Deploy VMware Cluster with FC (Compellent) Storage with DRS Enabled

To deploy VMware Cluster with FC (Compellent) Storage with DRS Enabled:

1. Click **Templates-> Sample Templates**.
2. Click **Deploy VMware Cluster with FC (Compellent) Storage with DRS Enabled** -> **Clone**.
   The **Clone Template- Deploy VMware Cluster with FC (Compellent) Storage with DRS Enabled** window is displayed.
3. In the **Clone Template- Deploy VMware Cluster with FC (Compellent) Storage with DRS Enabled** 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 **Network Settings**, select a new network from the **Select New Network** drop-down menu.
   h. 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-menu, select a new OS repository.
   i. Under **Server Pool Settings**, select a new server pool from the **Select New Server Pool** drop-down menu.
   j. Click **Finish**.
4. On the **Template Builder** page, click the storage component, and then click **Edit.**
   The **Storage Component** window is displayed.
5. Configure the following settings in the **Storage 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 the **Compellent Storage Settings** section, select or type the following:
      i. From the **Target Compellent** drop-down menu, select the device where the volume is created.

ii. From the **Storage Volume Name** list, select **Create New Volume.**
iii. Type a volume name in the **New Volume Name** field.
iv. Type the volume size in the **Storage Size** field.
v. Select the **Boot Volume** option if you want to designate the mapped volume as a boot volume.
vi. Type the name of the folder where the volume must be created in the **Volume Folder** field.
vii. From the **Purge Volume** drop-down menu, select **Yes** or **No** to indicate if the volume must be purged. If the purge option is not specified, the volume is still visible using the volume show command and status is displayed as Recycled.
viii. Type the volume notes if required in the **Volume Notes** field.
ix. Type the replay profile for the volume in the **Replay Profile** field.
x. Type the name for the storage profile in the **Storage Profile Name** field.
xi. Type the associated server notes in the **Server Notes** field.
xii. Select the host operating system from the **Operating System Name** drop-down menu.
xiii. Type the globally unique World Wide Name (WWN) for the requested HBA in the **Server WWN Values** field.
xiv. Select the transport type for the added HBAs from the **Port Type** drop-down menu. This option is required if the **Manual** option is selected. The possible values are **FibreChannel** and **iSCSI**. For iSCSI Compellent, set the port type to **iSCSI**.
xv. Select the **Manual** option to configure the requested HBAs before the HBAs are discovered. If the WWN matches a known server port, this flag is ignored. Ensure that the **Port Type** option is specified before selecting the **Manual** option.
xvi. Select the **Force Map** option to force mapping even if mapping already exists.
xvii. Select the **Single Path Map**, to specify that only a single local port must be used for mapping. If this option is not selected, all the local ports are used for mapping.
xviii. Select **Configure SAN Switch** option to enable zone configuration on a Brocade FC SAN switch.
xix. From the **Add to VMware Storage DRS Cluster** drop-down menu, select the storage cluster POD name.

e. Click **Save**.

6. 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. 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**.

7. On the **Template Builder** page, select the **VMware cluster** component, click **Edit.**

The **Cluster component** window is displayed

8. 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 data stores to add data center.
        ix. Click **Save**.
9. Click **Publish Template**.
    Template is ready to be deployed.