeviceIndex and device-index fields that are used by the Amazon EC2 API and the EC2 commands for the AWS CLI. 2011-01-01 network/interfaces/macs/ mac /interface-id The ID of the network interface. 2011-01-01 network/interfaces/macs/ mac /ipv4-associations/ public-ip The private IPv4 addresses that are associated with each public IP address and assigned to that interface. 2011-01-01 network/interfaces/macs/ mac /ipv6s The IPv6 addresses assigned to the interface. 2016-06-30 network/interfaces/macs/ mac /ipv6-prefix The IPv6 prefix assigned to the network interface. network/interfaces/macs/ mac /local-hostname

The private IPv4 DNS hostname of the instance. In cases where multiple network interfaces are present, this refers to the eth0 device (the device for which the device number is 0). If this is a IPv6-only instance, this is the resource-based name. For more information about IPBN and RBN, see [EC2 instance hostnames and domains](#).

2007-01-19 `network/interfaces/mac`/ `mac` /`local-ipv4s` The private IPv4 addresses associated with the interface. If this is an IPv6-only network interface, this item is not set and results in an HTTP 404 response. 2011-01-01 `network/interfaces/mac`/ `mac` /`mac` The instance's MAC address. 2011-01-01 `network/interfaces/mac`/ `mac` /`network-card` The index of the network card. Some instance types support multiple network cards. 2020-11-01 `network/interfaces/mac`/ `mac` /`owner-id` The ID of the owner of the network interface. In multiple-interface environments, an interface can be attached by a third party, such as Elastic Load Balancing. Traffic on an interface is always billed to the interface owner. 2011-01-01 `network/interfaces/mac`/ `mac` /`public-hostname` The interface's public DNS (IPv4). This category is only returned if the `enableDnsHostnames` attribute is set to `true` . For more information, see [DNS attributes for your VPC](#) in the *Amazon VPC User Guide*. If the instance only has a public-IPv6 address and no public-IPv4 address, this item is not set and results in an HTTP 404 response. 2011-01-01 `network/interfaces/mac`/ `mac` /`public-ipv4s` The public IP address or Elastic IP addresses associated with the interface. There may be multiple IPv4 addresses on an instance. 2011-01-01 `network/interfaces/mac`/ `mac` /`security-groups` Security groups to which the network interface belongs. 2011-01-01 `network/interfaces/mac`/ `mac` /`security-group-ids` The IDs of the security groups to which the network interface belongs. 2011-01-01 `network/interfaces/mac`/ `mac` /`subnet-id` The ID of the subnet in which the interface resides. 2011-01-01 `network/interfaces/mac`/ `mac` /`subnet-ipv4-cidr-block` The IPv4 CIDR block of the subnet in which the interface resides. 2011-01-01 `network/interfaces/mac`/ `mac` /`subnet-ipv6-cidr-blocks` The IPv6 CIDR block of the subnet in which the interface resides. 2016-06-30 `network/interfaces/mac`/ `mac` /`vpc-id` The ID of the VPC in which the interface resides. 2011-01-01 `network/interfaces/mac`/ `mac` /`vpc-ipv4-cidr-block` The primary IPv4 CIDR block of the VPC. 2011-01-01 `network/interfaces/mac`/ `mac` /`vpc-ipv4-cidr-blocks` The IPv4 CIDR blocks for the VPC. 2016-06-30 `network/interfaces/mac`/ `mac` /`vpc-ipv6-cidr-blocks` The IPv6 CIDR block of the VPC in which the interface resides. 2016-06-30 `placement/availability-zone` The Availability Zone in which the instance launched. 2008-02-01 `placement/availability-zone-id` The static Availability Zone ID in which the instance is launched. The Availability Zone ID is consistent across accounts. However, it might be different from the Availability Zone, which can vary by account. 2019-10-01 `placement/group-name` The name of the placement group in which the instance is launched. 2020-08-24 `placement/host-id` The ID of the host on which the instance is launched. Applicable only to Dedicated Hosts. 2020-08-24 `placement/partition-number` The number of the partition in which the instance is launched. 2020-08-24 `placement/region` The AWS Region in which the instance is launched. 2020-08-24 `product-codes` AWS Marketplace product codes associated with the instance, if any. 2007-03-01 `public-hostname` The instance's public DNS (IPv4). This category is only returned if the `enableDnsHostnames` attribute is set to `true` . For more information, see [DNS attributes for your VPC](#) in the *Amazon VPC User Guide*. If the instance only has a public-IPv6 address and no public-IPv4 address, this item is not set and results in an HTTP 404 response. 2007-01-19 `public-ipv4` The public IPv4 address. If an Elastic IP address is associated with the instance, the value returned is the Elastic IP address. 2007-01-19 `public-keys/0/openssh-key` Public key. Only available if supplied at instance launch time. 1.0 `ramdisk-id` The ID of the RAM disk specified at launch time, if applicable. 2007-10-10 `reservation-id` The ID of the reservation. 1.0 `security-groups`

The names of the security groups applied to the instance.

After launch, you can change the security groups of the instances. Such changes are reflected here and in `network/interfaces/mac`/ `mac` /`security-groups`.

1.0 `services/domain`

The domain for AWS resources for the Region.

2014-02-25 `services/partition`

The partition that the resource is in. For standard AWS Regions, the partition is `aws`. If you have resources in other partitions, the partition is `aws- partitionname`. For example, the partition for resources in the China (Beijing) Region is `aws-cn`.

2015-10-20 `spot/instance-action`

The action (hibernate, stop, or terminate) and the approximate time, in UTC, when the action will occur. This item is present only if the Spot Instance has been marked for hibernate, stop, or terminate. For more information, see [instance-action](#).

2016-11-15 `spot/termination-time`

The approximate time, in UTC, that the operating system for your Spot Instance will receive the shutdown signal. This item is present and contains a time value (for example, 2015-01-05T18:02:00Z) only if the Spot Instance has been marked for termination by Amazon EC2. The termination-time item is not set to a time if you terminated the Spot Instance yourself. For more information, see [termination-time](#).

2014-11-05 `system` The underlying virtualization type (hypervisor) of the instance. 2022-09-24 `tags/instance` The instance tags associated with the instance. Only available if you explicitly allow access to tags in instance metadata. For more information, see [Enable access to tags in instance metadata](#). 2021-03-23

Source: <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-instance-metadata.html>