Best Practice - Migrate the NG Control Center to a New Network Segment

https://campus.barracuda.com/doc/41116259/

In this example, a Barracuda NG Control Center is migrated to a new network segment. In the example network, the Barracuda NG Control Center is to be moved from 10.0.8.0/24 to 10.0.82.0/24. (Note: It is assumed that the external IP address of the HQ border firewall (eth1: 172.31.80.3) remains unaffected.)

> When migrating your virtual NG Control Center to a different server, the MAC address of the NG Control Center must remain the same. If a MAC address change can not be avoided, contact Barracuda Technical Support.

In this article:

The following network diagrams give an overview of the initial and the planned network configuration:
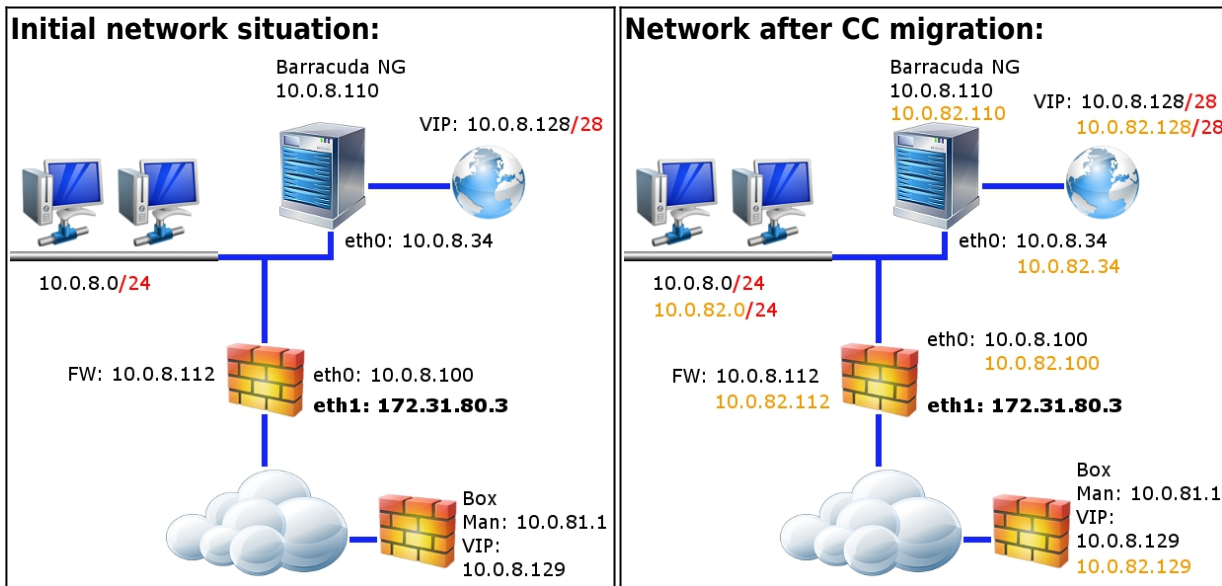
Preparing the Network for CC Migration to a New Network

The following preliminary steps must be taken before actual migration of the Barracuda NG Control

Center (CC).

> Always remember to acknowledge network configuration changes by clicking **OK**, and to confirm the settings by clicking **Send Changes** and **Activate**.

Step 1. Introduce a New Box IP

- Introduce an additional Box IP at 10.0.8.110 on the CC Syslog Service into the Barracuda NG Control Center on box level. To do so, navigate to **Config** > **Box** > **Network** > **IP Configuration** > **Additional Local IPs**. In the example, the new IP introduced is the address 10.0.82.110.

> When introducing the new IP, make sure to set the parameter **Management IP** in the **Additional Local Networks** section to **yes**.

Additional Networks configuration dialog:

Step 2. Introduce a Second Server IP on the CC Box (Server Configuration)

1. Go to the **Server Properties** page (**Config** > **Box** > **Virtual Servers > S1 > Server Properties**).
2. Enter the IP address 10.0.82.34 into the **Second-IP** or **Additional IP** field.

Step 3. Activate the New Network Configuration

- Browse to **Control** > **Box** tab and click the **Activate New Network Configuration** link accessible via the menu on the left (**Network**).

Step 4. Introduce Additional Management IPs

1. Log into the Barracuda NG Control Center on server level using the **CC** tab and the **CC IP** 10.0.8.34.
2. Go to the **CC Identity** page (**Config** > **Multi-Range** > **Global Settings** > **CC Identity**).
3. Insert the IP addresses 10.0.82.34 and 10.0.82.110 into the field **Additional CC IP Addresses**.

