Setting repeater mode with 2x C54APM

This manual will help you to set repeater mode on the C54APM. To create a Repeater environment, you need 2x C54APM. 1 of the C54APM will function as a normal Access point in your wireless network, and the other C54APM will function as a Repeater, for a bigger distance in your network.
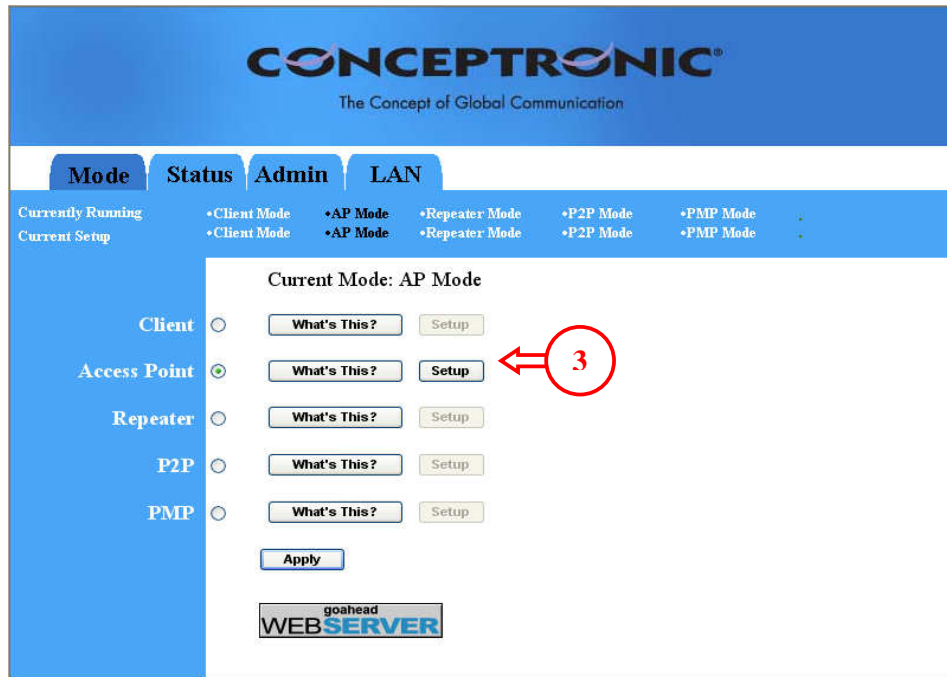
Important Notes:
- *You need at least firmware version 2.28 to work with Repeater Mode. Lower firmware versions don't support the correct settings!!*
- *Make sure that both C54APM have a different IP address, for example C54APM nr1: 10.0.0.1 and C54APM nr2: 10.0.0.2 !!*
- *When changing settings on the C54APM, make sure you are connected with the supplied Ethernet cable instead of the wireless connection!!*

