

XAP Net Locator

Introduction

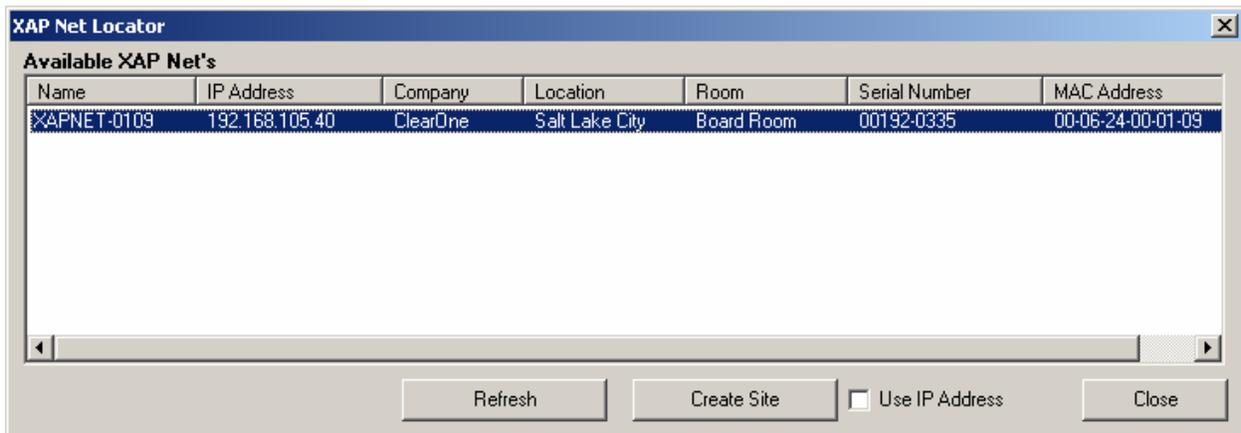
The new version of G-Ware 5.0 has a utility called XAP Net Locator. This utility will find XAP Nets installed on the same subnetwork as your computer and display their Network Name, IP Address, Serial Number and MAC Address in the XAP Net Locator window. If you entered a site description in the Unit Properties window, it will also be displayed. You can use this information to establish a connection to a XAP Net.

Using XAP Net Locator

1. Click the XAP Net Locator button on the G-Ware toolbar.



The XAP Net Locator utility opens, displaying all XAP Nets in the subnetwork.



2. Select the XAP Net you want to connect to.
 - If your Network is running NetBIOS, click **Create Site**.
 - If your network is not running NetBIOS, select **Use IP Address** and then click **Create Site**.

This will create a new site in G-Ware and you will be able to connect to the XAP Net and the XAP/PSR system to which it is connected. The Comm tab of G-Ware will automatically be configured to connect through the network.

Subnets

Local Area Networks (LANs) are normally broken up into smaller sub networks. This is done to make management of the network easier and to reduce broadcasts sent across the entire network.

Let's use the LAN address of 10.0.0.0 with a default subnet mask of 255.0.0.0. This subnet can have a total of 16,777,214 unique IP addresses. If this wasn't sub-netted and a broadcast message was sent, it

would be sent to all of those addresses. This is a waste of network bandwidth because the broadcast message, even though small, is taking up valuable space and time on the LAN. This can cause slow-downs on a LAN.

If the LAN is separated into smaller subnets, the broadcasts will only be sent to a single sub-network instead of the entire 16,777,214 addresses. To subnet a LAN address, a larger subnet mask, such as 255.255.255.0, is utilized.

With the LAN address of 10.0.0.0 with a subnet mask of 255.255.255.0 there would be a total of 65,534 sub-networks having only 254 unique IP addresses per sub-network. Now when a broadcast message is sent it will only go to the 254 IP addresses of the sub-net that as opposed to the 16,777,214 addresses without sub-netting.

