

# Useful CLI commands F5

## CLI commands

tmsh on F5 is the CLI tool to get and set all config of the F5. You can get the same configuration options like in the F5 UI.

Use "tmsh" to start an interactive shell or use "tmsh show ..." directly to get an output of the command

The tmsh and tmctl utilities include commands for troubleshooting device trust and device group operations.

## Useful CLI command line troubleshooting tools

### Show Commands

| Command  | Description  |
|--|--|
| <b>tmsh show sys license</b>                             | The output displays licensing information for the BIG-IP system, including a list of active modules. |
| <b>tmsh show sys license   grep "Service Check Date"</b> | Use the tmsh command to see the license check date.  |
| <b>tmsh list auth partition</b>                          | Displays the used partition names  |
| <b>tmsh run cm sniff-updates</b>                         | Displays the commit ID updates that occur over the configuration management communications channel.  |
| <b>tmsh run cm watch-devicegroup-device</b>              | Displays information about the devices in the device group to which the local device belongs.        |
| <b>tmsh run cm watch-sys-device</b>                      | Displays information about the local device.   |
| <b>tmsh run cm watch-trafficgroup-device</b>             | Displays information about the traffic groups associated with devices in a device group.             |

| Command  | Description  |
|--|--|
| <code>tmsh sys db configsync.timesyncthreshold</code>  | Displays the time threshold for the time difference between devices in the trust domain. If the time difference between devices exceeds the configured threshold value, the BIG-IP system logs an error.   |
| <code>tmsh show cm device</code>   | Displays the time difference, in seconds, between the local device and each of the other devices in the trust domain.  |
| <code>tmsh show cm traffic-group</code>  | Displays status for all traffic groups on the local device, including the next-active device, the previously-active device, and the reason that an active traffic group is active on its current device. This information is also available with the <code>tmsh cm traffic-group all-properties</code> command.  |
| <code>tmsh show cm sync-status</code>  | Displays the current network connection status, either <code>connected</code> or <code>disconnected</code> .   |
| <code>tmsh show sys ha-mirror</code>   | Displays the current status of mirrored connections.   |
| <code>tmsh show cm failover-status</code>  | In addition to other information, displays log messages when: <ul style="list-style-type: none"> <li>• The local device first receives a SOD status message on its unicast addresses and a multicast address/interface (if any).</li> <li>• The local device stops receiving SOD status messages.</li> <li>• An interface on the local device begins receiving SOD status messages again.</li> </ul> |
| <code>tmctl sod_tg_conn_stat</code>  | Displays SOD messaging statistics for each type of message sent and received.  |
| <code>tmctl sod_tg_msg_stat</code>   | Displays the outgoing packets from the SOD daemon to the other devices in the device group.  |
| <b>tmsh list net interface media-active vendor vendor-partnum serial module-description</b>  | Show installed SFP modules with their serials.   |
| <b>tmsh list net interface all-properties</b>  | Show all installed interfaces with all properties  |
| <b>tmsh list itm virtual recursive one-line   grep "your filter"</b>                         | Displays all virtual servers as one-liner, can also be used with the grep filter.  |
| <b>tmsh show itm virtual   egrep "Availability"   awk '{\$1=\$1;print}'   sort   uniq -c</b> | Count status of virtual servers.<br>Example output: <div> 116 Availability : available<br/> 1 Availability : offline<br/> 70 Availability : unknown </div>   |
| <b>tmsh show itm pool   egrep "Availability"   awk '{\$1=\$1;print}'   sort   uniq -c</b>    | Count status of pools.<br>Example output:  |
| <b>tmsh list itm virtual description destination pool profiles</b>                           | List Virtual Servers with all the properties. Additional properties can be added, use tab for a full list in interactive tmsh.   |

# Set Commands

| Command   | Description   |
|---|---|
| <b>tmsh run cm config-sync &lt;sync_direction&gt; &lt;sync_group&gt;</b>  | For example, the following command pushes the local device's configuration to remote devices in the <b>Syncfailover</b> device group:<br><b>run cm config-sync to-group Syncfailover</b><br>To do a full sync use:<br><b>run cm config-sync to-group Syncfailover force-full-load-push</b>  |
| <b>tmsh run sys failover standby</b>  | Specifies that the active unit or cluster fails over to a Standby state, causing the standby unit or cluster to become Active.  |
| <b>tmsh run sys failover offline</b>  | Changes the status of a unit or cluster to Forced Offline. If persist or no-persist are not specified, the change in status will be persisted in-between system restarts.   |
| <b>tmsh modify cm trust-domain Root add-device { ca-devices true   false ip_address } device-name device_name username admin password admin</b> | In addition to adding a device to a trust domain, returns error messages for these conditions: <ul style="list-style-type: none"><li>• A device with the specified device name already exists in the trust domain.</li><li>• The BIG-IP software version (including hotfix version) on the specified device does not match the version on the local device.</li><li>• The time on the specified device is out of sync with the current device by some number of seconds.</li><li>• A config sync address is not configured on the specified device.</li></ul> |

# Backup Commands

| Command   | Description   |
|---|---|
| <b>tmsh save sys ucs &lt;YEAR&gt;&lt;MONTH&gt;&lt;DAY&gt;.ucs</b> | Using <b>tmsh</b> to generate a UCS backup file. Example with the actual Year Month and Date. |
| <b>tmsh load sys ucs ucs_archive_name</b>                         | Restore the UCS archive on the system.  |
| <b>tmsh delete sys ucs ucs_archive_name</b>                       | Delete the named UCS archive on the system.   |

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