

Automated Apex Agent Deployment and VM Provisioning via vSphere

Customization Specifications

Platform: VMware vSphere Client & Apex Management Console | Target Audience: Systems Engineers / Virtualization Administrators

1. Purpose & Scope

This document outlines the workflow for provisioning a new Windows virtual machine from a template in VMware vSphere while automating the installation and enrollment of the Apex Agent using a Guest OS Customization Specification.

Executing this procedure ensures seamless, automated endpoint onboarding, direct assignment to the designated Apex Device Group, and immediate telemetry collection without requiring post-deployment manual intervention.

2. Administrative Considerations

IMPORTANT WARNING:

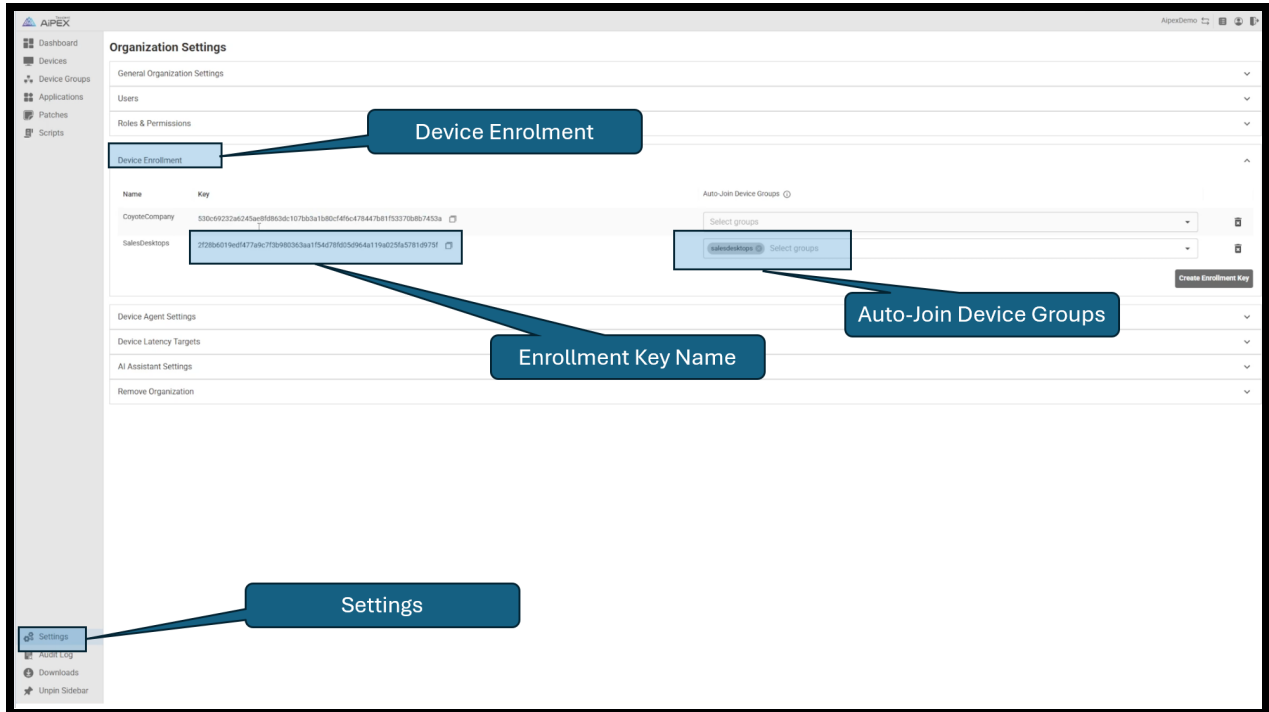
- This procedure was done on VMware vSphere 7.x, but the concepts can be used with later versions of vSphere and other systems that can clone images.
- A new customization specification can be created, or an existing specification can be edited to install the Aipex agent.

