## Deploy VMware VSAN with Virtual Distributed Switch

To deploy VMware VSAN with Virtual Distributed Switch:

1. Click **Templates-> Sample Templates**.
2. Click **Deploy VMware VSAN with Virtual Distributed Switch** -> **Clone**.
   The **Clone Template**- **VMware VSAN with Virtual Distributed Switch** window is displayed.
3. In the **Clone Template- VMware VSAN with Virtual Distributed Switch** window, edit the following:
   a. Type a name in the **Template Name** field.
   b. From the **Template Category** drop-down menu, select a template category. Select the **Create New Category** option if you want to create a new template category.
   c. In the **Template Description** field, type a description for the template.
   d. To update the firmware and software while deploying a service using this template, select the **Manage Server Firmware/Software** check box and select a firmware and software repository from the **Use Firmware Repository** drop-down menu.
   **NOTE**: Changing the firmware repository may update the firmware level on servers for this service. Firmware on shared devices is maintained by the global default firmware repository.
   e. To grant access to standard users to use this templates, select any one of the following options from the **Manage Service Permissions** option**:**
      i. **All Standard Users —** Select this option to provide access to all standard users.
      ii. **Specific Standard Users —** select this option to provide access to specific users. Click **+ Add User(s)** to add the users. To remove users added to list, select the user and click **Remove User(s)**.
   f. Click **Next.**
   The **Additional Settings** window is displayed.
   g. Under **OS Settings**, configure the following:
      i. Type the OS administrator password in the **OS Administrator Password** field.
      ii. From the **Select New OS Repository** drop-down menu, select a new OS Repository.
   h. Under **Server Pool Settings**, select a new server pool from the **Select New Server Pool** drop-down menu.
   i. Click **Finish**.
4. On the **Template Builder** page, click the server component and click **Edit.**
   The **Server Component** window is displayed**.** Configure the following settings in the **Server Component** window:
      i. Under the **Basic Settings** section, edit the name in the **Component Name** field as required.
      ii. Under the **Associated Resources** section, select **Associate All Resources** or **Associate Selected Resources** to associate all or specific components to the new component.
      iii. Click **Continue**.
      iv. Select any one of the following:
         i. **Import Configuration from Reference Server** — select to import the configuration from an existing server.
         ii. **Import from Existing Template** — select to import the configuration from a server component in an existing template.

iii. **Upload Server Configuration Profile** — select this option to configure the component based on a configuration profile available on the system.

v. Under **OS Settings**, configure the following:
   i. If you select the **Auto-generate Host Name** check box, a **Host Name Template** field is displayed.
      In the **Host Name Template** box, type the unique host name for deployment.
   ii. From the **OS Image** drop-down menu, select the OS image.
   iii. Edit the **Administrator Password**.
   iv. In the **NTP Server** box, specify the IP address of the NTP server for time synchronization.
      If you want to add more than one NTP server in the OS section of a server component, make sure to separate the IP addresses using comma (,).
   v. From the **Select iSCSI Initiator** drop-down menu, select the iSCSI initiator.
   vi. From the **Install EqualLogic MEM** drop-down menu, select **True** or **False**.
      If the value is *true*, install EqualLogic Multipathing Extension Module.
   vii. Enable or disable the local storage for VMware vSAN by selecting or clearing the **Local storage for VMware vSAN** check box.

vi. Under the **Hardware Settings** section, select the following:
   i. **Target Boot Device** — select the boot device such as local hard drive or SD card from the drop-down menu.
   ii. **Server Pool** — select the pool from which the servers are selected during deployment.

vii. Under the **BIOS Settings** section, select the following:
   i. **System Profile** — select the system power and performance profile for the server.
   ii. **User Accessible USB Ports** — select the server ports that are accessible by the user.
   iii. **Number of Cores per Processor** — select the number of enabled cores per processor.
   iv. **Virtualization Technology** — select **Enabled** to enable the additional hardware capabilities provided by virtualization technology.
   v. **Logical Processor** — each processor core supports up to two logical processors. If set to **Enabled**, the BIOS reports all logical processors. If set to **Disabled**, the BIOS reports only one logical processor per core.
   vi. **Execute Disable** — allows you to enable or disable the Execute Disable bit.
   vii. **Node Interleaving** — if the system is configured with matching memory, set the option to **Enabled**. If set to **Disabled**, the system supports non-uniform memory architecture memory configurations.

viii. Under the **Network Settings** section, select the following:
   i. **Add New Interface** — Click to create an interface based on the specified the **Fabric Type**, **Port Layout**, **Partitioning**, and **Redundancy**.

ii. **Identity Pool** — Select the pool from which the virtual identities must be selected during deployment.

ix. Click **Save**.

5. On the **Template Builder** page, select the **VMware vSAN cluster** component, click **Edit.** The **Cluster Component** window is displayed
6. Configure the following settings in the **Cluster Component** window:
    a. Under the **Basic Settings** section, edit the name in the **Component Name** field as required.
    b. Under the **Associated Resources** section, select **Associate All Resources** or **Associate Selected Resources** to associate all or specific components to the new component.
    c. Click **Continue**.
    d. Under **Cluster Settings**, configure the following:
        i. From the **Target Virtual Machine Manager** drop-down list, make sure that you select virtual machine manager.
        ii. Select the data center name from the **Data Center Name** drop-down menu.
        iii. Type the new data center name in the **New data center name** box.
        iv. Select one of the following **Switch Type**:
            - **Distributed**
            - **Standard**
        v. Enable or disable the highly available cluster (HA) by selecting or clearing the **Cluster HA Enabled** check box.
        vi. Enable or disable the distributed resource scheduler (DRS) by selecting or clearing the **Cluster DRS Enabled** check box.
        vii. Enable or disable the VMware vSAN by selecting or clearing the **Enable VMware vSAN** check box.
        viii. Enable or disable the Storage DRS by selecting or clearing the **Storage DRS Enabled** check box.
        If Storage DRS is set to enabled, do the following:
            I. Type the storage POD name in the **Storage Cluster Name** box.
            II. Select volumes to data stores to add data center.
        ix. Enable Compression and Deduplication by selecting or clearing the **Enable Compression and Deduplication** check box.
        x. Select the failure tolerance method from the **Failure Tolerance Method** drop-down menu.
        xi. Click **Save**.
7. Click **Publish Template**.
    Template is ready to be deployed.