AD\ANTECH Enabling an Intelligent Planet

Advantech AE Technical Share Document

Date	2016/03/11	SR#	1-2394207525	
Category	■FAQ □SOP	Related OS	N/A	
Abstract	ADAM-6000 & ADAM-6200, How to get the ADAM in the different subnet by			
	Utility?			
Keyword	Ethernet, Subnet, Favorite Group, Management Switch, Router			
Related				
Product	ADAM-6000 series, ADAM-6200 series			

Problem Description:

This document explains how to get the ADAM in the different subnet by Utility.

Answer:

If the PC with utility is connected to ADAM directly, the module could always be found.

However, if the customer's network structure have a managed switch or router between ADAM and the host PC and the default gateway is set accordingly, the intermediate managed switch/router will not send out the "search" packet from utility to the ADAM in another network domain since it's a broadcast packet.

In this situation, we will suggest the customer take advantage of the "favorite group" function of the utility. With the "favorite function", user can pre-define the IP, password and other parameter of the ADAM module so that utility will send out the unicast packet to the corresponding ADAM device directly. In this situation, the managed/router will help to pass the packet to the correct port through the data gateway that user set so that the utility could find the module successfully.

The following is the example to add ADAM to the favorite group. The PC and ADAM-6251 are in the different subnet.

ADVANTECH

<u>Setting</u>

PC	
IP Address:	192.168.100.5
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.100.254

ADAM-6251

IP Address:	192.168.200.5
Subnet Mask:	255.255.255.0
Default Gateway:	192.168.200.254

<u>Step</u>

1. Let the PC in the 192.168.200.XXX subnet and get the ADAM-6251



2. Add the ADAM-6251 to the favorite Group and create the new group.

ource devices	Selected devices	
	[192.168.200.51-[ADAM-6251]	Existed group
	»	G New errors
		[192.168.200.XXX]
	<<	or lowed

Enabling an Intelligent Planet

3. New group is created and the ADAM-6251 is showd below.



AD\ANTECH

4. Then let the PC in the 192.168.100.XXX subnet and use "Terminal for the Command Test" to connect the ADAM-6251 in the different subnet.

COM3 Device IP: Use Target IP> Target IP: 192.168.200.51 Disco COM4 Comect timeout: 2000 ms Adam Type Send UDP/Tu CupP Po Up Uters Send timeout: 2000 ms Adam-5000 C UDP Po	
COM4 Connect timeout: 2000 ms Adam Type Send UDP/T Image: Send UDP/To Image: Send UDP/To C Adam-5000 C UDP Po Image: Send UDP/To Send timeout: 2000 ms C Adam-5000 C UDP Po Image: Send timeout: 2000 ms C Adam-6000 C DDP Po	sconnect
Uthers Send timeout: 2000 ms @ Adam-6000	VTCP
	Post [500
192.168.200.XXX Receive timeout: 1000 ms Adam-6200 Wire-4000 Wire-4000	Port 1002
Wireless Sensor Networks Scan interval: 1000 ms C Apax-5000 Coupler	

5. See the packet in Wireshark. They establish the connection.

18 2016-03-09 17:13:48.242123	192.168.100.5	224.0.0.252	LLMNR	68 Standard duery 0X5943 A TAIPEIDI	
19 2010-05-09 17.15.48.442287	192.108.100.3	192.108.100.233	NDND	92 Name query NB TAIPEIDICOS	
20 2016-03-09 17:13:49.147375	192.168.100.5	192.168.200.51	TCP	66 59218 → 502 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PERM=1	
21 2016-03-09 17:13:49.147711	192.168.200.51	192.168.100.5	TCP	60 502 → 59218 [SYN, ACK] Seq=0 Ack=1 win=2048 Len=0 MSS=512	
22 2010-05-09 17.15.49.146225	192.100.100.3	192.100.200.31	ICP	J4 J92I0 → JUZ [ACK] SEQ=I ACK=I WIN=0JJ9Z LEN=0	
23 2016-03-09 17:13:49.191911	192.168.100.5	192.168.100.255	NBNS	92 Name query NB TAIPEI01<00>	
24 2016-03-00 17.12.40 041037	102 168 100 5	102 168 100 255	NRNS	07 Name GUERY NR TATRET01/005	