3. Step-by-Step Provisioning & Deployment Procedure

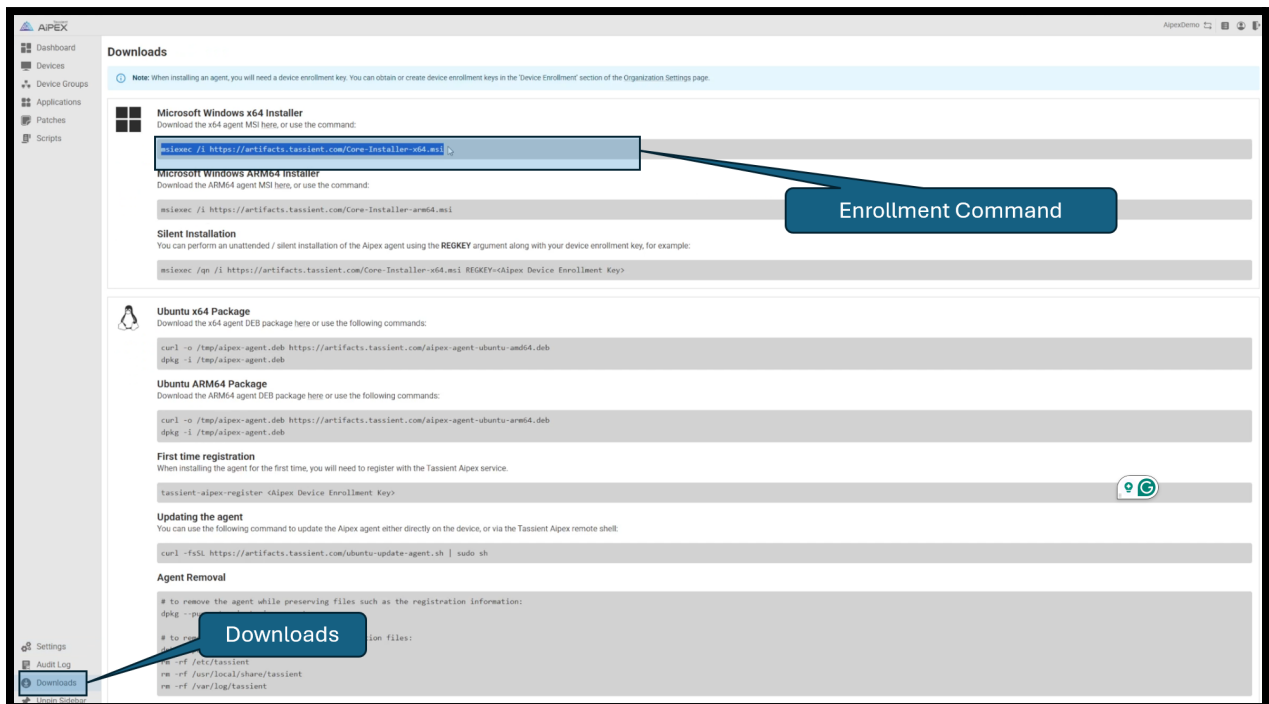
Retrieve Agent Installer and Enrollment Credentials

You will use the Aipex Device Enrollment key and `msiexec` command in the vSphere Customization Script to install the agent on a cloned machine.

1. Navigate to and log in to the Apex management console at <https://apex.tassient.com>.
2. Select **Settings** from the left navigation pane and expand **Device Enrollment** under Organization Settings to copy the required tenant **Enrollment Key**.



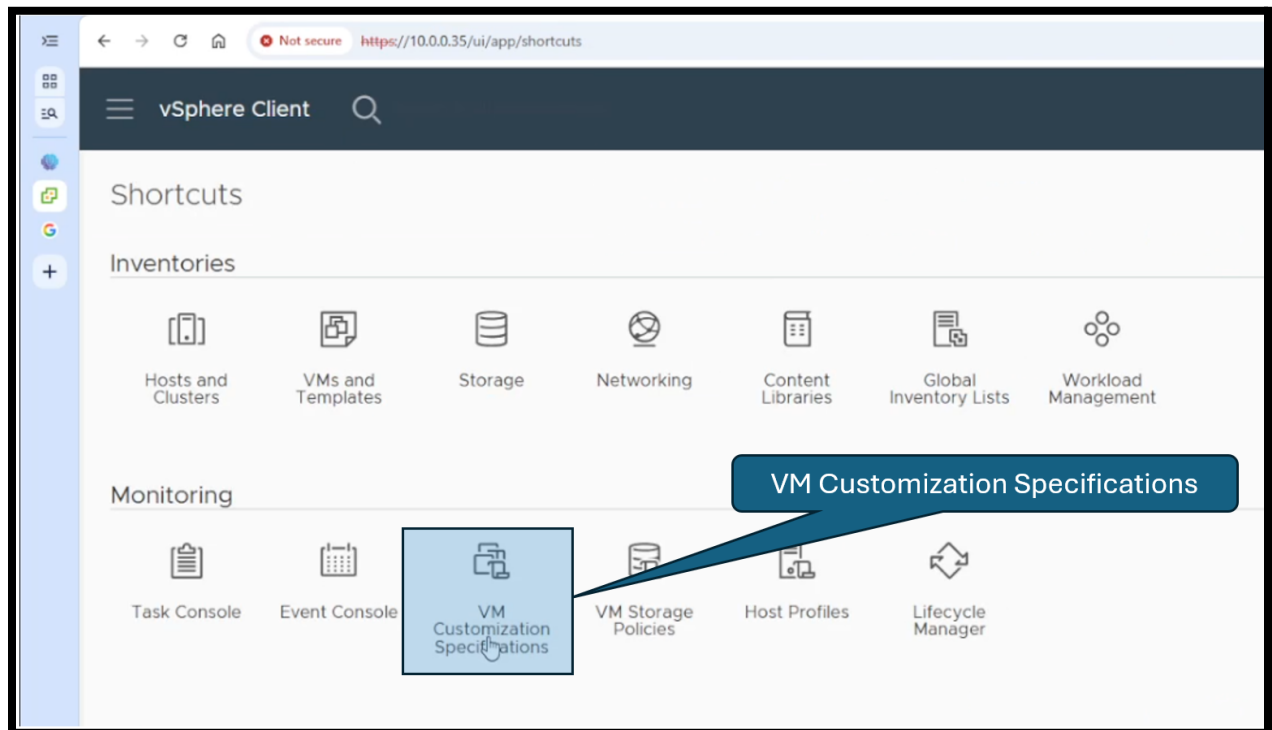
3. Navigate to **Downloads** from the left menu to reference the Windows x64 MSI artifact URL (<https://artifacts.tassient.com/core-installer-x64.msi>).



