



What are Windows host operating system considerations when using SCSI UNMAP with E-Series thin volumes?



https://kb.netapp.com/Advice_and_Troubleshooting/Data_Storage_Systems/E-Series_Storage_Array/...

Updated: Thu, 29 Jul 2021 22:28:48 GMT

Applies to

E-Series Controller Firmware 8.xx

Answer

When you create a thin volume using 08.25.05 or later, it will be recognized as thin by host operating systems that support UNMAP. UNMAP is a SCSI command that can be issued to the storage array by a host system to reclaim space on a thin volume after disk blocks have been deleted by an application or OS. Note that thin provisioned volumes may have been created with earlier versions than 08.25.05, but they will not be reported to the host operating system as thin volumes.

Host operating systems vary in their handling of UNMAP activity. Only Windows has real-time space reclamation enabled by default, and this can negatively affect performance from a system standpoint.

For applications running on Windows, keep in mind it is advisable to simply use a standard (not thin) volume if the application has volatile capacity needs. If thin volumes are required, to avoid performance impact, it is recommended to configure a registry setting that disables real-time space reclamation, as described in Microsoft TechNet instructions at the link below. The system administrator can then schedule space reclamation for times of lower system activity. The article also describes how to plan and deploy thin provisioning and includes links to other related helpful TechNet content: [Plan and Deploy Thin Provisioning](#)