Advantech AE Technical Share Document

Date	2017/11/6	**SR#**	1-3081098541
Category	■FAQ □SOP	**Related OS**	N/A
Abstract	IAG_FAQ_ADAM-6000_ADAM-6200_How to set routers' port forwarding to achieve P2P function		
Keyword	Port forwarding, P2P , router		
Related Product	ADAM-6000, ADAM-6200 series		

■ Problem Description:

Users want to use P2P function in two different external IP. This document will explain how to set the routers by following example.

■ Answer:

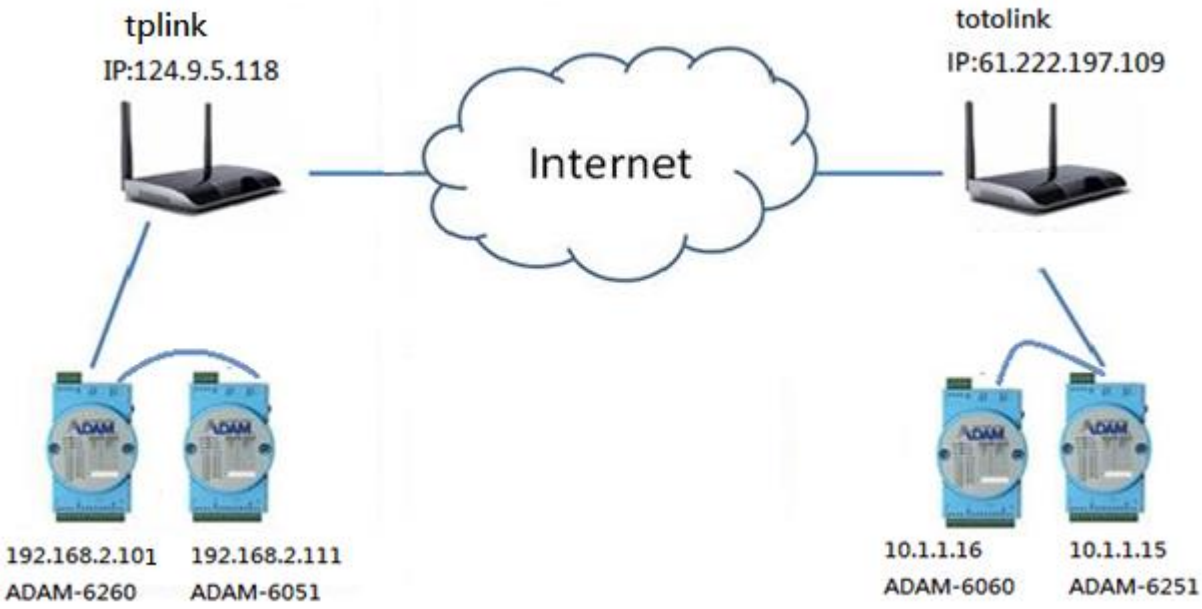

Figure 1. Network structure

This environment are two independent public IP, there are two ADAM modules under these two routers. One ADAM DI modules can control another ADAM Relay module at different public IP by P2P function. The structure is like *Figure 1.* and the rule is show at *Table 1.*

Source	Destination
192.168.2.111(ADAM-6051)	10.1.1.16(ADAM-6060)
10.1.1.15(ADAM-6251)	192.168.2.101(ADAM-6260)

Table 1. P2P logic

When ADAM-6051 controls ADAM-6060, its network package will go through router (TOTOLINK) like *Figure 2*.

