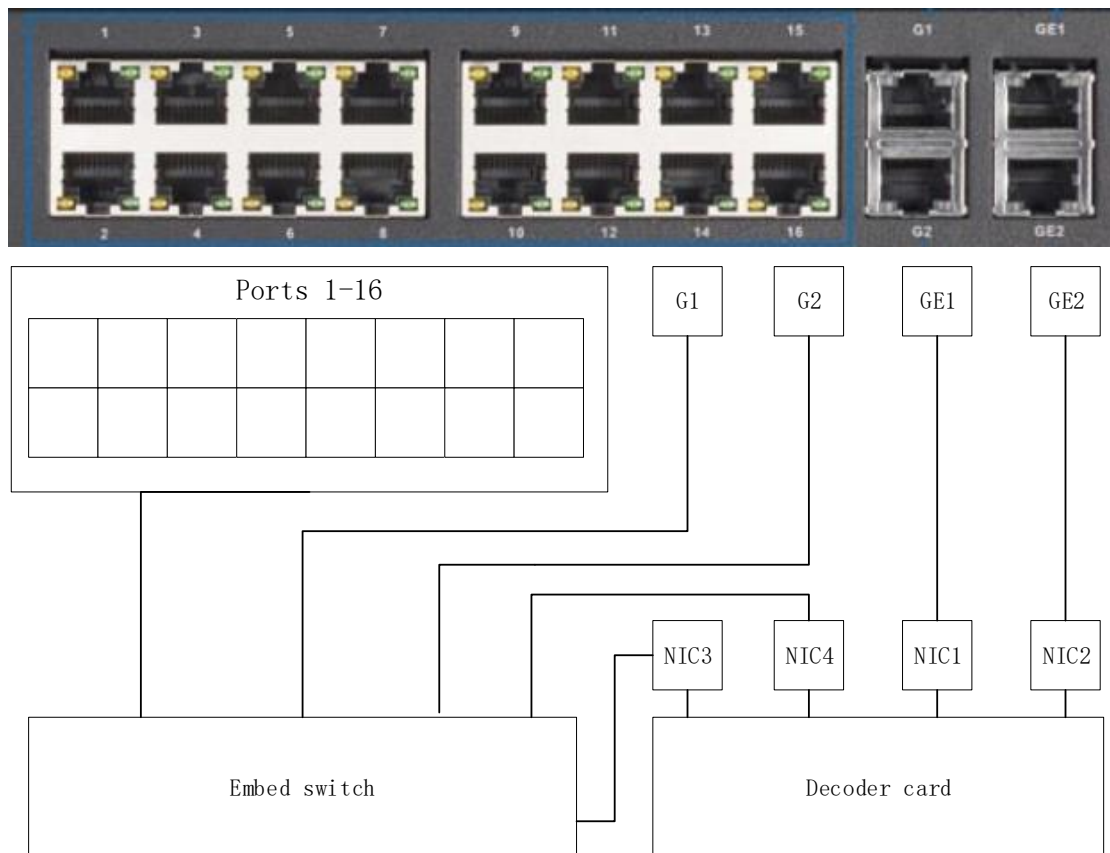


Technical details of DS-6900 series ports (With application plan)

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1. Internal Connection diagram



As shown in figure above, the link mode of decoder 6908/10/16 device can summarized as below:

1. 69 series decoder(08/10/16) has 4 independent NICs, manage ports GE1 and GE2 link to two of them. The other two NICs connect to the embed switch.
2. NICs does not link with each other directly, IP address independent. Attention that NIC3/4 have connected by embed switch.
3. G1 and G2 link with embed switch and Ports 1-16, NIC3/4 can connect with port G1/2 by embed switch.
4. G1 and G2 is connected with each other by embed switch, so attention, don't link G1 and G2 to one external switch, it will be the loop
5. GE1/GE2/G1/G1 are 1000M port, ports 1-16 are 100M port.