Setting the first C54APM as an Access point

1. Open Internet Explorer, and type in the adressbalk the IP address of the Access point. (Example: **HTTP://10.0.0.1/**)
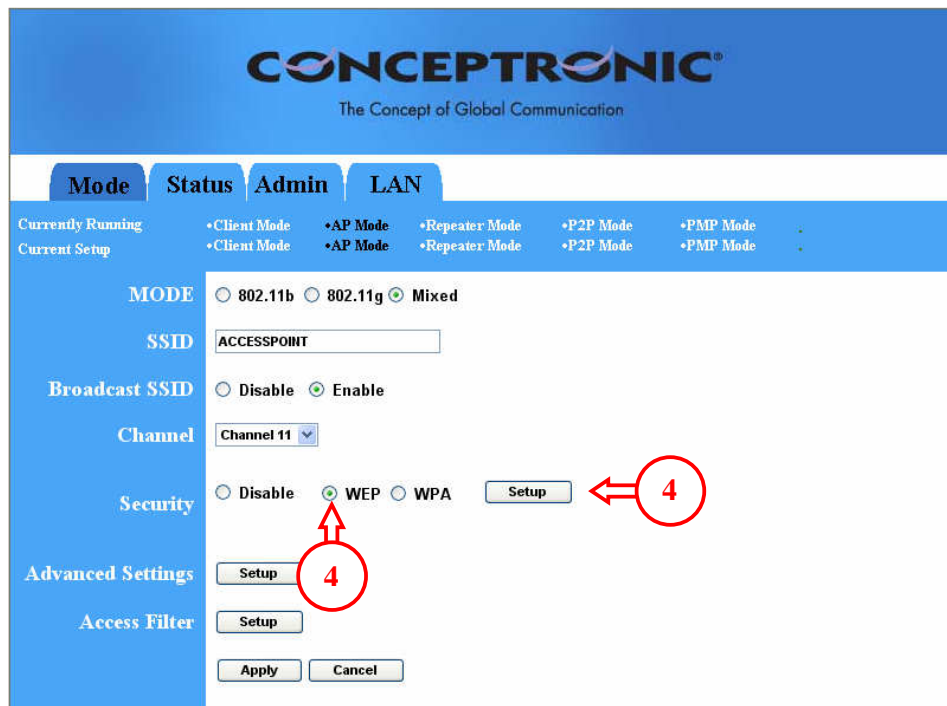

2. Enter the Username and Password for the Access point (Default: **admin** / **admin**) (Username and password can be in capitals in some versions of the C54APM)

It's more than just a concept...
It's a lifestyle... Your lifestyle!

CONCEPTRONIC®

The Concept of Global Communication

check it out: www.conceptronic.net

3. Select "**Setup**" at the _Access point_ section.

    If you want to use security on your wireless network, follow steps 4-8.
    If you don't want to use security, you can skip this section and continue at step 9.

4. Select the option "**WEP**", and click on "**Setup**". *(WPA is not supported in Repeater Mode)*

5. Set the _Authentication Type_ to "**Open**", the _WEP Length_ to "**WEP-128**" and the _Mode_ to "**HEX**".
6. Set the _Default TX Key_ to "**Key 1**" and enter an encryption key in the field "**Key 1**".
   This key must be 26 characters and can contain the numbers 0 to 9 and the letters A to F.
   Remember this key! You will need it to configure the Repeater and the wireless card for connection!
7. Press "**Apply**".

The access point will display the following message:

8. Press "**OK**" to save the WEP security settings. The Access point will countdown for enabling the settings and after the countdown, it will return at the main configuration screen for Access point mode.
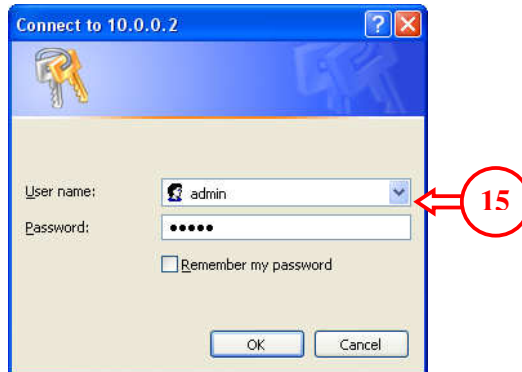
9. Press "**Setup**" at the *Advanced Settings* option.

10. Set *Connect Repeater* to "**Enable**" and enter the MAC address of the second C54APM in the first field of "**Repeater MAC Address**". If you use 2 Access points for repeating, you can enter the MAC Address of the third Access point in the second field of "**Repeater MAC Address**".
11. Press "**Apply**". The Access point will do a short configuration reboot, and return to the main configuration screen for Access point mode.
12. Set the *SSID* to "**ACCESSPOINT**" or any other name you want to use for the C54APM.
13. Press "**Apply**". The Access point will reboot again, and activate all changes.

Now the Access point is configured, you need to configure the other C54APM as a Repeater.