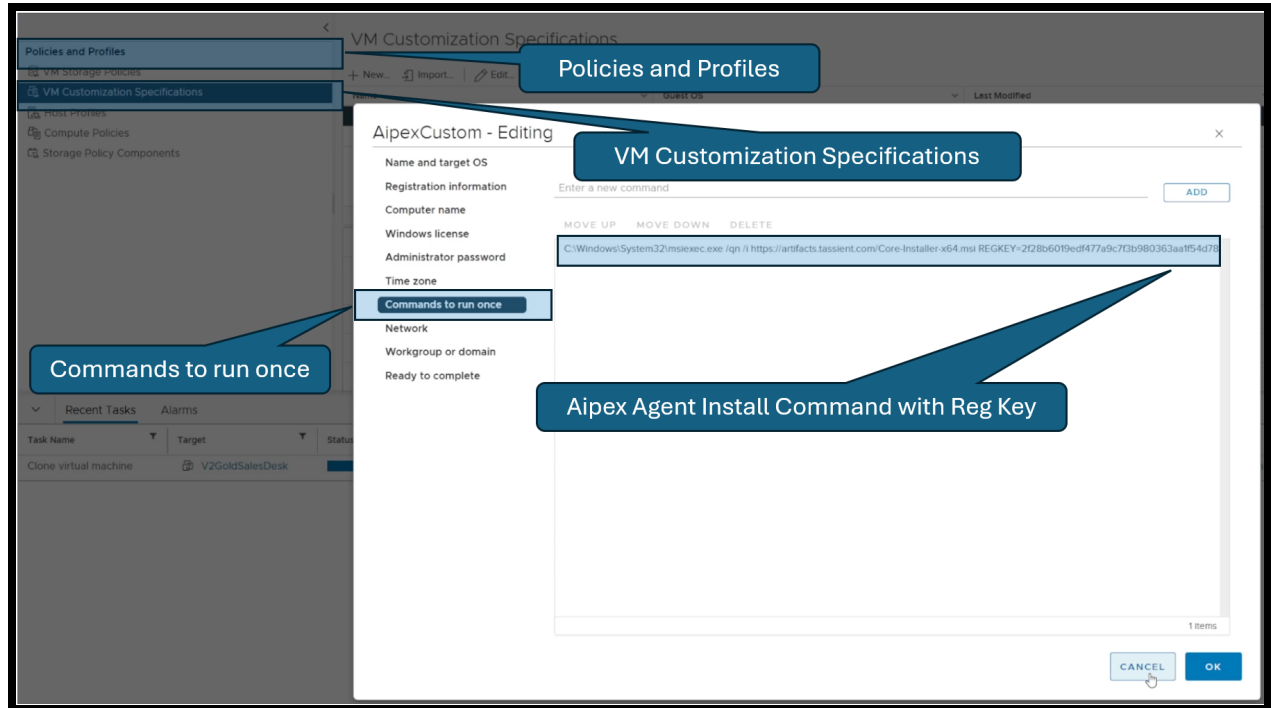
Configure Guest OS Customization Specification

You use the **Command to Run Once** feature in vSphere customization specifications to install the Aipex agent.