2. Link mode

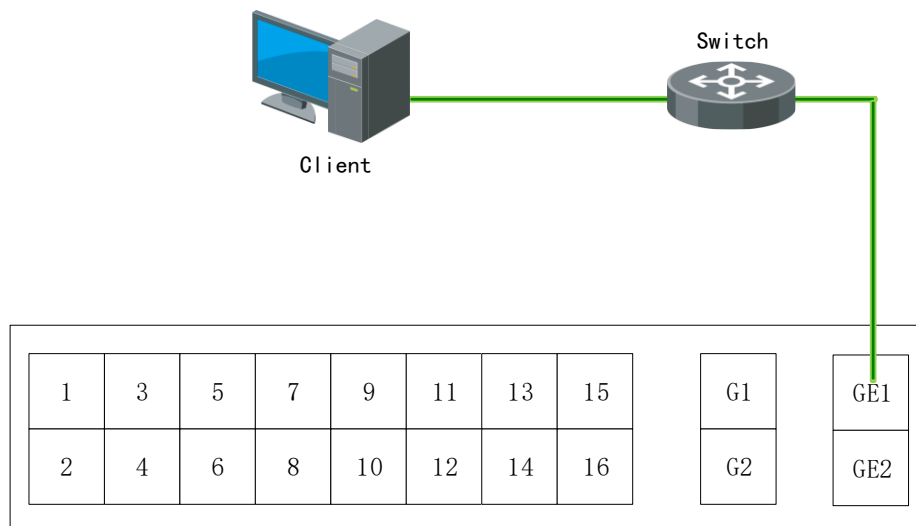
Link with any one of G1/G2/GE1/GE2 you can scan IP and manage decoder. Decoder cannot scanned when you only link with ports 1-16 because they do not connect with NICs by program design.

We have three types' ports, so we have different using methods, let us analyze with them.

2.1.Only Connect GE1 to external switch

It's the common way to use ports of decoder, very stable and simply, one IP address and enough to almost all the application sceneries.

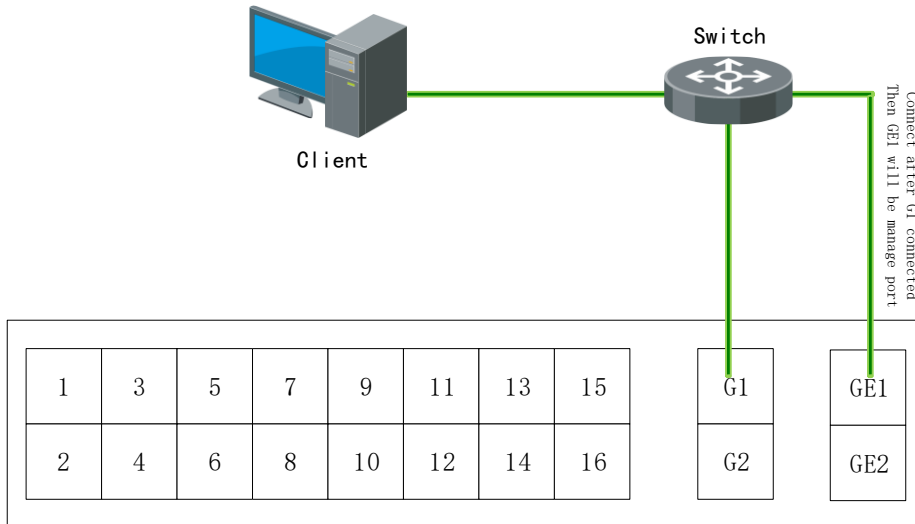
This way is recommend.



2.2. Connect GE1 and G1 to external switch

In this mode, you can use the embed switch and GE1 at the same time, but maybe you want to know that witch one is manage port because they all have independent IP and can manage the decoder. The answer is: which insert last, which is manage port.

Because of its' uncertainly, this link mode is not recommend. In actually, one port is enough, we don't need all of them.

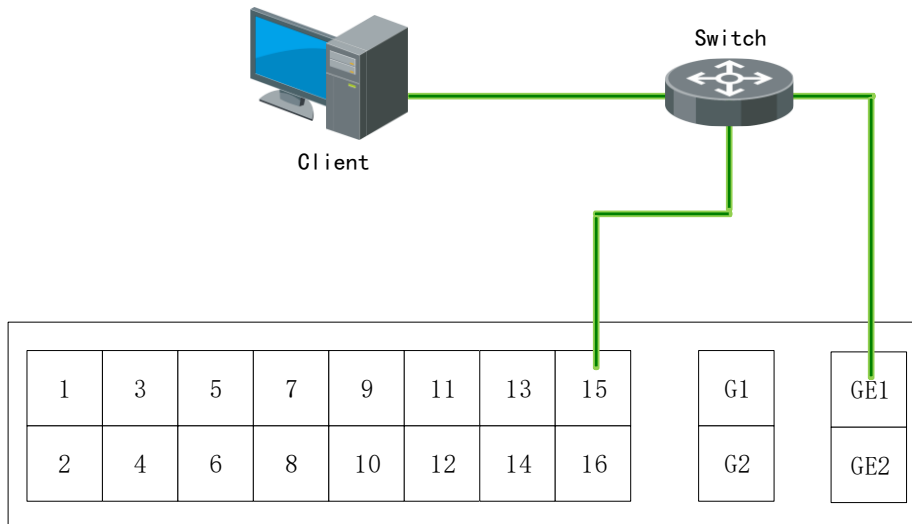


2.3. Connect GE1 and one of ports 1-16 to external switch

In this mode, you also can use the embed switch, but you will not worried about the manage port. Compare with method in chapter 2.2, this way is stable and independent, GE and ports 1-6 do not interfere with each other.

