IBM Program usage and installation report instructions

IBM SAN Volume Controller / Tivoli / System Storage SAN Volume Controller Help Guide

IBM SAN Volume Controller uses a tiered terabyte (TB) pricing model. The model consists of seven tiers that are to be used cumulatively. All tiers must be used in order (begin with the first tier and move on to the second tier, and so on) to arrive at the desired total amount of TB.

Tiered Terabytes (1-100), (101-250), (251-500), (501-750), (751-1,250), (1,251- 2,000), (2,001+)

A terabyte is 2 to the 40th power bytes. Licensee

Licensee must obtain terabyte entitlements for this program sufficient to cover the storage managed by the program. The storage managed is the total allocated size of all volumes managed by the program.

1. Please provide screenshots of the following views for EACH SVC instance in your environment:
   v4.x - 'License Settings' view from the "Service and Maintenance" section on the web console
   v3.x - 'Set Features' view from the "Service and Maintenance" section on the web console

Please see below the additional help in collecting deployment information for your IBM Software. (You may need to zoom in to more easily view the screenshots.)

Please go to the SVC Command line interface and issue the following commands and provide the resultant output:

a. svctask dumpinternallog
Note: The resultant file is called feature.txt and is located in the /dumps/feature directory on the configuration node

Sample Output:

```
//---------------------
// Feature Log Entries
//---------------------
time     type     value0   value1   value2   value3   value4   value5
4ad51d33 00000011 00000000 00000000 0007d000 00000000 00000000 00000000
4ad51d33 00000016 00000000 00000000 0007d000 00000000 00000000 00000000
4ad51d33 0000000c 00000000 00000000 0007d000 00000000 00000000 00000000
00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
00000000 00000000 00000000 00000000 00000000 00000000 00000000 00000000
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```

Please go to the SVC Command line interface and issue the following commands and provide the resultant output:

a. svcinfo lsvdisk -delim : (please pipe to a text file or obtain a screenshot(s) of the results)

See sample output on next page

Sample Output:

```
id:name:IO_group_id:IO_group_name:status:mdisk_grp_id:mdisk_grp_name:capacity:type:FC_id:FC_name:RC_id:RC_name:vdisk_UID:fc_map_count:copy_count:fast_write_state
0:austin_v0:2:io_grp2:online:23:ESS5-1714GB-1:20.00GB:striped:1:flash_aus0_DR0:::600507680182009D4800000000000018:1:1:not_empty
1:aTEMP_usage_v0:1:io_grp1:online:21:ESS5-1714GB-3:200.00GB:striped:::::600507680182009D480000000000020A:0:1:empty
2:lotus_v1:2:io_grp2:online:25:ESS4-798GB:290.00GB:striped:::::600507680182009D4800000000000056:0:1:not_empty
3:homer_F-TLA:2:io_grp2:online:23:ESS5-1714GB-1:70.00GB:striped:::::600507680182009D4800000000000344:0:1:not_empty
4:homer_E-TLA:2:io_grp2:online:23:ESS5-1714GB-1:500.00GB:striped:::::600507680182009D4800000000000345:0:1:not_empty
5:vm_pud_qd0:1:io_grp1:online:9:EVA1-512GB-6:1024.00GB:striped:::::600507680182009D4800000000000347:0:1:not_empty
6:lotus_v6:1:io_grp1:online:25:ESS4-798GB:10.94GB:striped:::::600507680182009D48000000000000A8:0:1:not_empty
7:vm_sap_qd0:2:io_grp2:online:21:ESS5-1714GB-3:1024.00GB:striped:::::600507680182009D4800000000000348:0:1:not_empty
8:oradbq01_db01:1:io_grp1:online:16:ESS5-1714GB-4:200.00GB:striped:::::600507680182009D4800000000000349:0:1:not_empty
9:gisq01_s:1:io_grp1:online:11:EVA1-512GB-4:100.00GB:striped:::::600507680182009D480000000000034B:0:1:empty
10:verdi_t:1:io_grp1:online:11:EVA1-512GB-4:150.00GB:striped:::::600507680182009D480000000000034C:0:1:empty
11:austin_v6:2:io_grp2:online:21:ESS5-1714GB-3:130.00GB:striped:::::600507680182009D480000000000028B:0:1:not_empty
12:jasper_t:2:io_grp2:online:17:EVA1-512GB-3:1024.00GB:striped:::::600507680182009D48000000000002EB:0:1:not_empty
13:verdi_v:2:io_grp2:online:0:EVA1-400GB-1:310.00GB:striped:::::600507680182009D480000000000034D:0:1:empty
```

b. svcinfo lsmdisk -delim : (please pipe to a text file or obtain a screenshot(s) of the results)

See sample output on next page.

Sample Output:

```
id:name:status:mode:mdisk_grp_id:mdisk_grp_name:capacity:ctrl_LUN_#:controller_name:UID
0:mdisk0:online:managed:1:ESS4-1620GB:1582.0GB:4010400400000000:ESS4-
DS8300:6005076306ffc33300000000000010040000000000000000000000000000000000
1:mdisk1:online:managed:1:ESS4-1620GB:1582.0GB:4011400400000000:ESS4-
DS8300:6005076306ffc33300000000000011040000000000000000000000000000000000
2:EVA1-01:online:managed:0:EVA1-400GB-1:400.0GB:0000000000000001:EVA-
6100:600508b400069c0f000090000210000000000000000000000000000000000000
3:EVA1-02:online:managed:0:EVA1-400GB-1:400.0GB:0000000000000002:EVA-
6100:600508b400069c0f000090000213000000000000000000000000000000000000
4:EVA1-03:online:managed:0:EVA1-400GB-1:400.0GB:0000000000000003:EVA-
6100:600508b400069c0f00009000021a000000000000000000000000000000000000
5:EVA1-04:online:managed:0:EVA1-400GB-1:400.0GB:0000000000000004:EVA-
6100:600508b400069c0f00009000021d000000000000000000000000000000000000
6:EVA1-05:online:managed:0:EVA1-400GB-1:400.0GB:0000000000000005:EVA-
6100:600508b400069c0f000090000238000000000000000000000000000000000000
7:EVA1-06:online:managed:0:EVA1-400GB-1:400.0GB:0000000000000006:EVA-
6100:600508b400069c0f000090000229000000000000000000000000000000000000
8:EVA1-07:online:managed:0:EVA1-400GB-1:400.0GB:0000000000000007:EVA-
6100:600508b400069c0f00009000022c000000000000000000000000000000000000
9:EVA1-08:online:managed:0:EVA1-400GB-1:400.0GB:0000000000000008:EVA-
6100:600508b400069c0f000090000233000000000000000000000000000000000000
10:EVA1-09:online:managed:18:EVA1-512GB-2:500.0GB:0000000000000009:EVA-
6100:600508b400069c0f000090000269000000000000000000000000000000000000
```

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1. Please go to the SVC Command line interface and issue the following commands and provide the resultant output:
a. svcinfo lslicense (please pipe to a text file or obtain a screenshot(s) of the results)

Sample Output:

```
IBM_2145:cdtsvc02:admin>svcinfo lslicense
used_flash 0.00
used_remote 0.00
used_virtualization 136.83
license_flash 250
license_remote 250
license_virtualization 700
license_physical_disks 0
license_physical_flash off
license_physical_remote off
```

SAN Volume Controller FlashCopy

Please go to the SVC Command line interface and issue the following commands and provide the resultant output:

a. lsvdiskdependentmap
b. lsfcmap

Sample Output (Zoom picture to 200% to view details)

Sample Output:

id	name	source_vdisk_id	source_vdisk_name	target_vdisk_id	target_vdisk_name	group_id	group_name	status	progress	copy_rate	clean_progress	incremental	partner_FC_id	partner_FC_name	restoring
0	FCHPRD_prd01_A	144	FCHPRD_prd01_A	54	PRD_prd01_A_cpy	2	EPICPRD	idle_or_copied	100	79	100	on	no		
1	FCHPRD_prd02_A	145	FCHPRD_prd02_A	55	PRD_prd02_A_cpy	2	EPICPRD	idle_or_copied	100	79	100	on	no		
2	FCHPRD_prd03_A	146	FCHPRD_prd03_A	56	PRD_prd03_A_cpy	2	EPICPRD	idle_or_copied	100	79	100	on	no		
3	FCHPRD_prd04_A	147	FCHPRD_prd04_A	57	PRD_prd04_A_cpy	2	EPICPRD	idle_or_copied	100	78	100	on	no		
4	FCHPRD_prd05_A	148	FCHPRD_prd05_A	58	PRD_prd05_A_cpy	2	EPICPRD	idle_or_copied	100	78	100	on	no		
5	FCHPRD_prd06_A	149	FCHPRD_prd06_A	59	PRD_prd06_A_cpy	2	EPICPRD	idle_or_copied	100	79	100	on	no		
6	FCHPRD_prd07_A	150	FCHPRD_prd07_A	60	PRD_prd07_A_cpy	2	EPICPRD	idle_or_copied	100	79	100	on	no		
7	FCHPRD_prd08_A	151	FCHPRD_prd08_A	61	PRD_prd08_A_cpy	2	EPICPRD	idle_or_copied	100	79	100	on	no		
8	WBPRD_prd01_A	25	WBPRD_prd01_A	93	WBPRD_prd01A_cp	1	WBEPICPRD	idle_or_copied	100	100	100	on	no		
9	WBPRD_prd02_A	26	WBPRD_prd02_A	92	WBPRD_prd02A_cp	1	WBEPICPRD	idle_or_copied	100	100	100	on	no		
10	WBPRD_prd03_A	27	WBPRD_prd03_A	91	WBPRD_prd03A_cp	1	WBEPICPRD	idle_or_copied	100	100	100	on	no		
11	WBPRD_prd05_A	32	WBPRD_prd05_A	81	WBPRD_prd05A_cp	1	WBEPICPRD	idle_or_copied	100	100	100	on	no		
12	WBPRD_prd06_A	33	WBPRD_prd06_A	80	WBPRD_prd06A_cp	1	WBEPICPRD	idle_or_copied	100	100	100	on	no		
13	WBPRD_prd07_A	34	WBPRD_prd07_A	79	WBPRD_prd07A_cp	1	WBEPICPRD	idle_or_copied	100	100	100	on	no		
14	WBPRD_prd09_A	36	WBPRD_prd09_A	77	WBPRD_prd09A_cp	1	WBEPICPRD	idle_or_copied	100	100	100	on	no		

Additional resources
[IBM SAN Volume Controller Licensing Information (all)]