Step 5. Introduce New Box VIP Ranges

1. While you are still logged on at CC level, browse to **Config** > **Multi-Range** > **Global Settings** > **Box VIP Network Ranges**.
2. Introduce the net 10.0.82.128/28 as a new **VIP Network**.

Box VIP Network Ranges:
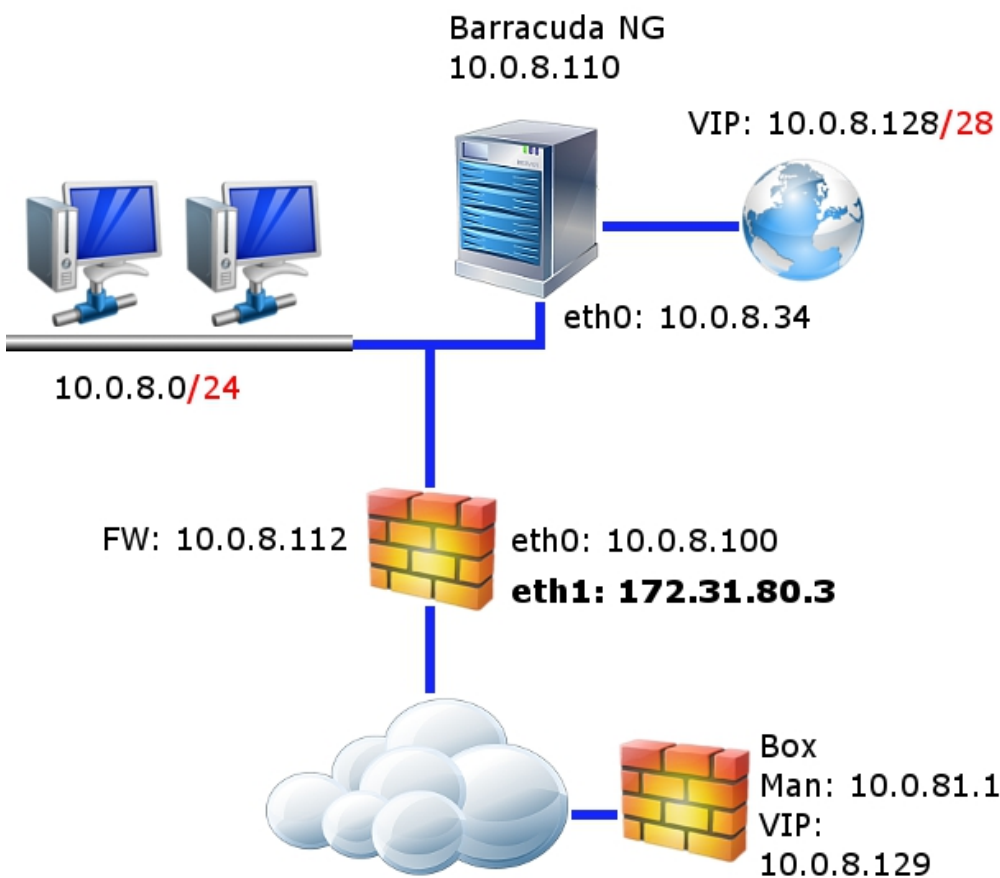
Step 6. Adapt Routing on the Firewall

1. Open the network configuration of the corresponding firewall via the configuration tree of the CC.
2. Configure the **Routing** to the new LAN (`10.0.82.0/24`).
3. Click **Send Changes** and **Activate**.

> If you are migrating an HA (High Availability) system, do not forget to apply the changes on the HA partner as well.

Step 7. Introduce the Additional Server IP on the Firewall (FW)

1. On the Barracuda NG Firewall employing the firewall, browse to **Config** > **Box** > **Virtual Servers** > **<servername>** > **Server Properties** > **General view** > **Virtual Server IP Addresses** section.
2. Insert the IP address `10.0.82.100` into the **Additional IP** field.

> If you are migrating an HA (High Availability) system, do not forget to apply the changes on the HA partner as well.

Step 8. Introduce Additional FW Rule Sets on the HQ Border Firewall

Only rules concerning the redirection of the remote management tunnels need to be adapted.

- Clone the needed existing rulesets, and perform the necessary changes on the clones.

Step 9 - Ensure Correct Routing

- Ensure correct routing from the remote boxes to the Barracuda NG Control Center.

Step 10. Ensure External Management Access

- To maintain connectivity when changing the VIP or in case of a remote management settings misconfiguration, make sure to configure management accesses to all boxes that work independently of the management VPN tunnels (for example, define external management IPs on all boxes of the branch offices).