But, the bandwidth of ports 1-6 is 100M, it is bottleneck. Consider with performance limit (about 50%), this can support access about 12 IPC with 4M stream.

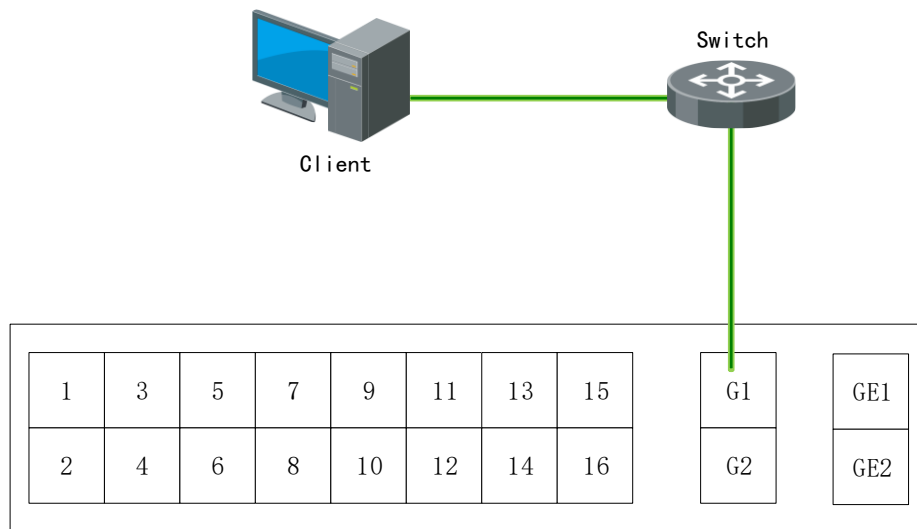
This mode is commonly.



2.4. Only connect G1 to external switch

In this link mode, decoder embed switch connect with external switch, and embed/external switch all can connect the IPC linked with ports 1-16, we also can

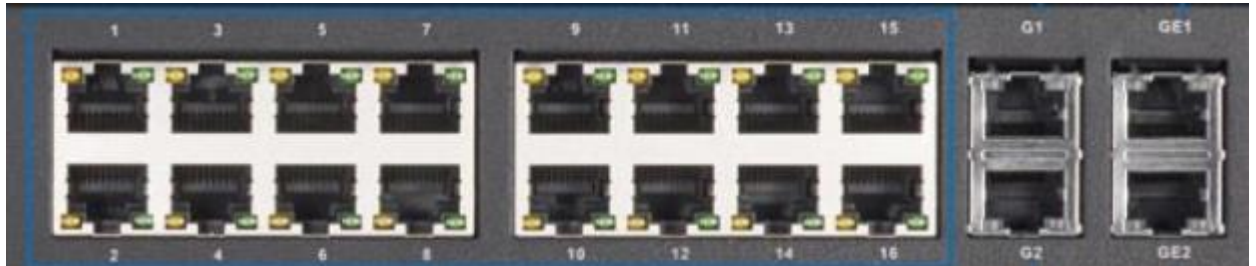
manage the decoder by G1.



3. Common application plan

3.1. Ports introduction

Get a brief introduction again as below:



GE1 and GE2: these are manage port for the decoder. In general, we use one of them to manage decoder and get video stream, it is probably enough to all the application scenarios.

