Simple Procedure for Backing Up the Nautel NE-IBOC Exciter to the CBC File Server

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The Nautel NE-IBOC exciter stores its configuration files in a directory on the unit called "/usr/dab/irss-x.y.z", where "x.y.z" corresponds to the current iBiquity version of software installed on the machine. For instance, if you were running iBiquity version 2.3.3 the directory would then be called "/usr/dab/irss-2.3.3".

Additionally, there are some specific system configuration files that store the IP address, host name, and other important files. This document will demonstrate the procedure for backing up all the necessary files for the NE-IBOC.

Please note that this procedure has been tested on an AM NE-IBOC only. It has not been tested on an FM unit, nor has it been tested on a BE unit. However, given that iBiquity uses the same procedure for storing files on all their systems, it is quite possible that this procedure would work on numerous platforms. Anyone willing to experiment should report their results to me.

This document also assumes that you have a rudimentary knowledge about Linux configuration and networking. You should be able to bring up access to a Linux command prompt, either through an Xterm or through a remote login. Further, your NE-IBOC should be able to access the "outside world" through a standard Internet connection. If it cannot, then backing up the files to the CBC file server will be impossible. If you wish to backup the files to a local computer (i.e., a laptop or local desktop) then the information in this document will be a starting point for that procedure. However, the implementation of a procedure would be left up to the local engineer.

Here are the steps required to complete the backup using the CBC file server:

1. Request a login to the CBC file (SCP) server from Amanda Alexander (amandaa@crawfordbroadcasting.com). She will give you a username/password combination that will permit you to have access to the file server.
2. Log into the file server from any computer that has either PuTTY[1] (for shell access) or WinSCP[2] (for a GUI).
3. Create a directory, in your home directory, for each station you wish to backup. If you have three stations (KAAA, KBBB, KCCC) then create directories for each of those stations.
4. Log into the NE-IBOC, either using PuTTY (for a shell) or on the NE-IBOC itself by bringing up the "Command" screen and executing an "Xterm". (Consult your NE-IBOC manual for specific instructions on accessing the command shell from the NE-IBOC)
   a) If using a remote shell (such as PuTTY), login to the system as 'root'. Use the password created for the root user. The default password is 'password'.
5. Once you have a command shell available you should enter the following command:
   `scp -prv -P 30722 /etc/sysconfig [your_user_name]@216.17.146.17:~/[your_station]`
   a) Replace the section [your_user_name] with the user name you were assigned.
   b) Replace the section [your_station] with the call letters of the station you are backing up.
      - `scp -prv -P 30722 /etc/sysconfig joeblow@216.17.146.17:~/KAAA` {for example}
6. The system will ask you for your password. This is the password given to you by Amanda.
7. After you enter the password you should begin to see a scrolling list of files being backed up. These are the Linux configuration files. There shouldn't be very many of these. Depending on your Internet connection speed the command should complete within 10 minutes or so.
8. Next you must backup the iBiquity files. For this example we will back up every file (binaries and configuration files), however it is not necessary to backup the binary files, as the CD-ROM contains all of these.

1 http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html
2 http://winscp.net/eng/download.php

9. Execute the following command, using your login information and station call letters:
   `scp -prv -P 30722 /usr/dab [your_user_name]@216.17.146.17:~/[your_station]`
10. The system will again prompt for a password. After entering the password the backup should begin. This backup will take a fairly long time (up to two hours on a slow Internet connection) as it is backing up every file (including all the binary files) to the server. That is nearly 600MB of data to transfer to the server!
11. When the command completes you should log back into the file server again using either PuTTY or WinSCP and verify that the files were transferred.

If there are any questions about the procedure, please drop me a note!

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