Setting the second C54APM as a Repeater

14. Open Internet Explorer, and type in the adressbalk the IP address of the Repeater.
    (Example: **HTTP://10.0.0.2/**)

15. Enter the Username and Password for the Repeater (Default: **admin** / **admin**)
    (Username and password can be in capitals in some versions of the C54APM)

16. Select "**Setup**" at the *Repeater* section.

    If you want to use security on your wireless network, follow steps 17-21.
    If you don't want to use security, you can skip this section and continue at step 22.
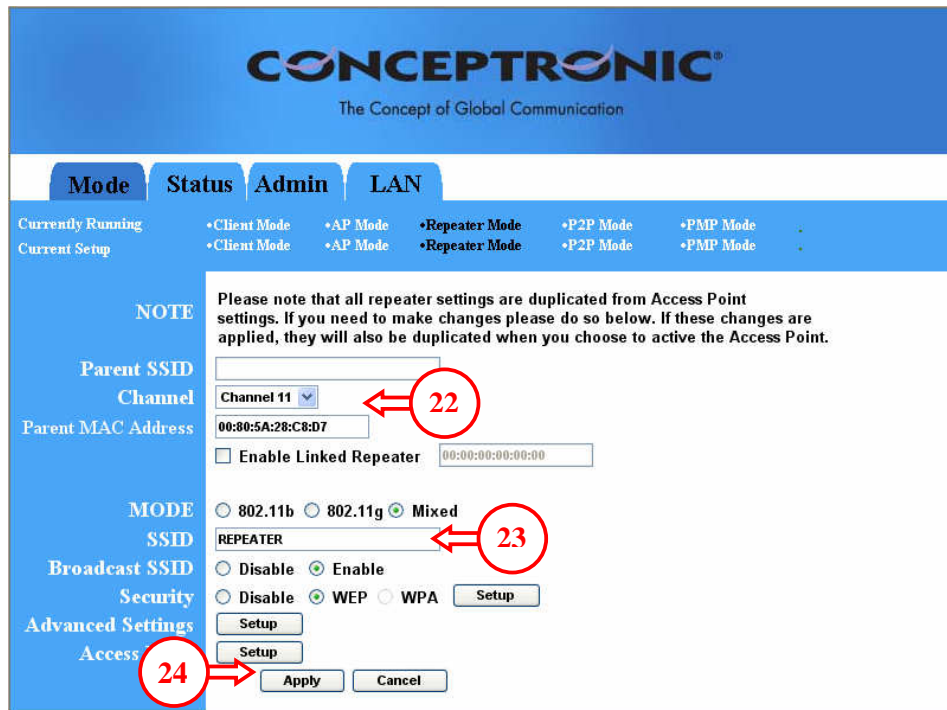
17. Select the option "**WEP**", and click on "**Setup**". *(WPA is not supported in Repeater Mode)*

18. Set the *Authentication Type* to "**Open**", the *WEP Length* to "**WEP-128**" and the *Mode* to "**HEX**".
Set the *Default TX Key* to "**Key 1**" and enter the same encryption key in field "**Key 1**" as you entered in the first C54APM.
19. Press "**Apply**".

It's more than just a concept...
It's a lifestyle... Your lifestyle!

CONCEPTRONIC®

The Concept of Global Communication

check it out: www.conceptronic.net

The Repeater will display the following message:

20. Press "**OK**" to save the WEP security settings. The Repeater will countdown for enabling the settings and after the countdown, it will return at the main configuration screen for Repeater mode.

21. Set the channel on the same channel as the first C54APM, and enter the MAC Address of the first C54APM in the "**Parent MAC Address**" section.
    (If you want to repeat the signal 1 more time after this Repeater, activate the "Enable Linked Repeater" and enter the MAC Address for the second Repeater in this field)

22. Set the *SSID* to "**REPEATER**", or any other name you want to use for the Repeater.
23. Press "**Apply**". The Repeater will reboot again and activate all changes.

