W7100A/W7100 Errata Sheet

Document History

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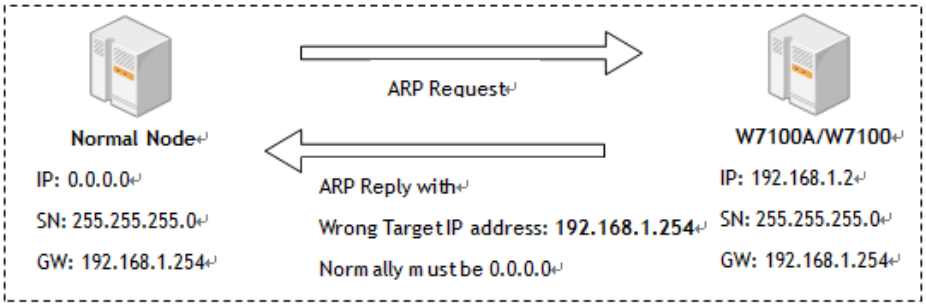
Erratum 1	
Phenomenon	**The W7100A/W7100 replies with gateway IP address for the ARP request from network node which has "0.0.0.0" IP address. But normally the W7100A/W7100 should replies with target IP address "0.0.0.0" not the gateway IP address.**
Condition	 The main reason of this erratum is subnet calculating logic. The W7100A/W7100 misunderstands the node locates other sub-network when target has "0.0.0.0" IP address. So the W7100A/W7100 set the target IP to the gateway IP instead of "0.0.0.0" and sends the ARP reply.
Solution & Recommendation	The "0.0.0.0" is abnormal IP address in common network so if any node has "0.0.0.0" in the network, stop its ARP processing until getting the valid IP address.

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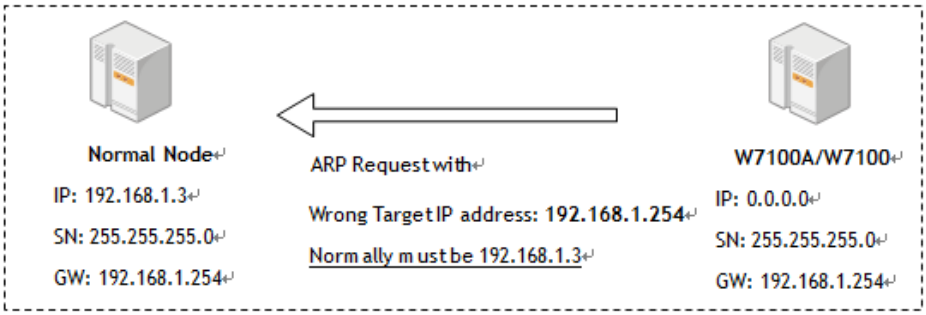
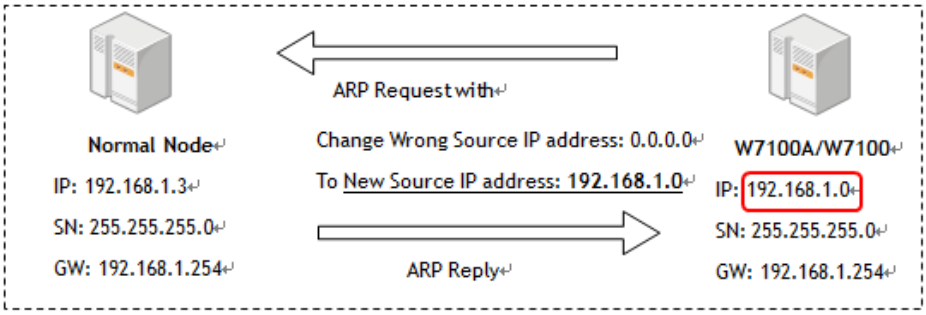
Erratum 2	
Phenomenon	**Assuming that the IP address of W7100A/W7100 is "0.0.0.0" and the gateway, subnet mask is valid (not "0.0.0.0"), the W7100A/W7100 set the target IP address of ARP request to the gateway IP address not the target node IP address when sends ARP request to another node. So the peer node cannot receive the ARP request from the W7100A/W7100.**
Condition	 The W7100A/W7100 miss calculates the sub-network location when sends the ARP request if its own IP address is "0.0.0.0". In the same condition, even if the gateway IP address is "0.0.0.0", the W7100A/W7100 sends ARP request to "0.0.0.0" IP address because the W7100A/W7100 sends ARP request to the gateway.
Solution & Recommendation	 Do not set the IP address of W7100A/W7100 to "0.0.0.0" to avoid this problem. If don't have valid IP address but want to send ARP request, please set the temporal IP address referring the gateway IP address and subnet mask. Normally common nodes cannot set zero IP address as its own IP address. So use this IP as a temporal IP address. For example, assuming that the gateway IP address is 192.168.1.1 and the subnet mask is 255.255.255.0, a temporal IP could be "192.168.1.0" or any unused IP could be the temporal IP address for the W7100A/W7100.

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