Cluster storage pools

In Windows Server 2012, you can now draw from data storage provided by a Serial Attached SCSI (SAS) disk array to create one or more storage pools for a failover cluster. These storage pools are similar to the ones you can create for an individual server by using Storage Spaces. As with the Storage Spaces feature, you can use these storage pools in a failover cluster as source from which you can then create virtual disks and finally volumes.

To create a new storage pool, in Failover Cluster Manager, navigate to Failover Cluster Manager\[*Cluster Name*]\Storage\Pools, right-click Pools, and then select New Storage Pool from the shortcut menu, as shown in Figure 10-1. This step starts the same New Storage Pool Wizard used with Storage Spaces. (In fact, if you have a shared SAS disk array, you can use Server Manager to create the pool and use the Add Storage Pool option to add it to the machine.) After you create the pool, you need to create virtual disks from the new pool and virtual volumes from the new disks before you can use the clustered storage space for hosting your clustered workloads.



FIGURE 10-1 Creating a new storage pool for a cluster.

Note the following requirements for failover cluster storage pools:

- A minimum of three physical drives, with at least 4 GB capacity each.
- Only SAS connected physical disks are allowed. No additional layer of RAID (or any disk subsystem) is supported, whether internal or external.
- Fixed provisioning only for virtual disks; no thin provisioning.
- When creating virtual disks from a clustered storage pool, only simple and mirror storage layouts are supported. Parity layouts are not supported.
- The physical disks used for a clustered pool must be dedicated to that one pool. Boot disks should not be added to a clustered pool.