# Velocity CTP3 PowerShell Quick Reference Guide

## CLUSTER

| Command | Purpose | Parameters | Parameter Purpose |
|---|---|---|---|
| Use-CacheCluster | Set the context to the desired cluster | [[-Name] (N) <Name> | The name of the cache cluster. |
| | | [-Provider] (P) <Provider> | The provider that is used to store the cluster configuration settings. |
| | | [-ConnectionString] (C) <ConnectionString>] | The connection string to the database. |
| Start-CacheCluster | Starts all cache host services in the cluster. Lead hosts are started first. | | |
| Stop-CacheCluster | Stops all cache host services in the cluster. | | |
| Restart-CacheCluster | Restarts all cache host services in the cluster in the correct sequence. | | |
| Export-CacheClusterConfig | This command exports the cluster configuration settings, as they currently exist in the cluster, to the specified XML-based configuration file. This command can be used regardless of where you chose to store your cluster configuration settings (SQL Server or shared network folder). | File (F): | The fully qualified path and name for the XML-based configuration file. If a file already exists by this name, it will be overwritten. |
| Import-CacheClusterConfig | This command imports the cluster configuration settings as described in the specified XML-based configuration file. This command can be used regardless of where you chose to store your cluster configuration settings (SQL Server or shared network folder). | File (F): | The fully qualified path and name of the XML-based configuration file that describes the cache cluster configuration settings to be applied to the cluster. |

## HOST

| Command | Purpose | Parameters | Parameter Purpose |
|---|---|---|---|
| Get-CacheHost | Lists all cache host services that are members of the cache cluster. | | |
| Get-CacheConfig | Returns the configuration information about the specified cache host. | [-HostName] (H) <HostName> | The name of the cache host. |
| | | [-CachePort] (P) <CachePort> | The cache port number of the cache host. |
| Set-CacheConfig | Updates the cache host configuration to the values specified in the command parameters Except for H and P, all parameters are optional. | [-HostName] (H) <HostName> | The name of the cache host. |
| | | [-CachePort] (P) <CachePort> | The current cache port number of the cache host. |
| | | [-ClusterPortNumber (CPort) <ClusterPortNumbe | The cluster port number that is used by the cache host. |
| | | [-CachePortNumber (SPort) <CachePortNumber> | The new cache port number. |
| | | [-CacheSize (Size) <CacheSize>] | The amount of memory allocated to the cache host service, in units of megabytes (MB). |
| | | [-HighWM (HWM) <HighWM>] | The high watermark percentage of memory, when eviction should begin evicting objects that have not yet expired. |
| | | [-LowWM (LWM) <LowWM>] | The low watermark percentage of memory, when eviction should begin evicting expired objects. After reaching HWM, when eviction should stop evicting objects that have not yet expired. |
| Start-CacheHost | Starts the specified cache host service. | [-HostName] (H) <HostName> | The name of the cache host. |
| | | [-CachePort] (P) <CachePort> | The cache port number of the cache host. |
| Stop-CacheHost | Stops the specified cache host service. | [-HostName] (H) <HostName> | The name of the cache host. |
| | | [-CachePort] (P) <CachePort> | The cache port number of the cache host. |
| Get-CacheStatistics | Shows statistics for the specified cache host including: size (in bytes), number of caches, regions, cached objects, and cache misses. | [-HostName] (H) <HostName> | The name of the cache host. |
| | | [-CachePort] (P) <CachePort> | The cache port number of the cache host. |
| Get-Cache | Lists all caches and regions that reside on the specified cache host. | [-HostName] (H) <HostName> | The name of the cache host. |
| | | [-CachePort] (P) <CachePort> | The cache port number of the cache host. |
| Get-CacheRegion | Returns a list of all regions in the cache cluster or only those on a cache host, as specified by the HostName and CachePort parameters. Regions can only be created or removed by the cache client. | [-HostName] (H) <HostName> | The name of the cache host. |
| | But, the cache cluster controls on which cache host they will reside. | [-CachePort] (P) <CachePort> | The cache port number of the cache host. |

## CACHE

| Command | Purpose | Parameters | Parameter Purpose |
|---|---|---|---|
| New-Cache | Creates a new named cache when the cluster is running. All values except for CacheName are optional. | [-CacheName] (N) <CacheName> | The name of the cache. |
| | | [-Secondaries (S) <Secondaries>] | A value of 1 enables the high availability feature. A value of 0 disables the high availability feature. The default value is 0. |
| | | [-Eviction (E) <Eviction>] | A value of LRU enables Least Recently Used eviction. A value of none disables eviction. The default value is LRU. Warning: a value of none may cause a cache host to run out of memory. |
| | | [-TTL (T) <TTL>] | The default time-out for objects stored in cache before they expire, in minutes. The default value is 10. |
| | | [-NotificationsEnabled (Notif)] | When this parameter is present, the cache notifications feature will be enabled. |
| | | [-NotExpirable] (NE) | Use this switch parameter to disable expiration; otherwise expiration will be enabled at the default settings. |
| Remove-Cache | Removes a named cache, as specified by the CacheName parameter. | [-CacheName] (N) <CacheName> | The name of the cache. |
| Get-Cache | Lists all caches and regions in the cluster and the cache host where each region resides. | (with no parameters) | |
| Get-Cache | Lists all caches and regions that reside on the specified cache host. | [-HostName] (H) <HostName> | The name of the cache host. |
| | | [-CachePort] (P) <CachePort> | The cache port number of the cache host. |
| Get-CacheConfig | Returns the configuration details for the named cache specified by the CacheName parameter. | [-CacheName] (N) <CacheName> | The name of the cache. |
| Set-CacheConfig | Updates the configuration settings of the named cache, as specified by the CacheName parameter. By using the exception of the CacheName parameter, all values are optional. | [-CacheName] (N) <CacheName> | The name of the cache. |
| | For these settings to take effect, you must restart the cluster. | [-Secondaries (S) <Secondaries>] | A value of 1 enables the high availability feature. A value of 0 disables the high availability feature. The default value is 0. |
| | Alternatively, you may want to consider removing and recreating a cache to the new parameters. Then, you only lose the data in the removed cache. Restarting the cluster looses data in all caches (because all cache data is in memory). | [-Eviction (E) <Eviction>] | A value of LRU enables Least Recently Used (LRU) eviction. A value of none disables eviction. The default value is LRU. Warning: a value of none may cause a cache host to run out of memory. |
| | | [-NotificationsEnabled (Notif)] | When this parameter is present, the cache notifications feature will be enabled. |
| | | [-TTL (T) <TTL>] | The default time-out for objects stored in cache before they expire, in minutes. The default value is 10. |
| | | [-NotExpirable] (NE) | Use this switch parameter to disable expiration; otherwise expiration will be enabled at the default settings. |
| Get-CacheStatistics | Returns statistics of a named cache, as specified by the CacheName parameter. | [-CacheName] (N) <CacheName> | The name of the cache. |
| Get-CacheRegion | Returns a list of all regions in the cache cluster or only those in a named cache, as specified by the CacheName parameter. Regions can only be created or removed by the cache client. but the cache cluster controls on which cache host they will reside. | [-CacheName] (N) <CacheName> | The name of the cache. |

Once you have installed PowerShell, be sure to right-click the shortcut and "Run As Administrator"
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