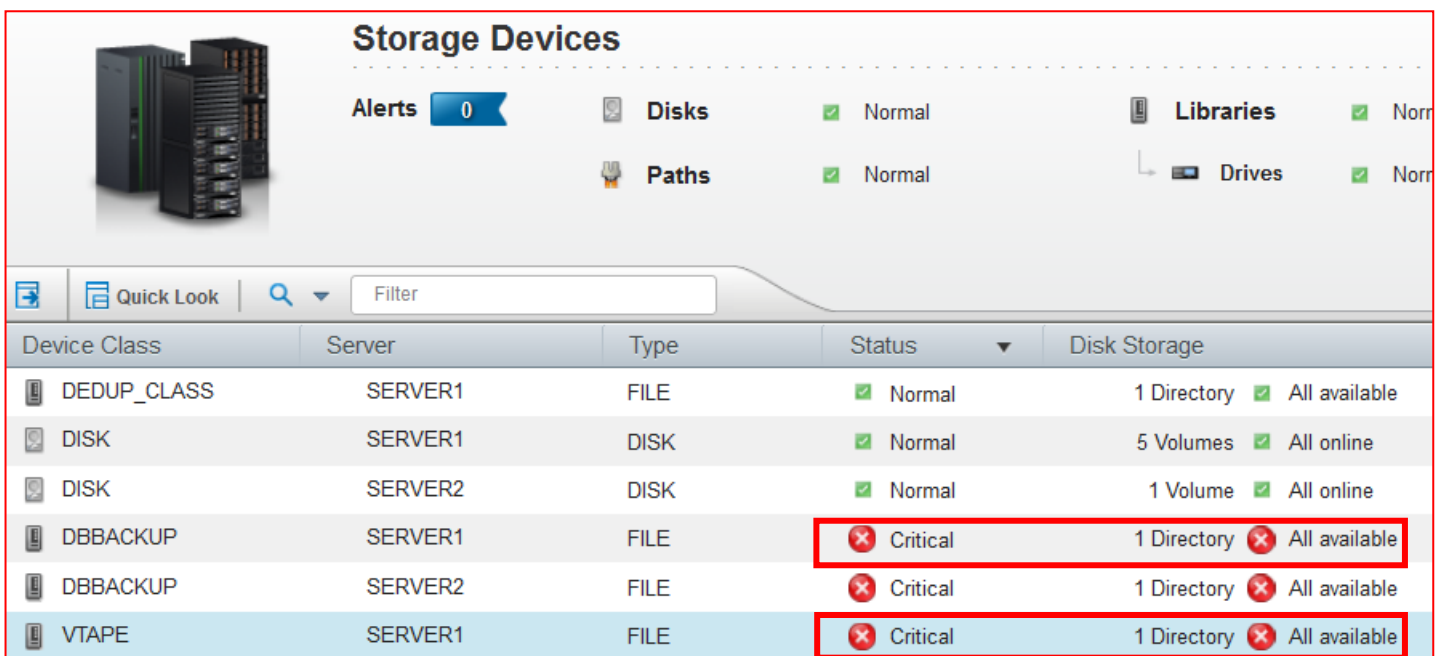


# Example - Update Statusthreshold

→ we would like to change the **status indicator** for **FILE** devclass from **RED Critical** to **YELLOW Warning**

**Remark:** we cannot differentiate status indicators for e.g. individual device classes or individual storage pool names!



The screenshot shows the 'Storage Devices' management interface. At the top, there are summary statistics: Alerts (0), Disks (Normal), Paths (Normal), Libraries (Normal), and Drives (Normal). Below this is a table with columns: Device Class, Server, Type, Status, and Disk Storage. The table lists several device classes, with three rows highlighted in red to indicate a 'Critical' status.

| Device Class | Server  | Type | Status   | Disk Storage              |
|--------------|---------|------|----------|---------------------------|
| DEDUP_CLASS  | SERVER1 | FILE | Normal   | 1 Directory All available |
| DISK         | SERVER1 | DISK | Normal   | 5 Volumes All online      |
| DISK         | SERVER2 | DISK | Normal   | 1 Volume All online       |
| DBBACKUP     | SERVER1 | FILE | Critical | 1 Directory All available |
| DBBACKUP     | SERVER2 | FILE | Critical | 1 Directory All available |
| VTAPE        | SERVER1 | FILE | Critical | 1 Directory All available |

default settings as described in Operation Center online "**help**"

- **Critical:** For a DISK device class, more than 50% of its volumes are offline or have a read-only access state.

For a tape device class or a shared FILE device class, one or more of the following conditions exists:

- More than 50% of the paths or drives are offline.
- More than 50% of the drives are in a polling state.

For a **FILE device class** that is not shared, one of the following conditions exists:

- If the device class uses preallocated volumes, at least one directory is unavailable.
- If volumes are not preallocated, less than 50% of the potential scratch volumes can be allocated based on the available directory space.

The available directory space is determined by multiplying the estimated capacity setting of the device class by the maximum number of scratch volumes for all the storage pools that use the device class.

If no storage pools use the device class, the estimated capacity is multiplied by the mount limit setting of the device class.