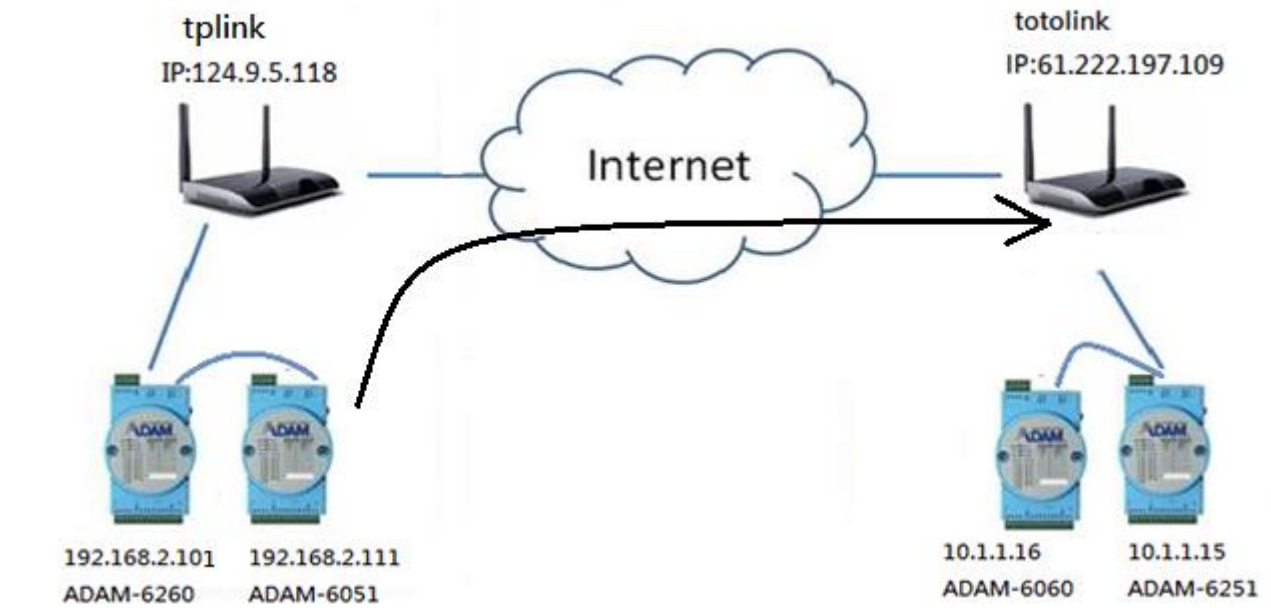

Figure 2. ADAM-6051→ADAM-6060

External port setting is 1025 because the default P2P target/local port is 1025. Internal port setting is 1234, so if the router receives the package from 1025 port it will transfer to 1234 port to the device under this router. For this example, user has to change the ADAM-6060 default P2P target/local port setting to 1234 like *Figure 4*. ADAM-6051 P2P setting is like *Figure 5*. (ADAM-6051 P2P target/local port settings do not need to change→default 1025)

