

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.

Setting**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

Step

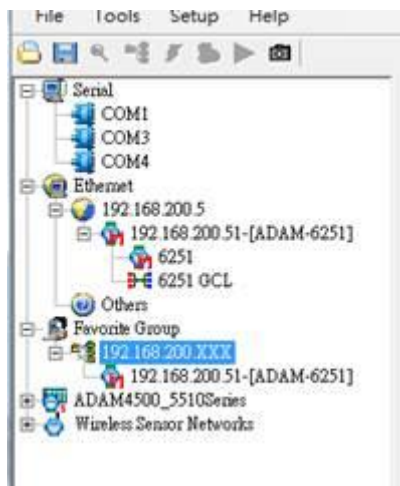
1. Let the PC in the 192.168.200.XXX subnet and get the ADAM-6251



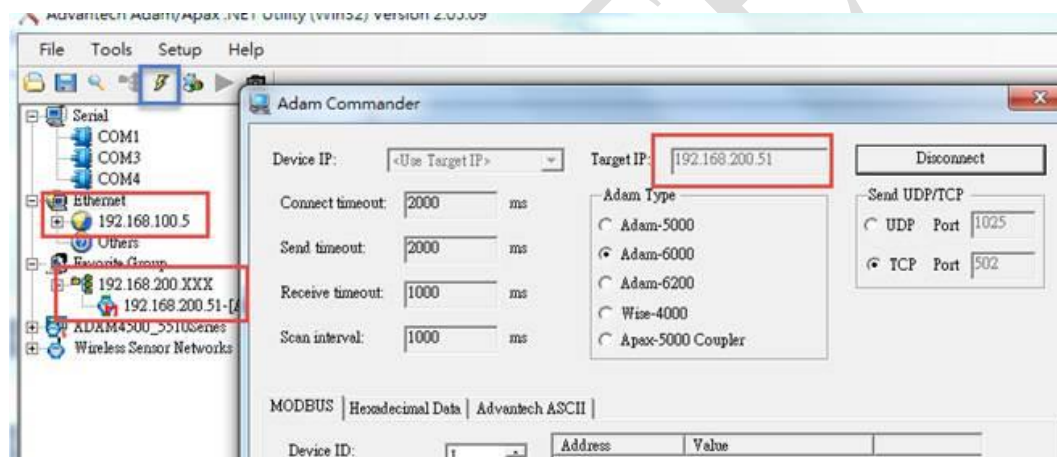
2. Add the ADAM-6251 to the favorite Group and create the new group.



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



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.



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

18	2016-03-09 17:13:48.24123	192.168.100.5	224.0.0.252	LLMNR	68 Standard query 0x5943 A TAIPETOL
19	2016-03-09 17:13:48.442287	192.168.100.5	192.168.100.255	NBNS	92 Name query NB TAIPETOL<00>
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	2016-03-09 17:13:49.148223	192.168.100.5	192.168.200.51	TCP	94 59218 → 502 [ACK] Seq=1 Ack=1 win=65532 Len=0
23	2016-03-09 17:13:49.191911	192.168.100.5	192.168.100.255	NBNS	92 Name query NB TAIPETOL<00>
24	2016-03-09 17:13:49.911037	192.168.100.5	192.168.100.255	NBNS	92 Name query NB TAIPETOL<00>