

AWS Monitoring

Which IAM permissions are needed to fetch Amazon EC2, EBS and ELB metrics

When you create an AWS app, you need to provide the access key and secret for a user that can fetch metrics for EC2, EBS and/or ELB, depending on which of those you select to be monitored. We recommend creating a separate IAM user for this, with the minimum permissions:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "ec2:DescribeInstances",
        "ec2:DescribeAddresses",
        "ec2:DescribeVolumes",
        "elasticloadbalancing:DescribeLoadBalancers",
        "cloudwatch:GetMetricStatistics",
        "cloudwatch:ListMetrics"
      ],
      "Resource": [
        "*"
      ]
    }
  ]
}
```

The Describe* permissions are needed to identify the resources which need to be monitored (Instances and Addresses for EC2, Volumes for EBS and LoadBalancers for ELB), while GetMetricStatistics will allow SPM to fetch the actual metrics from CloudWatch.

Metrics

Report: Health

Chart: Health

Metric Name | Metric Description — | — 'healthy instances' | 'unhealthy instances' |

Report: CPU

Chart: Read/Write Operations

Metric Name | Metric Description — | — ‘disk reads’ | ‘disk writes’ |

Chart: Disk Reads/Writes (Bytes)

Metric Name | Metric Description — | — ‘reads’ | ‘writes’ |

Report: Requests Queue

Chart: Rejected Requests

Metric Name | Metric Description — | — ‘rejected requests’ |

Chart: Pending Requests

Metric Name | Metric Description — | — ‘pending requests count’ |

Report: CPU

Chart: CPU Utilization

Metric Name | Metric Description — | — ‘cpu utilization’ |

Report: Status Check

Chart: Status Check

Metric Name | Metric Description — | — ‘status check failed’ | ‘status check failed (instance)’ | ‘status check failed (system)’ |

Report: CPU

Chart: Network

Metric Name | Metric Description — | — ‘network in’ | ‘network out’ |

Report: EBS

Chart: % Time Spent Idle

Metric Name | Metric Description — | — ‘% Time Spent Idle’ |

Chart: Average Queue Length

Metric Name | Metric Description — | — ‘avg queue length’ |

Chart: Average Read/Write Latency

Metric Name | Metric Description — | — ‘avg. read latency’ | ‘avg. write latency’ |

Chart: Read/Write Bandwidth

Metric Name | Metric Description — | — ‘read bandwidth’ | ‘write bandwidth’ |

Chart: Average Read/Write Size

Metric Name | Metric Description — | — ‘avg. read size’ | ‘avg. write size’ |

Chart: Read/Write Throughput

Metric Name | Metric Description — | — ‘read throughput’ | ‘write throughput’ |

Report: ELB Responses**Chart: ELB Responses**

Metric Name | Metric Description — | — ‘4xx’ | ‘5xx’ |

Report: Provisioned IOPS**Chart: Consumed Read/Write Ops**

Metric Name | Metric Description — | — ‘consumed read/write ops’ |

Chart: Volume Throughput Percentage

Metric Name | Metric Description — | — ‘throughput percentage’ |

Report: Requests**Chart: Latency**

Metric Name | Metric Description — | — ‘latency min’ | ‘latency max’ | ‘latency avg’ |

Chart: Requests

Metric Name | Metric Description — | — 'requests count' |

Report: Backend Responses**Chart: Backend Responses**

Metric Name | Metric Description — | — '2xx' | '3xx' | '4xx' | '5xx' |

Chart: Connection Errors

Metric Name | Metric Description — | — 'connection errors' |