Figure 3. TOTOLINK Port forwarding setting

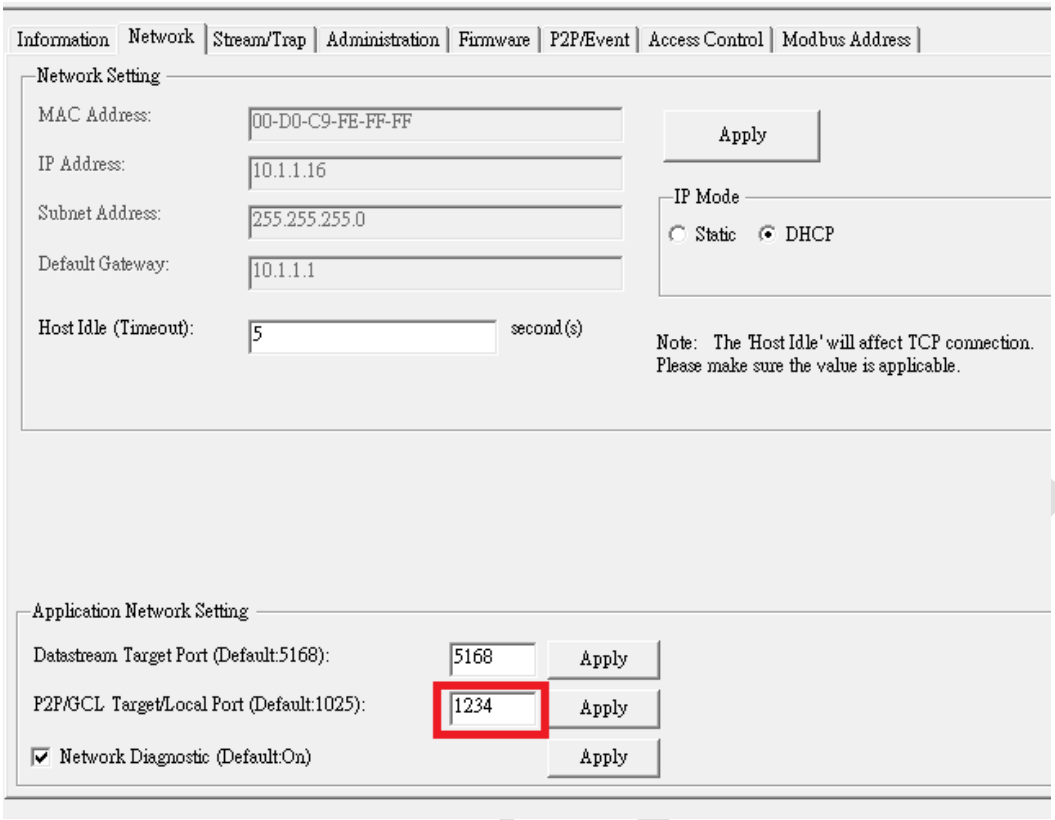

Figure 4. ADAM-6060 Utility setting

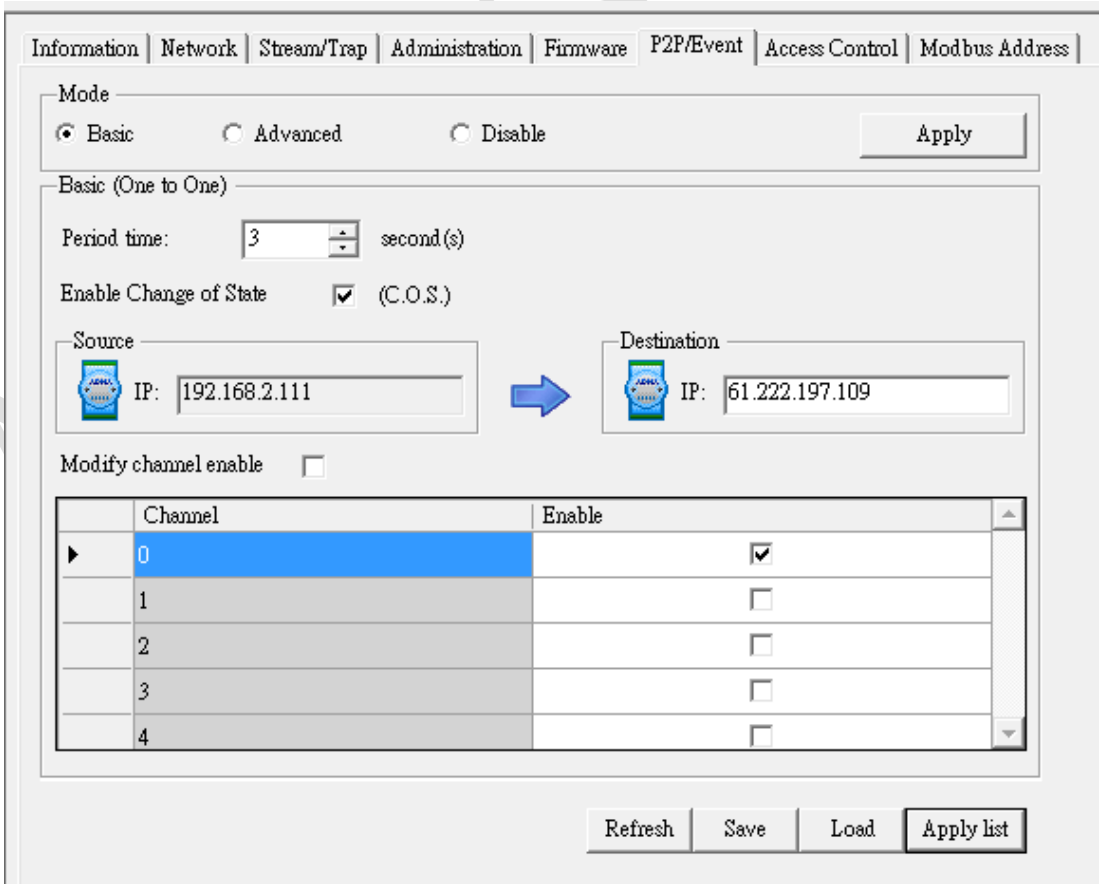

Figure 5. ADAM-6051 P2P setting

192.168.2.101(ADAM-6260)	1025
192.168.2.111(ADAM-6051)	1025
10.1.1.16(ADAM-6060)	1234
10.1.1.15(ADAM-6251)	1025

Table 2. P2P target/local port setting

When ADAM-6251 controls ADAM-6260, its network package will go through router (TPLINK) like *Figure 6.* User has to setup the NAT rule. Under this router, its setting is like below *Figure 7.* In this router, we setup the virtual server function. It can choose a range of external port correspond to an internal port. (In this case, I set 1025→1025) Because I use the default port for P2P function, I don't need to change the P2P target/local port setting. ADAM-6251 P2P setting is *Figure 8.*

