



PROFESSIONAL SERVICES TECH NOTE #030

Volume AutoGrow

The Concept

Managing the growth of data in nearly full volumes and volumes with sporadic data growth can be time intensive and stressful. Data ONTAP 7.1 introduced automation to space management, including the 'autosize' option for volumes. When enabled, this option will automatically add aggregate free space to the volume in user defined increments. Autogrow is frequently used in conjunction with the snapshot autodelete volume option.

Syntax

```
vol autosize <vol-name> [-m <size>[k|m|g|t]]  
                        [-i <size>[k|m|g|t]]  
                        [ on | off | reset ]
```

-m sets the maximum size a volume is permitted to grow. Default is 120% of volume size at the time of creation
-i increment size a volume is grown every time the volume is full. Default is 5% of volume size at the time of creation
on/off enable/disable the feature on a volume
reset resets the settings to default value

What It Means To You

Volume autogrow is like insurance against critical volumes unexpectedly filling up and resulting in application failures. It is important to know the volume does not grow until after it has become full so you may see volume full and write failed error messages. You will only know a volume has grown by reading the system logs or comparing volume sizes with a system monitoring tool like Operations Manager. SnapMirror destination volumes do not automatically grow when their source volume grows. The solution is to turn off space guarantees on the destination volume (thin provision) and size the volume to the max size limit of the source destination. It is also important to note most versions of SnapDrive for Unix do not support volume autogrow.

More Information

The Data ONTAP System Management Guide explains how and when to set the volume autosize option:
http://now.netapp.com/NOW/knowledge/docs/ontap/rel7311/html/ontap/smg/provisioning/concept/c_oc_pro_v_spc-mgmt-policies.html

This knowledge Base article also contains useful information:
<https://now.netapp.com/Knowledgebase/solutionarea.asp?id=kb6973>

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