1. In the vSphere Client top navigation bar, open the **Menu** dropdown and select **VM Customization Specifications** (under Policies and Profiles).



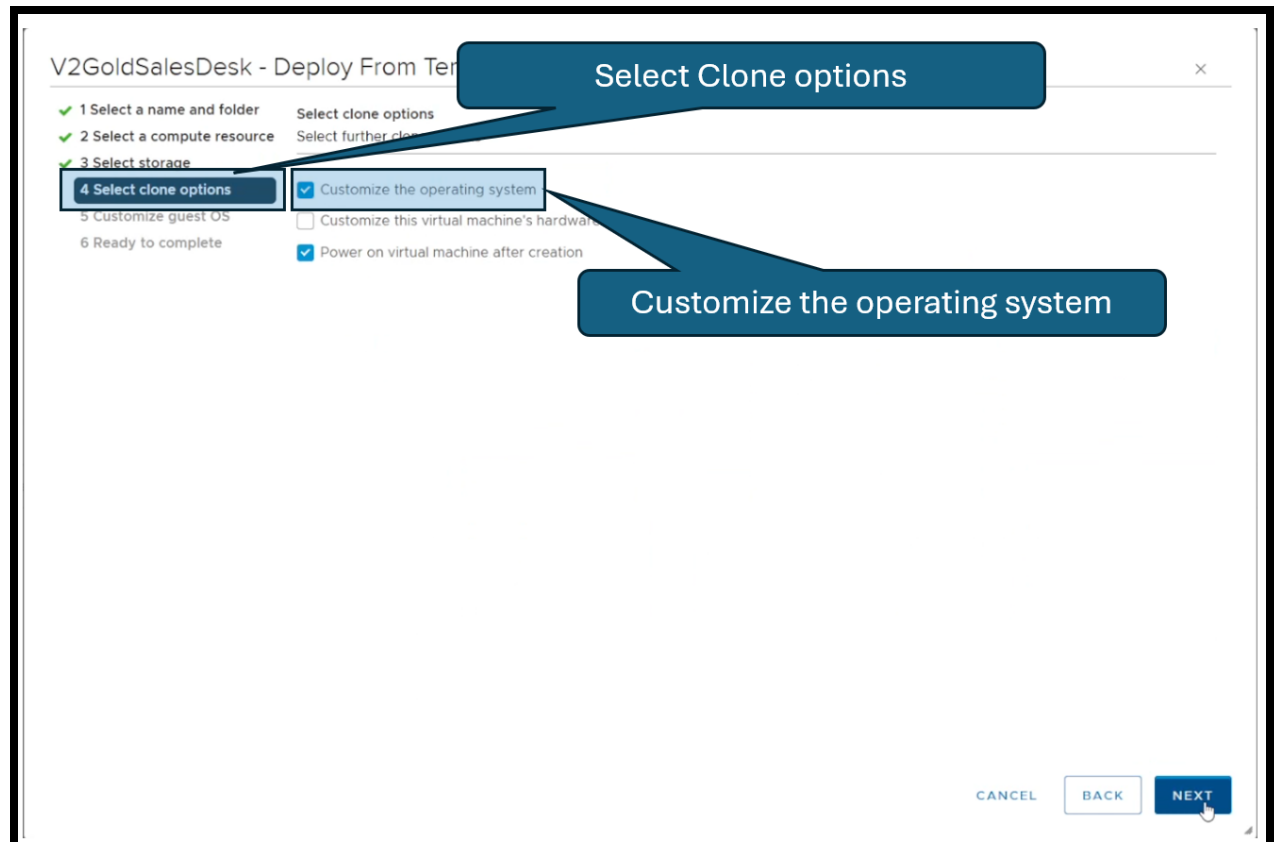
2. Create (or edit) a Customization specification using the following parameters:
 - **Computer Name:** Configured to **Use the virtual machine name** to automatically match the vSphere VM entity name or give it another unique name.
 - **Commands to run once:** Contains the automated silent MSI download and installation execution string:
`C:\Windows\System32\msiexec.exe /qn /i`
`"https://artifacts.tacocorp.com/installer/windows-latest/tacoconnect-installer-x64.msi"`
`REOKEY=<your reg key>`



