Compute Products  (https://cloud.google.com/products/compute/)
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# Preparing Windows Server Machines for Migration with CloudEndure

CloudEndure is deprecated (https://cloud.google.com/compute/docs/deprecations/cloudendure). For migrating from other VM platforms, use Migrate for Compute Engine (https://cloud.google.com/migrate/compute-engine/).

This guide describes how to prepare a Windows Server machine for migration to Google Cloud using the CloudEndure  (https://www.cloudendure.com/) VM Migration Service. These are pre-migration tasks. After you have completed these tasks, continue with the steps described in Migrating VMs with CloudEndure (https://cloud.google.com/compute/docs/vm-migration/using-cloud-endure).

## Enable Remote Desktop connections

To connect to your instance after it has been migrated, you must enable connections using the remote desktop protocol (RDP). For steps to enable RDP connections, see the documentation for your version of Windows Server.

## Turn on Emergency Management Services

On your Windows machine, turn on Emergency Management Services (EMS). This helps you to troubleshoot boot failures after migrating your instance.

In the Windows command prompt, run the following command, which enables EMS on serial port 2:

```
bootcfg /ems ON /port COM2 /baud 115200 /id 1
```

# Enable the SOS boot setting

The SOS boot setting shows driver names as they are being loaded. This is helpful if you need to troubleshoot issues with device drivers after the migration.

In the Windows command prompt, run the following command:

```
bootcfg /addsw /SO /ID 1
```

# Create local administrator accounts

If you need additional local administrator accounts on your instance, create those accounts before you migrate.

# Additional tasks for Windows Server 2003

If you are migrating a Windows Server 2003 machine to Compute Engine, you must perform the following additional tasks before you migrate your machine.

### Disable the Windows Driver Signing policy

You must disable the Windows Driver Signing policy, so that you can install the CloudEndure migration agent. As a best practice, re-enable the policy after you have migrated your VM.

To disable the Driver Signing policy:

1. On your desktop, right-click **My Computer**, and select **Properties**.
2. Click the **Hardware** tab, and click **Driver Signing**.
3. In the Driver Signing options, select **Ignore**.
4. Click **OK** to save your changes.

### Enable registry settings to shut down your instances from the Console

To ensure that you can cleanly shut down your Windows Server 2003 instances from the Google Cloud Console, you must edit your Windows Registry to allow shutdown commands without requiring a user to sign in to Windows.

Run the following commands to edit the Windows Registry on your machine:

```
reg add [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\policies\syste
"ShutdownWithoutLogon"=dword:00000001

reg add [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Windows] ^
"ShutdownWarningDialogTimeout"=dword:00000001
```

## Install the Windows Guest Environment

The Windows Guest Environment for Compute Engine lets you reset your administrator password from the Google Cloud Console. Download the Guest Environment for Windows Server 2003
 (https://storage.googleapis.com/gce-windows-drivers-public/win2k3driver/x86_agent/GCEWindowsAgent.exe)
, and use the install script
 (https://storage.googleapis.com/gce-windows-drivers-public/win2k3driver/x86_agent/install.cmd) to install and start the Guest Environment.

After you have completed these tasks, continue with the steps described in Migrating VMs to Compute Engine (https://cloud.google.com/compute/docs/tutorials/migrating-vms-compute-engine).

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