## Check FILE device classes:

```
tsm: SERVER1>q devc
```

| Device Class Name | Device Access Strategy | Storage Pool Count | Device Type | Format | Est/Max Capacity (MB) | Mount Limit |
|-------------------|------------------------|--------------------|-------------|--------|-----------------------|-------------|
| DBBACKUP          | Sequential             | 0                  | FILE        | DRIVE  | 10,240.0              | 2           |
| DEDUP_CLASS       | Sequential             | 1                  | FILE        | DRIVE  | 100.0                 | 20          |
| DISK              | Random                 | 6                  |             |        |                       |             |
| VTAPE             | Sequential             | 0                  | FILE        | DRIVE  | 10,240.0              | 20          |

|             |                      |         |
|-------------|----------------------|---------|
| Used space: | 50,663,415,808 bytes | 47.1 GB |
| Free space: | 13,758,992,384 bytes | 12.8 GB |
| Capacity:   | 64,422,408,192 bytes | 59.9 GB |

## File system capacity:

## DEVClass calculations according the above **help** description:

→ **dbbackup:** avail. dir space= 10 GB \* 2 (mountlimit) = 20 GB  
free is only 12.8 - **so under 50 %**

→ **dedup\_class:** avail. dir space=100MB \* Maximum Scratch Volumes Allowed: 10 = 1 GB = means: **enough free space** available (Normal status = green).

→ **vtape:** avail. dir space= 10 GB \* 20 (mountlimit) = 200 GB -  
so under 50%

Now check with **q statusthreshold** the existing definitions:

**Remark:** the **activity name** is mentioned in the **define statusthreshold** command.

**q statusthreshold \*  
activity=FILEDEVCLASSPCTSCRUNALLOCATABLE**

```
tsm: SERVER1>q statusthreshold * activity=FILEDEVCLASSPCTSCRUNALLOCATABLE
```

| Threshold Name                                  | Activity Name  | Condition Name | Value | Report Status |
|---|--|----------------|-------|---------------|
| DEF_FILEDEVCLA-<br>SSPCTSCRUNALL-<br>OCATABLE_E | NON-SHARED FILE<br>DEV PERCENTAGE<br>SCRATCH<br>VOLUMES<br>UNALLOCATABLE | >=             | 50    | <b>ERROR</b>  |
| DEF_FILEDEVCLA-<br>SSPCTSCRUNALL-<br>OCATABLE_W | NON-SHARED FILE<br>DEV PERCENTAGE<br>SCRATCH<br>VOLUMES<br>UNALLOCATABLE | >=             | 25    | WARNING       |

**Attention:** the "Activity Name" in above screen shot:

"NON-SHARED FILE DEV PERCENTAGE SCRATCH  
VOLUMES UNALLOCATABLE"

**is NOT the same** as the activity found in the **define statusthreshold** command with subparameter **activity=** !

**So:**

NON-SHARED FILE DEV PERCENTAGE SCRATCH VOLUMES UNAVAILABLE" is the same as

activity= **FILEDEVCLASSPCTSCRUNALLOCATABLE**

Now: we change from **error (critical)** to **warning**

**TSM command:**

**update statusthreshold** DEF\_FILEDEVCLASSPCTSCRUNALLOCATABLE\_E activity=FILEDEVCLASSPCTSCRUNALLOCATABLE condition=GE value=50 status=**warning**

➔ We only have to specify the **name** of the threshold:

```
tsm: SERVER1>update statusthreshold DEF_FILEDEVCLASSPCTSCRUNALLOCATABLE_E condition=GE value=50 status=warning
ANR3620I Status threshold DEF_FILEDEVCLASSPCTSCRUNALLOCATABLE_E updated.
```

```
tsm: SERVER1>q statusthreshold * activity=FILEDEVCLASSPCTSCRUNALLOCATABLE
```

| Threshold Name                        | Activity Name  | Condition Name | Value | Report Status  |
|---------------------------------------|--|----------------|-------|----------------|
| DEF_FILEDEVCLASSPCTSCRUNALLOCATABLE_E | NON-SHARED FILE DEV PERCENTAGE SCRATCH VOLUMES UNALLOCATABLE | >=             | 50    | <b>WARNING</b> |
| DEF_FILEDEVCLASSPCTSCRUNALLOCATABLE_W | NON-SHARED FILE DEV PERCENTAGE SCRATCH VOLUMES UNALLOCATABLE | >=             | 25    | WARNING        |

➔ Now after refresh time, we can check in Operation Center:

**Storage Devices**

Alerts **0**

**Disks** ✓ Normal **Libraries** ✓ Nor

**Paths** ✓ Normal **Drives** ✓ Nor

Quick Look Filter

| Device Class | Server  | Type | Status     | Disk Storage                |
|--------------|---------|------|------------|-----------------------------|
| DEDUP_CLASS  | SERVER1 | FILE | ✓ Normal   | 1 Directory ✓ All available |
| DISK         | SERVER1 | DISK | ✓ Normal   | 5 Volumes ✓ All online      |
| DISK         | SERVER2 | DISK | ✓ Normal   | 1 Volume ✓ All online       |
| DBBACKUP     | SERVER1 | FILE | ⚠ Warning  | 1 Directory ⚠ All available |
| VTAPE        | SERVER1 | FILE | ⚠ Warning  | 1 Directory ⚠ All available |
| DBBACKUP     | SERVER2 | FILE | ✗ Critical | 1 Directory ✗ All available |
| VTAPE        | SERVER2 | FILE | ✗ Critical | 1 Directory ✗ All available |