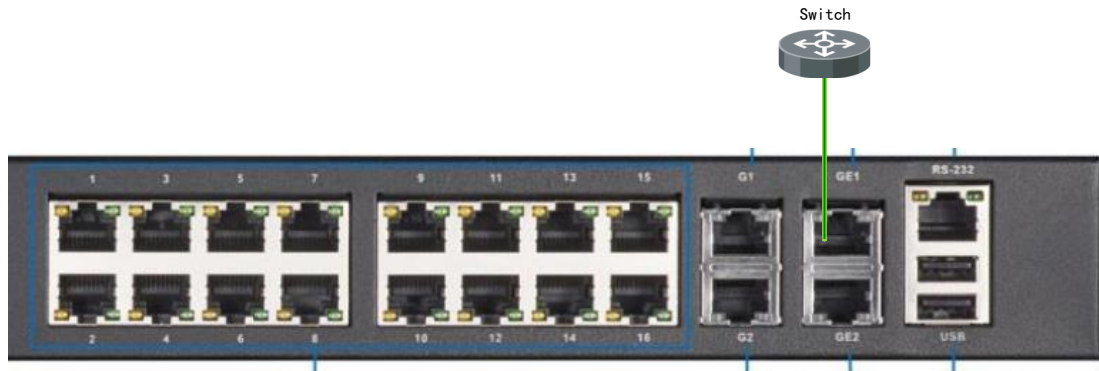
G1 and G2: use these ports you also can manage the decoder, get video stream, but usually we use them to connect the port 1-16 to the core switch. It means that port 1-16 is a little switch, and when you connect the switch by G1, port 1-16 will establish a lan with switch.

Pay a attention, unless you need port polymerization, don't connect G1 and G2 to one switch at the same time, it will be the loop.

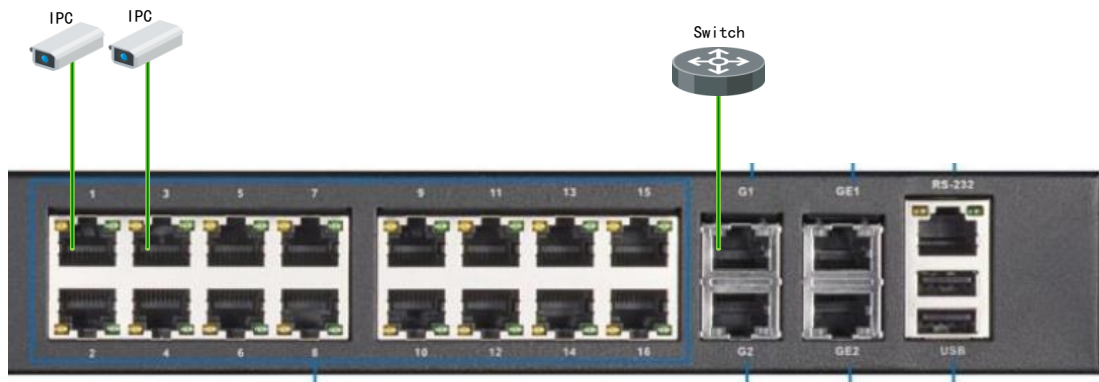
Ports 1-16: Like a little switch, used for connect IPC if your switch is short of port. It can't be used alone.

3.2. Application plan

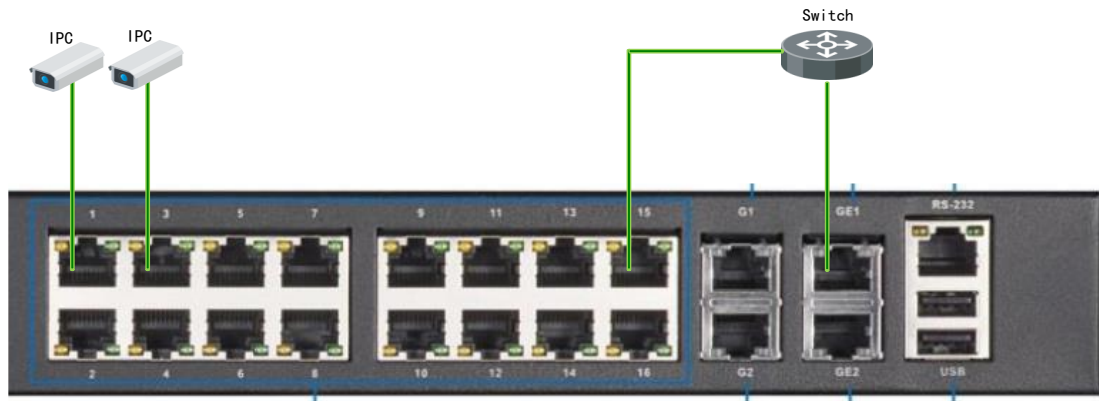
Almost all the application scenarios need you connect GE1 or GE2 to the core switch, and it is enough, as below:



If you short of Switch ports to connect IPC, you can use ports 1-16 to extend, connect G1 to the switch, and IPC to the ports 1-16, as below.



Or you can connect GE1 to external switch, and choose one of ports 1-16 connect to external switch, but attention with bottleneck, as below.



Attention:

Between G port and GE port, choose only one of them, as above , it is the stable using method. The plan as above is almost enough to all the scenarios.