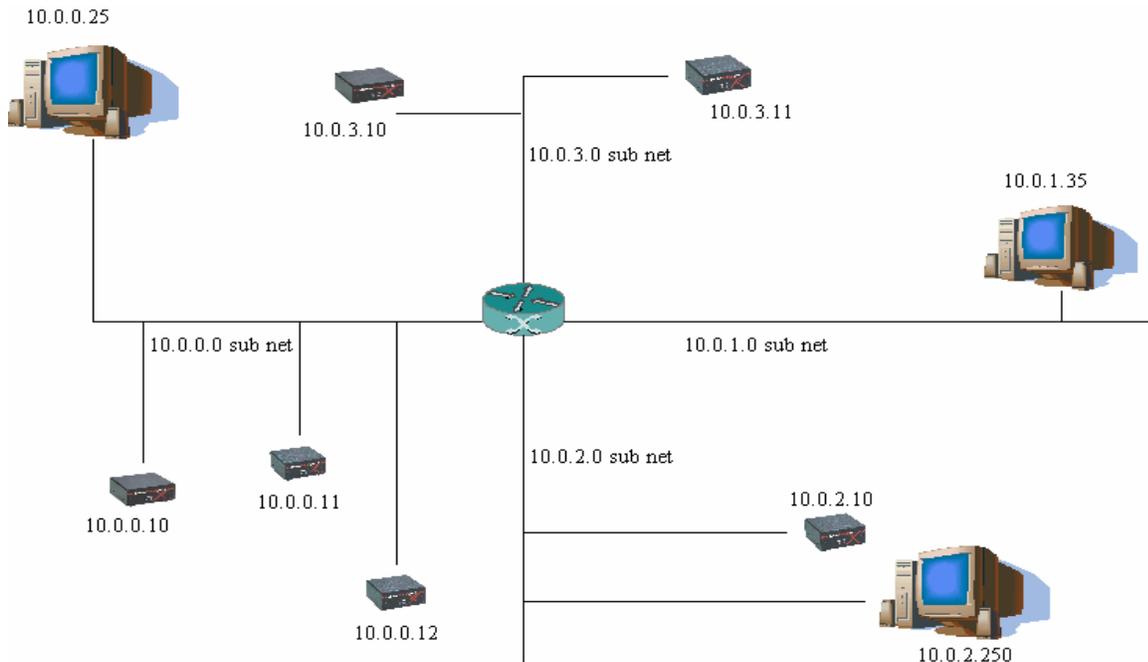
Subnet Example

In the example below the LAN is using IP block of 10.x.x.x. It has been set up into 4 separate subnets: 10.0.0.0, 10.0.1.0, 10.0.2.0 and 10.0.3.0 all using the subnet mask of 255.255.255.0.

If computer 10.0.0.25 ran the XAP Net Locator, a broadcast message would be sent to the 10.0.0.0 subnet. It would then receive information from the three XAP Nets on its subnet: 10.0.0.10, 10.0.0.11 and 10.0.0.12.

If computer 10.0.1.35 ran the XAP Net Locator, a broadcast message would be sent to the 10.0.1.0 subnet. It would not receive information from any XAP Nets since there are none on the subnet of 10.0.1.0.

If you ever connect to a network that you know has XAP Nets on it but cannot find them with the Locator, make certain that your computer is on the same subnet as the XAP Nets.



If a computer is on a different subnet than a XAP Net, it is still possible to connect to that XAP Net using the XAP Net's IP address. This is configured in the G-Ware site file properties.

If you were on the computer with IP address of 10.0.1.35 (see diagram on previous page) and want to connect to the XAP Net with IP address of 10.0.3.10 you will need to configure the Comm tab of your site properties.

To connect using an IP address

1. Open G-Ware and select **New Site** from the File menu. A Site Properties window will open.
2. Click on the **Comm** tab and select **Use Networking**.
3. Type in the **IP Address** of the XAP Net and leave the Port as 23. This port is used by G-Ware for communication.
4. Click **OK**.
5. Select **Connect** from the Connect menu. G-Ware will connect to XAP Net using the LAN connection and not the local COM Port.