Important Note:
- *Before connecting to the configured Repeater, make sure that the Repeater is not connected to a wired network!! This will cause the wireless connection to connect and break-up continuously.*
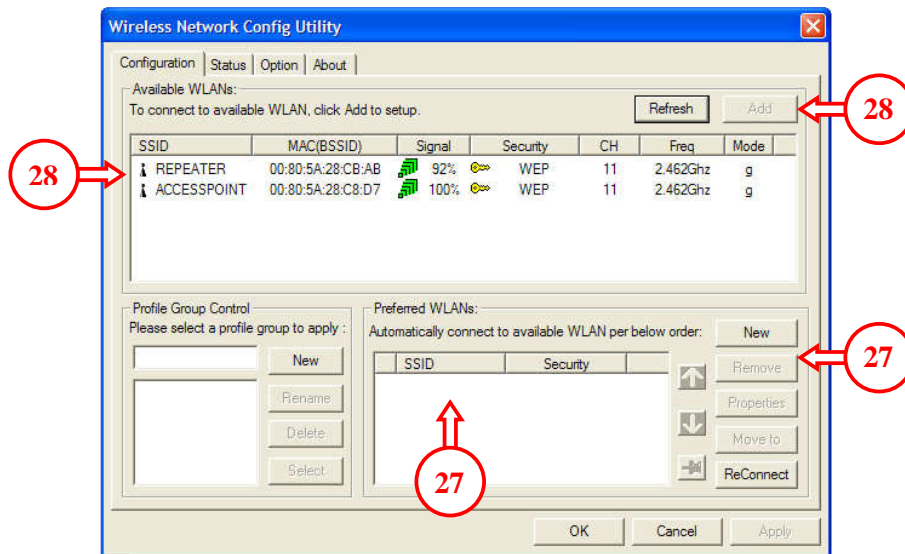
It's more than just a concept...
It's a lifestyle...Your lifestyle!

CONCEPTRONIC®
The Concept of Global Communication

check it out: www.conceptronic.net

Connecting your wireless computer to the Repeater

The following steps will show how to connect to the repeater, using a Conceptronic wireless adapter.
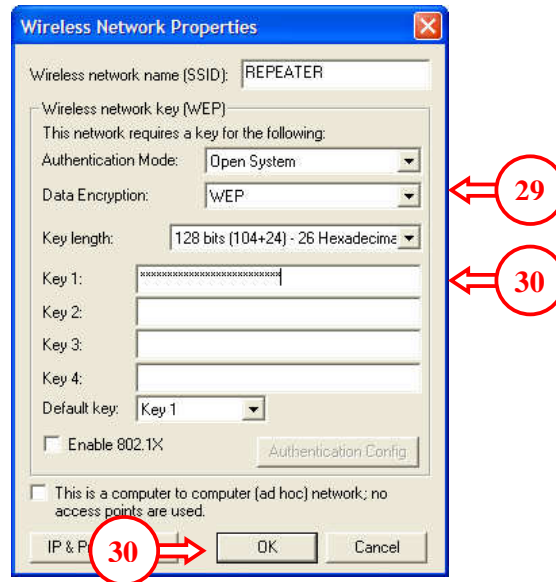
24. Connect your Wireless device to the computer.

25. Double-click on the Conceptronic Utility in the taskbar. The Conceptronic Utility will come up. You will see both C54APM in the utility if they are both in range, otherwise, only the Repeater will show up.

26. Remove any existing *Preferred WLAN's* in the configuration panel. If there are no *Preferred WLAN's*, you can continue to step 28.
27. Select the SSID for the Repeater and press "**Add**".

28. If you are using Security, set the *Authentication Mode* to "**Open System**", the *Data Encryption to* "**WEP**" and the *Key length* to "**128 Bits (104+24) – 26 Hexadecimal**".

29. Enter the key from step 7 in the field of *Key 1* and press "**OK**".

If you don't use security on the wireless network, set the *Authentication Mode* to "**Open System**", the *Data Encryption* to "**Disabled**" and press "**OK**".

The wireless computer will now connect to the Repeater, which is in contact with the Access point and the network behind it.