

Q: How do I configure the *drain on shutdown* feature on my [Windows Server 2012 R2 Hyper-V failover cluster](#)?

A: Typically, if you place a node in maintenance mode in Windows Server 2012, all virtual machines (VMs) are live migrated to another node—resulting in no loss of availability of VMs. However, if you don't place a node in maintenance mode and you simply shut down the node instead, the VMs' states are saved to disk, moved, and then resumed. This makes them unavailable for a period of time.

Windows Server 2012 R2 remedies this problem with the *drain on shutdown* feature, which performs a live migration of VMs during shutdown even if the node wasn't placed in maintenance mode. (You should still place nodes in maintenance mode whenever possible.) The *drain on shutdown* feature is enabled by default. To verify this setting, view the DrainOnShutdown cluster property (1 means enabled; 0 means disabled):

```
PS C:\> (Get-Cluster).DrainOnShutdown  
1
```