

IRIS 8.04 Release Notes

These notes cover changes made in IRIS since release 8.03 of 26 September 2003. If you are upgrading from an earlier release, please read those notes also.

Installation Changes

1. On systems such as the **RVP8** in which the **DspExport** utility is launched at boot time, you should add the “-daemon” argument to the startup script. This is often located in your /etc/rc.d/rc.local file.
2. The installation file were renamed to end in “.tgz”, before they ended in “.gz”. This is to more accurately represent that these files are gzipped tar files.

Bug Repairs

1. Use of the new 8.03 **scp** feature for network output was blocked. There is a patch for 8.03 to fix this.
2. The **IrisToBufr** pipe program was broken since 8.00. The levels are now set according to the OPERA specification.
3. Changes also made to **BufrToIris**. It can now handle BUFR data with both missing corners, and missing center. It also no longer produces warning for some of the newer attributes added to **IrisToBufr**.
4. The changes to the RVP6 trigger waveforms in 8.03 were broken such that the ranges were wrong until **Ingest** is turned off then on again. There is a patch for 8.03 to fix this.
5. In **setup** output section the labeling on Slide Show option was reversed.
6. **zcal** now checks the current locale, so it can get the language correct.
7. In **ascope**, repaired some factor-of-two errors in spectral plots/readouts.
8. Fixed **rtdisp** which was not saving and loading the port number. Also fixed the sweep line color for 16 and 32 bit displays.
9. Extensive work was done on the **DspExport** function and the socket interface. All calls to both the dsp_lib and the dsp_i_lib will now connect over the socket. The eventual goal is to read all setup information directly from the dsp_lib. To this end, there is now a dsp_lib call to get the dsp_manual_setup structure. All applications should use this to get this information, and not use the dsp_load() function. Note that when using **DspExport**, you must manually maintain the zcalib.conf file on the two systems to keep them the same.

There is a new command “OPEN” to switch the connection from info-only to I/O. If you have a legacy client program which does not send the OPEN command, you can get legacy behavior from **DspExport** with the command line option “-803”. We have also added the “-daemon” option to **DspExport** which you should use in automatic startup scripts.

10. Work was done to improve the **AntExport** function. Now we have logging options for each direction. It correctly handles the case of the client program closing and restarting. Fixed a bug causing the last command to be continuously sent. Note that when using **AntExport**, you must manually maintain the `bitex.conf` and `bitex_wgt.conf` files to keep them the same.
11. The new slide show feature was broken on both SGI and HP platforms due to a byte swapping bug. On those systems it would display “Error WIN LOOP LOAD MISSING reply received”.

New Features

1. The IRIS message menu now shows the last 200 messages, up from 70.
2. Support has been added to IRIS and to the `dsp_lib` to fully support the maximum of 3072 range bins of the RVP8. The `dsp_bin_max()` function can now go up to 3072, as well as the real-time display. Note that for the RVP8, the `dspw_filt()` function now takes an array of 3072 words as input, as does the `LFILT` opcode. Customers who have written their own application programs should be aware of this.
3. Raised the maximum number of products allowed in the product schedule from 300 to 800.
4. The bite interface in `ant_lib` now has a new command called `BITE_SET_VALUES`. This is used in some cases to initiate transmission of control BITE packets. This is now available in the **bitex** interrogate menu. The purpose of this command is to prevent the RCP8 from sending a bite control packet until the control bits for that packet have been fully initialized by an application program.
5. The antenna library support processes **ant_xmt** and **ant_rcv** are now run as daemon processes. One of the advantages of this is that they will not stop sometimes when the RVP8 threads are stopped.

Setup Changes

1. **Setup/Output** for network outputs now has a new compression option called “TIFF PackBits”. This is applicable only to TIFF outputs. It allows the customer to explicitly control whether the TIFF PackBits compression is on or off. There is no need to use other compression schemes on TIFF products because the built in compression is very good. Starting in release 7.23 the TIFF compression was turned on all the time. Previous to that the compression flag controlled this.
2. **Setup/RVP** now has a new question in the *Optional Data Parameters* section. If you enable polarization diversity, the new question “HV off time before Polar change” allows you to enter a time. A value of zero gives you the legacy behavior. A nonzero value means that whenever the polarization is changed, the high voltage is turned off first, then the polarization change is made after the delay. The system waits until the new

polarization setting is confirmed, or the “Max Wait for Polarization” time has expired.
On systems which cannot sense the polarization state, the max time is always used.