Restoring Lost IP Address Settings and Configurations to Zebra Label Printers

(Updated 8/21/2013)

This guide provides instructions for diagnosing and resolving the problem of a cache Zebra label printer losing its IP address setting. When each cache Zebra printer was first installed on a FS or BLM network, an ICBS-R Team Member, cache employee or agency network specialist configured the printer by entering and saving a number of settings on the printer using the printer keypad.

One crucial setting is the IP address. Each networked printer is assigned a unique IP address, which is how it communicates with the agency network it's connected to. For some reason, Zebra printers will sometimes lose their IP address setting. When this occurs, most people will automatically assume there is a problem with the network. This is a reasonable assumption, but it's not always the case.

Diagnosis

First and foremost, if print capability is lost, check the back of the Zebra printer. You will see a light. If it is blinking green, then the network connectivity is fine. If it is blinking any other color, generally red or yellow, there is a problem with the network. If this is the case, the appropriate agency helpdesk or network specialist must be notified for assistance (please see "Agency Helpdesk/Network Specialist Contact Information" at the end of this document).

If the light is blinking green and the printer is not printing, then there is some sort of configuration problem. The most common configuration problem is that the IP address setting has been lost.

Checking Configuration Settings:

The easy fix for this is, if you previously printed out the "List Network" and "List Setup," from the printer and have that available, is to go into the Zebra printer menu and (using the print-outs as your guide) check to see that the settings in the Zebra printer match the print-out settings. Pay particular attention to the menu options titled:

Setting	**Desired Value**	**Notes**
IP Protocol	Permanent	Needs to be set to Permanent to permanently retain the IP address after it's been entered

Setting	Desired Value	Notes
Head Close	Calibration	
Media Power Up	Calibration	
Communications	Normal Mode	
Protocol	None	This is not the IP Protocol
Media Type	Gap/Notch, Tear Off, Continuous, etc.	This depends on the type of label you're using
Print Method	Direct Thermal or Thermal Transfer	This depends on the type of label you're using

If you did **not** print out the printer configurations before the printer quit working, then it's too late to do so now, since the configuration settings were lost. What needs to be done at this point is to determine if your printer is a Zebra ZM4+ or if it is a ZM400. Although the menu options are virtually the same, they are in a sequentially different order. So, to avoid frustration, you will need to contact someone at another cache that has the same printer that you have, and either have them fax or email a copy of their printer configurations. Another option is, via a phone call, have someone that has the printout for your same model printer, read off the settings they have on their printer, as you check each setting on your printer.

Checking Default Gateway, Subnet Mask and IP Address Settings

We've now checked the settings and have changed those that needed to be restored to their defaults. The next step is to check the "Default Gateway," "Subnet Mask" (sometimes referred to as "Netmask") and "IP Address" Setting. Note that the Default Gateway and the Subnet Mask number strings are *usually* the same for all networked printers at a given cache. It is only the IP Address that is different for each respective printer. Here are some **sample** values:

- Default Gateway: 199.131.248.1
- Subnet Mask: 255.255.255.0
- IP Address: 199.131.248.10

If the values entered in your Zebra printer no longer match the values assigned by an agency network specialist, the correct settings will need to be reentered (note: if your printer loses these values, it will usually return to its factory defaults of 000.000.000.000 or 255.255.255.000 for these settings). Each cache should have a document containing the Default Gateway, Subnet Mask and IP address assigned to each networked printer at their cache. On the Zebra configuration print-outs mentioned earlier, these values will be listed on the "List Network" printout.

If you don't have this information at hand, contact the ICBS Helpdesk and they will contact an ICBS-R Team Member who can look up the information for you. They will need to know which printer you're having problems with (e.g. idcdk_zebra_ship_01; LMFCOP2E241ZZ1.blm.doi.net; etc.). Alternatively, you can open a ticket with the FS or BLM (depending on which agency provides your network), and they can provide this information to you.

Once you've obtained the correct Default Gateway, Subnet Mask and IP Address for your nonfunctioning printer, reenter the correct string of numbers for each; pressing the Set-up/Exit button on the printer to save the changes for each. If you are unsure of how to enter/change the Default Gateway, Subnet Mask and IP address please contact the ICBS Helpdesk, which can direct you to an ICBS-R SME for assistance.

Finally, go back through the menu to ensure that all the changes you have made to the settings have been saved and are correct. If all corrections have been entered properly and saved each time, your printer should now be back on line.

Making a Print-out With the Correct Settings:

After restoring all the default values and restoring your printer to service, remember to print a copy of the **"LIST NETWORK"** and **"LIST SETUP,"** and keep it near the printer for future reference.

Zebra Printer Users Guides:

For additional information on ZM400 Zebra printer configuration, setup and producing configuration print-outs, a user can go to the Zebra.com corporate website and view the Z/ZR Series Printer Quick Reference Guide:

http://www.zebra.com/content/dam/zebra/manuals/en-us/printer/z-rz-qrg-en.pdf

and User Guide:

http://www.zebra.com/content/dam/zebra/manuals/en-us/printer/z-rzseries-ug-en.pdf

Agency Helpdesk/Network Specialist Contact Information:

Forest Service Customer Help Desk (CHD) at: 1-866-945-1354

BLM Customer Help Desk at: 1-800-BLM-HELP (1-800-256-4357)

Two sources for local BLM network and printer trouble-shooting:

- For GBK: BLM NIFC Local Helpdesk: 208-387-5734; Natalie Wiklund: 208-387-5504
- For AKK: AFS IT Trouble Line: 907-356-5588

Additional Notes for GBK trouble-shooting: GBK's Local (BLM NIFC) Helpdesk will handle tickets for GBK printer problems locally. If the ICBS Helpdesk determines that a GBK printer issue is likely due to a network or printer configuration problem, the user should be advised to contact the Local Helpdesk for assistance. Likewise, if the Local Helpdesk determines that the issue is a system problem and not a problem with the network or printer, they will refer the user to the ICBS Helpdesk.

Additional Notes for AKK trouble-shooting: The local (BLM Alaska Fire Service) IT Trouble Line staff will handle tickets for AKK printer problems locally. If the ICBS Helpdesk determines that an AKK printer issue is likely due to a network or printer configuration problem, the user should be advised to contact the IT Trouble Line for assistance. Likewise, if the IT Trouble Line staff determines that the issue is a system problem and not a problem with the network or printer, they will refer the user to the ICBS Helpdesk.

IIA ("ICBS") Helpdesk contact Information:

1-866-224-7677
http://www.interagencyhelpdesk.com/
helpdesk@dms.nwcg.gov