NETGEAR® ProSAFE® WAC720 and WAC730

How to Create an Ensemble with Two WAC720 or WAC730
CONCEPTS

The NETGEAR® ProSAFE® WAC720 and WAC730 are high performance 2 x 2 and 3 x 3 business class dual band 802.11ac wireless Access Points (AP) that can support an aggregate throughput of up to 1.2 Gbps (300 Mbps for 2.4 GHz and 867 Mbps 802.11ac for 5 GHz) and 1.75Gbps (450Mbps for 2.4GHz and 1.3Gbps 802.11ac for 5 GHz) respectively. The WAC720 & WAC730 operate in standalone or ensemble mode for centralized group management of up to 10 like Access Points without additional hardware, licenses or support fees. Ensemble mode allows you to initiate common firmware updates and monitor client connectivity and usage for multiple APs through a centralized dashboard.

COMPONENTS

WAC720 or WAC730 x 2 (up to 10)

CONFIGURATION STEPS

NOTE: By default the WAC720/730 will obtain an IP address from your DHCP Server.
Username: admin Password: password

Suggested Test Setup

For our example, we will have two WAC720 with the following IP address:
AP1: 192.168.50.188
AP2: 192.168.50.189

We will also give the ensemble we created the following management IP address:
Ensemble IP: 192.168.50.197

Although we can still go into the management IP of each ensemble member, giving every member the same ensemble IP address will provide you with a single IP address in which to manage your ensemble regardless of which member is the master.

Steps

The steps below illustrates the typical steps to create the ensemble we outlined above.

1. Login to AP1 (in our example the IP address is 192.168.50.189, yours may vary) and go to the Configuration -> Ensemble -> Basic -> Ensemble General page.
2. For Ensemble Mode select Start, for Ensemble Name enter a name for your Ensemble. The Ensemble Name is what joins all the members of the ensemble. Every AP in the same ensemble must have the same Ensemble Name.
3. For AP Name, give your AP a descriptive name (optional).
4. For Priority, enter a number. The priority number is used to determine which AP is the master. In our example we will give it 10.
5. Click Apply.
6. Next, go to the **Configuration -> Ensemble -> Basic -> Management** page. Enter an IP address for your ensemble. (In our example we give it 192.168.50.197)

7. Click **Apply**.

**NOTE:** Although not required, a best practice is to give every member of the ensemble the same Ensemble Management IP Address. This way, if the current Ensemble master is removed from the ensemble, you will be able to still manage the ensemble from the same ensemble management IP address.

8. Now, go to the **Configuration -> Ensemble -> Basic -> Secure Ensemble** page. Securing the ensemble is an important step to prevent unwanted APs from joining your ensemble.

9. Select **Enabled for Secure Mode** and enter a secure **Passphrase**. The **Re-authentication Timeout** value can be left at default.

10. Click **Apply**.
11. Next, we will enable Auto Channel Assignment for the ensemble. This will allow the ensemble to automatically adjust the channels used by ensemble member APs, according to real-time RF conditions. Go to Configuration -> Ensemble -> Advanced -> Channel Assignment.

12. For Auto Assign Channels, select Start.

Now, we will configure AP2 so that it joins the ensemble we just created.

13. Login to AP2 (in our example the IP address is 192.168.50.188, yours may vary) and go to the Configuration -> Ensemble -> Basic -> Ensemble General page.

14. For Ensemble Mode select Start, for Ensemble Name enter the same ensemble name you used for AP1. The Ensemble Name is what joins all the members of the ensemble. Every AP in the same ensemble must have the same Ensemble Name.

15. For AP Name, give your AP a descriptive name (optional).

16. For Priority, enter a number. The priority number is used to determine which AP is the master. In our example we will give it 9.

17. Click Apply.
18. Next, go to the **Configuration -> Ensemble -> Basic -> Management** page. Enter an IP address for your ensemble. (In our example we give it 192.168.50.197)

19. Click **Apply**.

20. Now, go to the **Configuration -> Ensemble -> Basic -> Secure Ensemble** page. Securing the ensemble is an important step to prevent unwanted APs from joining your ensemble.

21. Select **Enabled** for **Secure Mode** and enter a secure **Passphrase**. The **Re-authentication Timeout** value can be left at default.

22. Click **Apply**.
23. Next, we will enable **Auto Channel Assignment** for the ensemble. This will allow the ensemble to automatically adjust the channels used by ensemble member APs, according to real-time RF conditions. Go to **Configuration -> Ensemble -> Advanced -> Channel Assignment**.

24. For **Auto Assign Channels**, select **Start**.

Now that the ensemble has been created, we will now create a wireless-ac SSID on the ensemble. You can do this on any member of the ensemble as the settings will be auto propagated to all other members of the ensemble. However, as a best practice, it is best to login to the ensemble management IP address (192.168.50.197) and make all your changes on the ensemble master.

25. Login to the ensemble management IP address and go to the **Configuration -> Security -> Profile Settings** page.

26. For this example we will edit the default 5GHz profile according to our settings. Find the **Profile Settings – 802.11 a/na-ac/a-na-ac** section at the bottom of the page and select **profile #0**.

27. Click **Edit**.

28. Enter your SSID security settings.

29. Click **Apply**.
30. And that’s it! You can go to the Monitoring -> Ensemble page to monitor the status of your ensemble.