

# Migrate to AWS with the Server Migration Service

It's time to move



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## Introduction

- Cloud migrations
- Education and training
- Automation
- Developing cloud agnostic tools and processes



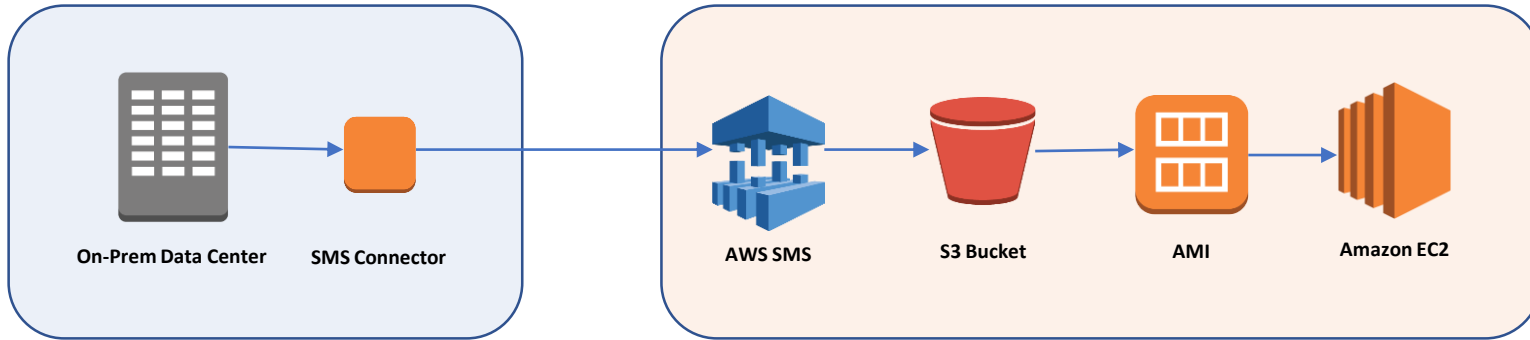
## What is AWS Server Migration Service?

SMS is an AWS native service that automates the migration of your on-prem virtual machines running in vSphere or Hyper-V into the AWS Cloud.

- It simplifies migrations
- Allows the concurrent migration of multiple servers
- Supports popular operating systems
- Reduces downtime by using incremental replication

## How does it work?

- It utilizes an AWS SMS Connector that is running in your vSphere
- Server volume data is replicated to an S3 bucket
- The new AWS EBS volumes are automatically converted into AMIs
- These AMIs are then used to create EC2 instances



## Requirements

- Disable any antivirus software
- Disconnect any disc drives connected to the VM
- Enable remote access (RDP/SSH) to the VM
- Verify that the VM is set to DHCP and any scripts allow dynamic IPs
- Verify the appropriate .NET Framework is installed for Windows VMs
- Verify that GRUB or GRUB 2 is your bootloader for Linux VMs
- Free up at least 6 GB of space on the root volume
- ESXi and vCenter 5.1+
  - DNS access
  - HTTPS access to AWS

## Supported Operating Systems

- Windows Server 2003+
- Windows Desktop 7+
- Ubuntu 12.04, 12.10, 13.04, 13.10, 14.04, 14.10, 15.04, 16.04, 16.10
- SUSE 11 SP 1, 2, or 3, SUSE 12 SP 1, 2, or 3
- Red Hat Enterprise Linux 5.1+ (Except for 6.0)
- CentOS 5.1+ (Except for 6.0)
- Debian 6.0.0+
- Oracle Linux 6.1+
- Fedora 19-21

## Limitations

- **Boot volume can not exceed 2TB and must be MBR partition**
- **A VM can not have more than 22 volumes**
- **Only VMDK disk images are supported for vSphere**
- **Does not support Paravirtual virtualization (PV)**
- **Multiple NICs are unsupported during migration**
- **Migrated VMs will not receive auto assigned public IP addresses**
- **IPv6 is unsupported**
- **VMs created from P2V conversions are unsupported**
- **Does not support interval replication for VMDKs in independent mode**

## AWS Account Preparations

To prepare your AWS account, you need to configure the permissions.

- Administrator accounts have permission to use SMS
- But we're not using Administrator accounts, right?

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "sms:*"
      ],
      "Resource": "*"
    }
  ]
}
```

- Or you can use the `ServerMigrationServiceRole` from the IAM templates



# Demo

# Questions?

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