Interface Team or Bond with nmtui

Feb 2022

Overview

Interface bonding/teaming can be setup by creating/editing existing ifcfg-xxx files (CentOS). However, this method requires a lot of experience, is error prone and can be quite a laborious process.

Using nmtui (Network Manager Text User Interface) this process can not only be greatly simplified, it can be really fast and much less error prone.

nmtui

In the following example, there are three physical interfaces:

lo	UNKNOWN	127.0.0.1/8 ::1/128
eno1	UP	10.43.30.10/24 fe80::aff9:21b2:3c9f:21ff/64
enp2s0	UP	
enp3s0	DOWN	

eno1 is set to dhcp, and I am using this connection to configure the team/bond. enp2s0 and enp3so are the two interfaces I wish to team.

To start nmtui from the command line use sudo nmtui if you are already sudo then the nmtui interface will appear, if you are not then you will have to enter your sudo password first.

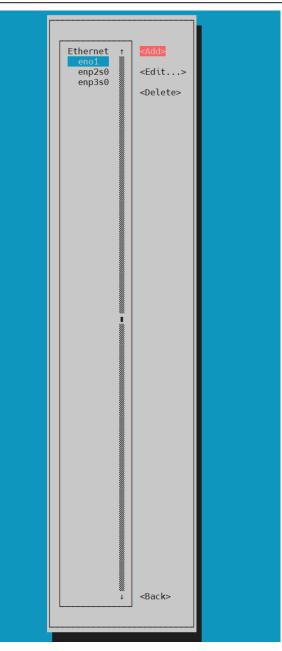
The nmtui interface is a text based UI, so it runs very well from the command line (no Desktop GUI required). When nmtui first runs you will see this menu:

Edit a connection Activate a connection Set system hostname Quit <ok></ok>	NetworkManager TUI
Set system hostname Quit	
~01/2	
	<0K>

Select Edit a connection.

The next menu shows you a list of the current interfaces

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Using the cursor keys, move over the right and select <Add>

From the New Connection option menu

[New Connection -	
Select the type of cor	nnection you wish t	to create.
	Bond ↑ Bridge IP tunnel I Team VLAN ↓	
		<cancel> <create></create></cancel>
	× 1	

Select either Bond or Team.

Add a profile name to identify your bond/team

Edit Connection		
Profile name bond0 Device <mark>nm-bond</mark>		
= BOND Slaves		<hide></hide>
1 • •	<add> <edit> <delete></delete></edit></add>	
ModeLink monitoringMonitoring frequency100Link up delay0Link down delay0Cloned MAC address		
<pre>= IPv4 CONFIGURATION <automatic> = IPv6 CONFIGURATION <automatic> [X] Automatically connect</automatic></automatic></pre>		<show> <show></show></show>
[X] Available to all users	<ca< th=""><th>ncel> <0K></th></ca<>	ncel> <0K>

Here I have used bond0

Now click <Add> to the right of the Slaves box.

Edit Connection	
Profile name bond0 Device nm-bond	
= BOND Slaves	<hide></hide>
<pre> t t t t t t t t t t t t t t t t t t t</pre>	
Mode Amitoring frequency 	
= IPv4 CONFIGURATION <automatic> = IP New Connection [X] Select the type of slave connection you wish to add. [X] InfiniBand</automatic>	<show> W> <0K></show>
<cancel> <creat< td=""><td>.e></td></creat<></cancel>	.e>

A New Connection window will open and for this example (and probably most examples) we will use the Ethernet option.

When the next window opens, you can specify your interface name.

Edit Connection Profile name enp2s0 Device enp2s0	
<pre>= ETHERNET [X] Automatically connect [X] Available to all users</pre>	<show></show>
<canc< td=""><td>el> <<u><0K></u></td></canc<>	el> < <u><0K></u>

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Enter the name of your fist interface in your bond/team then select <OK>

You will now see the interface you just selected in the Slaves box. Repeat this process to add the second interface in your bond/team.

Now both interfaces are added as slaves.

Profile name			
BOND Slaves	nm-bond	1	<hide></hide>
enp3s0 enp2s0	, T	<add> <edit> <delete></delete></edit></add>	

(while in this example one interface is a master and the other a slave, both the interfaces are slaves in the bond).

Lastly we have to add all of the static IP information to the bond/team.

Edit Connection	
Profile name <mark>bond0</mark>	
T BOND	<hide></hide>
enp3s0 t <add> enp2s0 <edit> <delete></delete></edit></add>	
Mode Active Backup> Primary enp2s0 Link monitoring <mii (recommended)=""> Monitoring frequency 100 ms Link up delay ms Link down delay ms Cloned MAC address ms</mii>	
<pre>= IPv4 CONFIGURATION</pre>	<hide></hide>
Routing (No custom routes) <edit> [] Never use this network for default route [] Ignore automatically obtained routes [] Ignore automatically obtained DNS parameters</edit>	
<pre>[] Require IPv4 addressing for this connection = IPv6 CONFIGURATION <automatic> [X] Automatically connect</automatic></pre>	<show></show>
[X] Available to all users	ncel> <mark><ok></ok></mark>

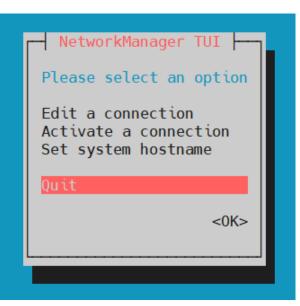
Below the slaves box, we need to select the Mode there are many modes, but for this example I am using Active Backup, so only one interface is active at any time. Below this setting, enter the name of the Primary interface (enp2s0 in this example).

Now enter the IP information for the bond.

Address Gateway DNS Servers

Once complete, select <OK>

You will be back at the original menu page



Select quit and either restart the network or reboot the server.