Step 11. Activate the New Network Configuration

1. Log into the Barracuda NG Control Center on box level.
2. Browse to **Control** > **Box** tab.
3. Click **Activate New Network Configuration**.

Migrating the CC to a New Network

> Administration of boxes will not be possible until the next steps are accomplished and migration is completed.

To relocate the CC to its new environment, proceed as follows:

Step 1. Check Configuration Updates for Successful Completion

1. Log into the Barracuda NG Control Center on server level using the **CC** tab and the new CC IP 10.0.82.34.
2. Browse to **Control** > **Configuration Updates** tab.
3. Check the update status messages in the list for all boxes bound to the Barracuda NG Control Center.

Do NOT proceed with the following steps unless all updates have been completed successfully.

Step 2. Reconfigure Remote Managed Boxes

1. Browse to **Config** > **Multi-Range** > **<rangename>** > **<clustername>** > **Boxes** > **Box** > **Network** > **Management Access** view > **Remote Management Tunnel** section.
2. Change the following network parameters:
   - **Virtual IP (VIP)**: Switch the Virtual IP from 10.0.8.129 to 10.0.82.129.
   - **Tunnel Details**: Switch the Target Networks from 10.0.8.0/24 to 10.0.82.0/24. Switch the Reachable IPs from Server IP 10.0.8.34 to 10.0.82.34 and MIP 10.0.8.110 to 10.0.82.110.

Step 3. Activate the New Network Configuration on the Boxes

1. Browse to **Control** > **Box Execution**.
2. Click **New Script** to generate a script for activation of the new network configuration on all boxes.

***boxactivate* shell script for box network activation:**
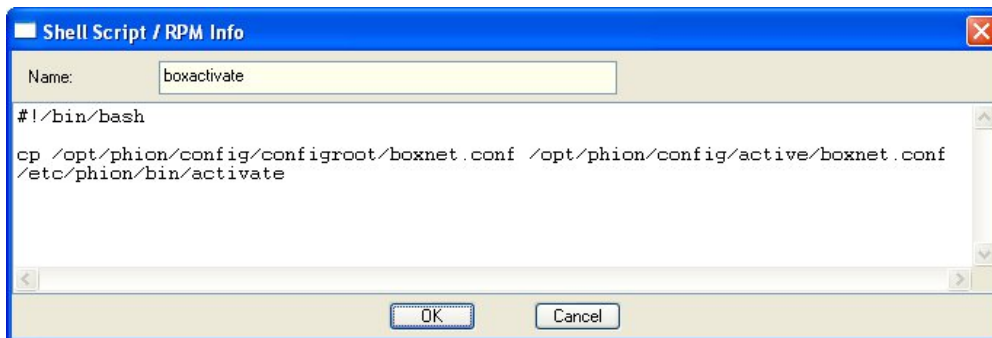
- Name the script for example `boxactivate`. Add the following lines to it:

```
#!/bin/bash cp /opt/phion/config/configroot/boxnet.conf
/opt/phion/config/active/boxnet.conf /etc/phion/bin/activate
```

- Execute the script by selecting it in the **Scripts** tab and simultaneous selection of the boxes where it is to be executed in the window left to the **Scripts** tab.
- While all needed objects are selected, click the **Create Task** button in the **Selected Boxes** section. The script is now executed.

Step 4. Check Configuration Updates for Successful Completion

Browse to **Control** > **Configuration Updates** tab and check the update status messages for successful completion of box network activation.

Step 5. Set the New CC IPs

To assure that the correct CC IP address is used for communication, interchange the Management IPs created above in **Step 4 - Introduce additional Management IPs** (see above).

- Switch the CC IPs 10.0.8.34 and 10.0.8.110 with the additional CC IPs 10.0.82.34 and 10.0.82.110 respectively.

Step 6. Delete Obsolete Rule Sets on the HQ Border Firewall

- Delete the former rulesets on the HQ border firewall that have been replaced through introduction of additional sets bound to the new IPs in **Step 8 - Introduce additional FW rule sets on the HQ border firewall** (see above).

Step 7. Assert the New Network Configuration

1. Log into the Barracuda NG Control Center on box level using the **Box** tab and the MIP 10.0.82.110.
2. Browse to **Control** > **Box** tab and click the **Activate New Network Configuration** link.
3. Select **Soft** activation from the available options.

Step 8. Perform a Complete Update via the Barracuda NG Control Center

1. Log into the Barracuda NG Control Center on server level using the CC tab and the CC IP 10.0.82.34.
2. Browse to **Control** > **Configuration Updates** tab.
3. Click **Update Now**.

Figures

1. net1.jpg
2. net2.jpg
3. CCNetworkMigration01.png
4. net1.jpg
5. sh_sc.jpg