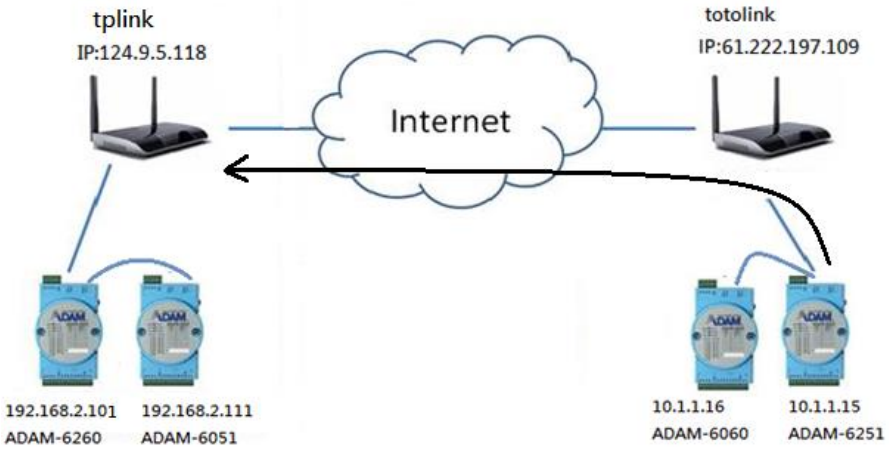

Figure 6. ADAM-6251→ADAM-6260

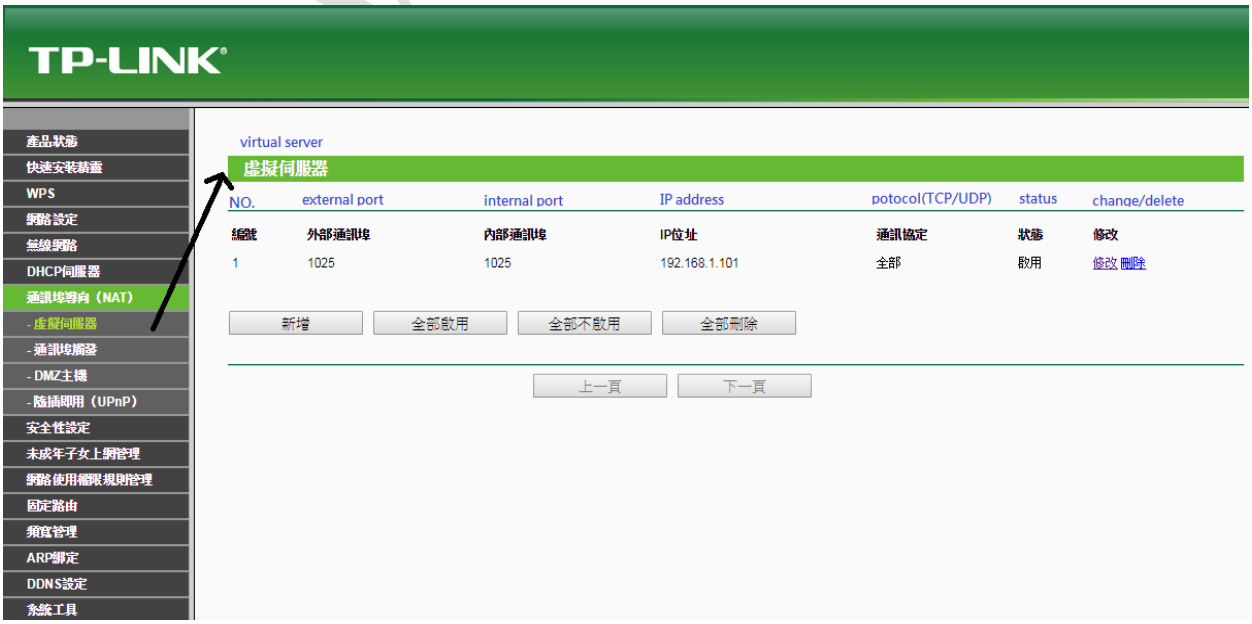

Figure 7. TPLINK Port forwarding setting

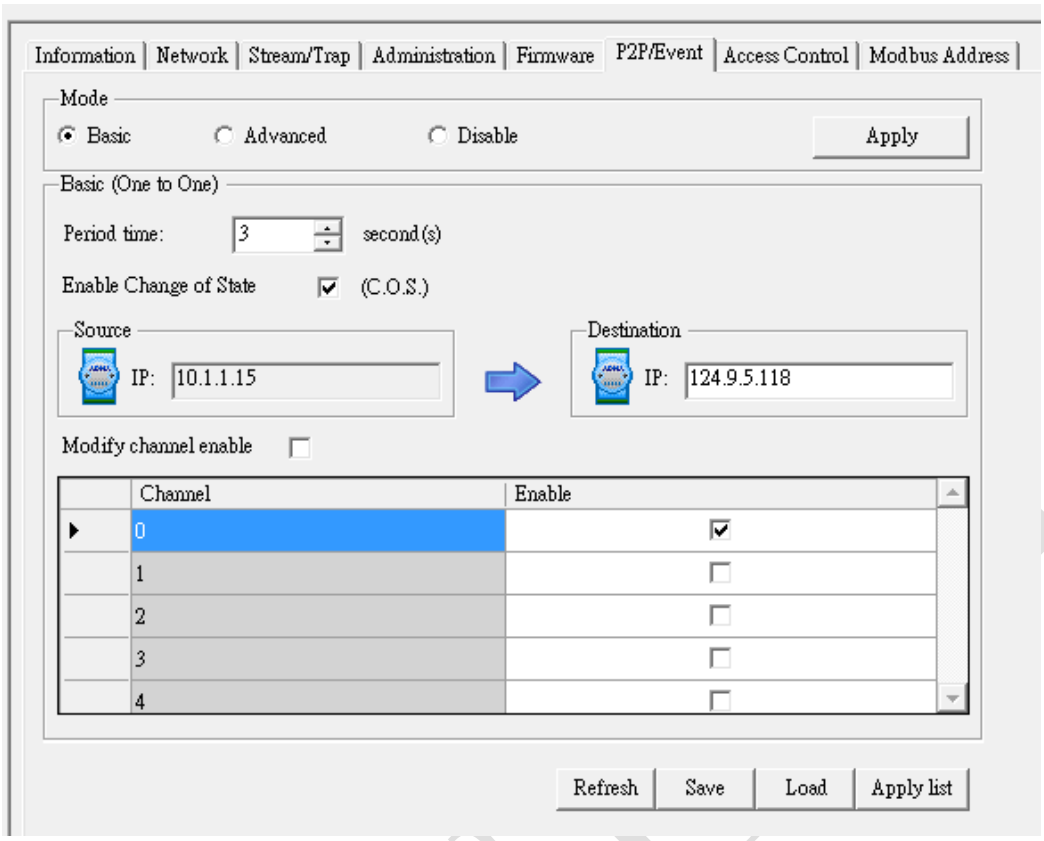

Figure 8. ADAM-6251 P2P setting

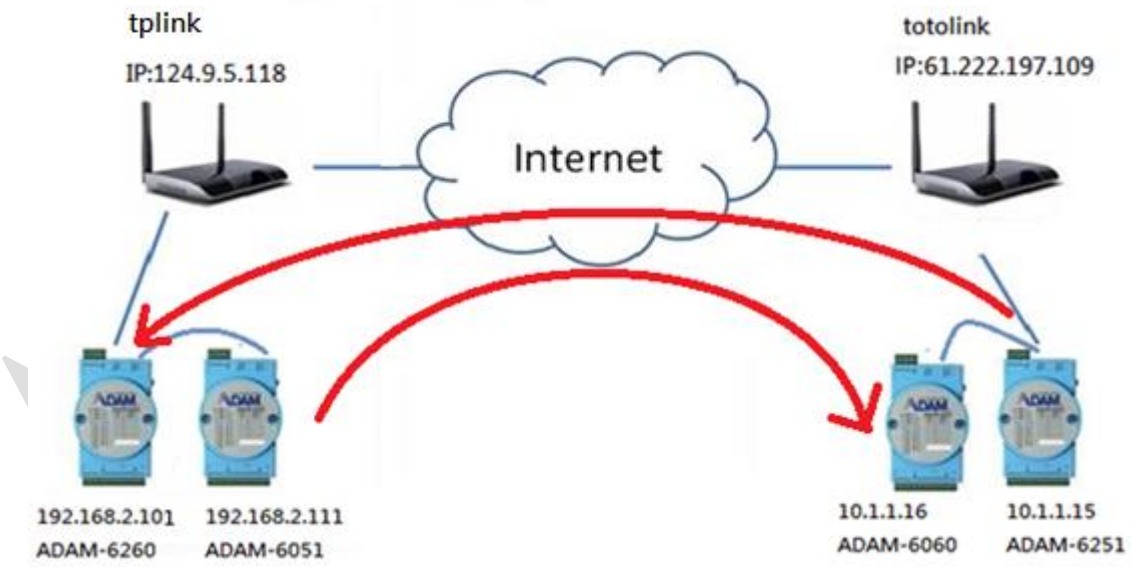

Figure 9. P2P behavior(DI→Relay)

Different routers have different functions and setting ways due to its level and brand. Above is an example for bio-direction P2P function between two independent IP routers (TOTOLINK-NT150RT and TPLINK-WR941ND). Users have to make sure their router setting, the ADAM modules setting (both P2P setting and P2P target/local setting) and the network status are correct while using P2P function.