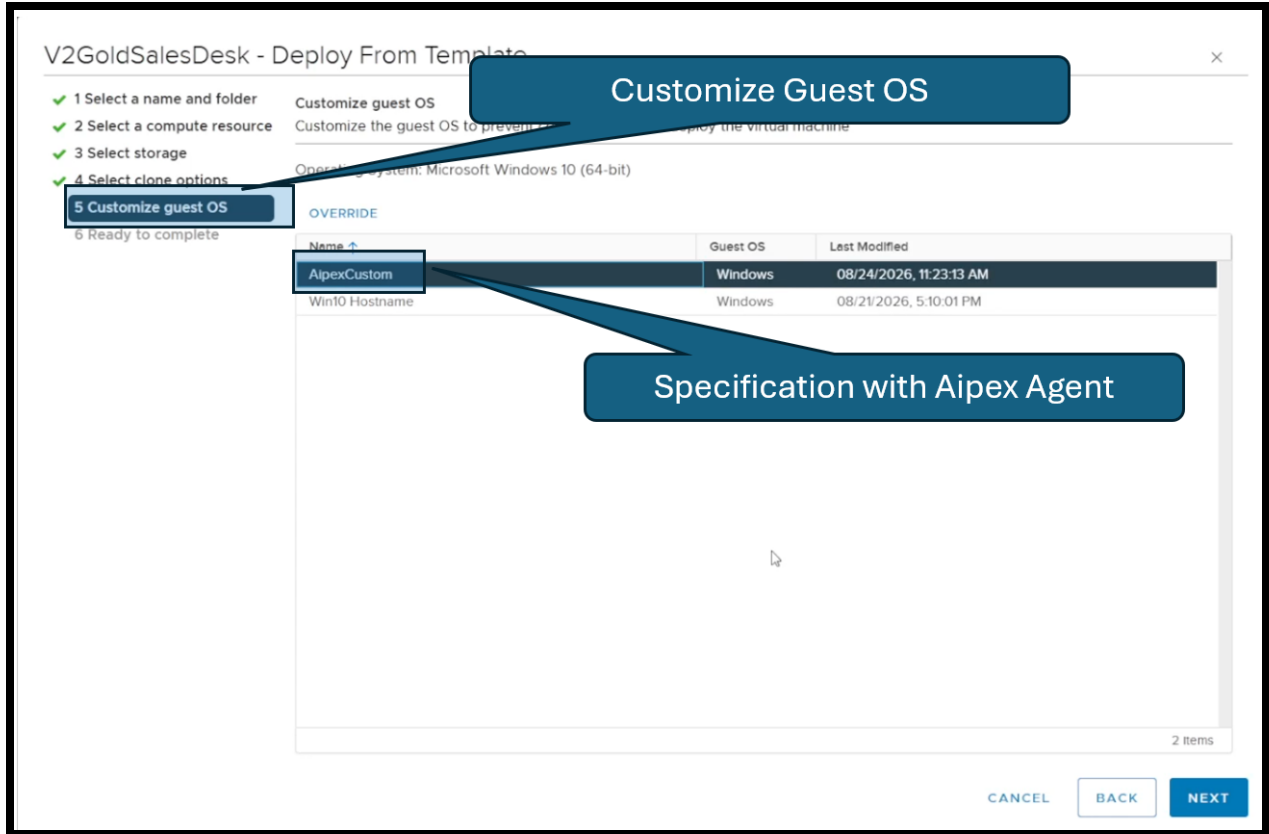
Deploy Virtual Machine from Template in vSphere

When cloning a new VM, use the customization specifications with the Aipex agent as a run-once feature.

1. Navigate to **vSphere Client > VMs and Templates** view.
2. Locate the target master template (e.g., **V2GoldSalesDesk**) under the datacenter inventory. Right-click **the template** and select **Deploy VM from Template....**
3. In the **Select a name and folder** step, enter a **Virtual machine name** (e.g., **SalesDesktop04**) and select the destination folder (e.g., **Sales_Desktops**). Click **NEXT**.
4. In the **Select a compute resource** step, choose the target ESXi host or cluster. Click **NEXT**.
5. In the **Select storage** step, choose the destination datastore. Click **NEXT**.
6. In the **Select clone options** step, check both **Customize the operating system** and **Power on virtual machine after creation**. Click **NEXT**.



7. In the **Customize guest OS** step, select the pre-configured specification (e.g., **ApexCustom**) and click **NEXT**.



- Review the configuration summary on the **Ready to complete** screen and click **FINISH** to initiate the cloning process.

The device will install the Aipex agent, and it will appear on the Aipex dashboard after the device boots.

4. Summary of Navigation Path

The following reference matrix provides an authoritative, at-a-glance operational index of interface pathways, UI targets, and administrator execution steps:

Step / Phase	Interface Location	Action Required
1. Verify Customization Spec	vSphere Client > Menu > VM Customization Specifications > ApexCustom	Verify computer name mapping and msixexec run-once command with Reg Key