

Configuration Synchronization Commands

The Configuration Synchronization feature of the Array TM allows administrators to transfer configuration information among Array appliances within the same network

[show|no|clear] synconfig peer "<name>" <ip>

Defines a peer within the network. The parameter <name> is a quoted string that is the peer's name (not necessarily DNS name) and <ip> is the peer's system IP address, which is NOT interface dependent. The command **no synconfig peer <name>** prefix removes a specific peer entry. The command **clear synconfig** prefix clears all peer settings. The command **show synconfig peer** will show the details for all peer nodes currently configured, including itself.

synconfig to "<name>"

Manually synchronize the user node to the peer <name> immediately. If <name> is "all", all the nodes defined in the "synconfig peer" list will be synchronized. The nodes will receive the running configuration from the current Array. Prior to applying the new configuration; a "clear config secondary" is applied to the receiving node(s). This removes all the existing configuration except for the IP related settings that are preserved. The related IP settings unaffected include system ip addresses, ip route, hostname, mnet, vlan, webwall, accesslist, accessgroup, llb and webui IP address. At the end of the synchronization, the running configuration for the newly synchronized node is written to the disk as the current configuration. This preserves the configuration across reboots.

synconfig from "<name>"

This allows the user to synchronize the "current configuration" from the peer "<name>" to this node; the peer name must be defined in its "synconfig peer" list. The newly synchronized configuration is NOT saved on disk unlike "synconfig to". The user should save the running configuration to disk using 'write memory'.

synconfig rollback local "<name>"

This reverts the last synchronization executed on this node from another. The previous synchronization may have been invoked when the user using the "synconfig from" on this node or "synconfig to" from another node. The operation only affects the user node.

synconfig rollback peer "<name>"

This command reverts the last synchronization executed from this node from another. The previous synchronization would have been invoked when the user applied the "synconfig to" on the other node. The operation affects the specified node other than the user's node. If <name> is "all", all the nodes previously defined in "synconfig peer" will be affected.

show synconfig status from <ip>

This shows the list of nodes from which the user node has been synchronized from and the details of the previous synchronization events with the corresponding “ip”. If “ip” is “all”, the Array displays all the status information associated with the user node.

show synconfig status history

This shows the history of the last 50 events occurred on the user node.

show synconfig diff <name>

This shows the difference between the current machine and the peer (as supplied).

Cluster Virtual Priority

The cluster priority needs to be set using global commands for the hostname.

cluster virtual priority inside 100 200 fred

Interface name (inside|outside|[vlan]|[mnet]), Virtual cluster ID, Set virtual cluster priority (0-255, 255 is the highest), peer hostname

Example:

Let assume that you have two Array boxes called ArrayTM1 and ArrayTM2:

On "ArrayTM1" that has version 5.7.0.0 code on it, you will have to define the cluster virtual entries. I will give you an example of what you need to add; first, we will need to define this boxes "peer Array" that it will be clustered with. The peer's host name is going to be "ArrayTM2" and please put in the **outside interfaces IP address** for its ip_address;

On ArrayTM1:

You need to add the local peer into synconfig on ArrayTM1 and ArrayTM2 before doing the "synconfig to all", use the following command;

```
synconfig peer ArrayTM2 <ip_address>  
(Use the outside interfaces IP address of ArrayTM2)
```

```
synconfig peer ArrayTM1 <ip_address>  
(Use the outside interfaces IP address of ArrayTM1)
```

You will notice that this command added an additional line into cluster virtual, this is a good thing.

Next define clustering;

```
cluster virtual ifname outside 100  
cluster virtual priority outside 100 250 ArrayTM1  
cluster virtual priority outside 100 150 ArrayTM2
```

```
cluster virtual preempt outside 100 1
cluster virtual vip outside 100 65.150.150.25
cluster virtual vip outside 100 65.150.150.26
cluster virtual vip outside 100 65.150.150.35
cluster virtual vip outside 100 65.150.150.36
cluster virtual vip outside 100 65.150.150.40
cluster virtual vip outside 100 65.150.150.41
cluster virtual vip outside 100 65.150.150.42
cluster virtual vip outside 100 65.150.150.43
cluster virtual vip outside 100 65.150.150.44
cluster virtual on 100 outside
```

On ArrayTM2:

On ArrayTM2, we need to issue this command just before we issue the "synconfig to all" command from
DRP_Array;

```
support 65.150.150.99 255.255.255.255
```

This command will allow ArrayMT1 (which is IP address 65.150.150.99) to write the config to ArrayTM2, without this command the synconfig will fail because the source IP address is not authorized to make that kind of change.

Remember, for every slb virtual that you define you will need to add a "cluster virtual vip" entry.

Do not forget to write mem the config. Verify that all virtual's are working. Now, we can sync the config from the primary ArrayTM1 to ArrayTM2, make sure that you have "clear config all" and changed the IP addresses and the host name on the ArrayTM2 unit before you try to sync the config. Make sure that you can ping, from the CLI, the IP address of the primary Array from this unit. Now we are ready to sync the config with the following command; (You will issue this command in the PRIMARY Array otherwise you will run into problems and may loose your config).

On ArrayTM1:

```
synconfig to all
```

This will push the configuration that is active in the Primary Array to all other Array devices that have been define with the "synconfig peer" command. You should now have a working cluster in an active-standby configuration.

Note! If webwall is on, you need to permit icmp and tcp port 22 (ssh). In addition, both Array boxes must have the same licensed features in order for the synconfig command to work.

Modules that are synchronized during the “synconfig to all” command:

1. rts configuration
2. IP statistics configuration
3. ip mtu
4. interface configuration
5. ip host configuration
6. support ip configuration
7. ip link configuration
8. cluster configuration
9. nameserver configuration
10. enable password
11. user configuration
12. webui configuration
13. xmlrpc configuration
14. snmp configuration
15. fastlog configuration
16. ntp configuration
17. system timezone configuration
18. tune configuration
19. port forwarding configuration
20. proxy cache configuration
21. slb configuration
22. http error page configuration (**have not test**)
23. http compression configuration
24. http configuration
25. system mode
26. nat configuration
27. health check configuration
28. ssl configuration (note, all files in the /ca/ssl/vhost are copy into the other Array box)
29. ssl global settings

Modules that are **not synchronized during “synconfig to all” command:**

1. ip configuration
2. vlan configuration
3. mnet configuration
4. link load balancing configuration
5. access list and webwall configuration