

IRIS 8.01 Release Notes

These notes cover changes made in IRIS since release 8.00 of 4 April 2003. If you are upgrading from an earlier release, please read those notes also.

Important Upgrade Notes

1. To support the new **RVP8** Manual online, you will need to make changes to your `${IRIS_CONFIG}` profile file. Change the env variable `IRIS_MANUALS_RVP6` to `IRIS_MANUALS_RVP8` by simply changing all the 6's to 8's. Also add a new line defining the extras directory such as:

```
export IRIS_MANUALS_EXTRA="${IRIS_ROOT}/manuals/extras/"
```

The extras directory can include customer written documents. When upgrading from 8.00 to 8.01 you must install the manuals because some programs expect to find the RVP8 manual. The *RVP6 User's Manual* is no longer supplied online, and the **manuals** and **install** utility will now reference the **RVP8** manual.

Bug Repairs

1. Repaired a bug in **install** introduced in 8.00: Installing an IRIS 8.00 release after an RDA 8.00 release would damage the RDA install. You can now install the releases in either order. Be sure to press the button "keep old files" in such a case.
2. Repaired automatic conversion of IRIS V1 format files. This was broken since 1996! V1 format files were produced by IRIS before version 5.25, before 1995.
3. Repaired a bug in the **setup** utility: In certain cases the setup menus would appear with all the text on the right side blank. This varied a lot on different OS versions. It was always fixed by moving the window.
4. Another **install** bug fixed: Instiris will now give warning messages if any of the requested installation files are missing. The following directories in the `${IRIS_BIN}` directory have been moved to the `${IRIS_ROOT}/config_template` directory: extras, LINUX, HP-UX, IRIX. This fixes another bug: the contents of these directories were erased when doing a network upgrade from just the app.gz file.
5. The **setup** File/List button was making the wrong listing file for many of the individual setup menus. It worked correctly from the parent menu.
6. Repaired a bug in the COMP product. In some cases it was attempting to composite in additional radar sites not selected in the menu. This could cause warning messages about unknown sites, additional radars appearing in the composite, and extra delays while it waits for the additional radar data. This bug dates back to when the COMP product was originally developed in 1999.
7. Repaired a bug in passive **ingest**: In multi-tasking mode it would sometimes never run the task. This was due to an uninitialized variable, and dates back to April 1998 when we first added the passive mode.

New Features

1. **Ingest** and **ascope** now have a new feature called “range smoothing”. This allows averaging several bins in range, but not reducing the output range bin count.
2. **Sigbru** will now allow you to make a backup without root privilege. Note that restore is still not allowed.
3. IRIS now includes an output pipe called **IrisToAsterix**. This is to convert to Eurocontrol’s ASTERIX data format using the representation called “Shaded Areas of Cartesian Vectors”. Note that the asterix format is a 3-bit format. That is 0–7, where 0 means below the lowest color (and also area-not-scanned). You should make up a special color scale for asterix with 8 or 7 levels. You can then both display on the color display with this scale, and you can output to the pipe using this scale. Note that on the display each of the 7 levels is split into 2 colors, in the asterix file the colors are not split.

Asterix products are limited in size to 256x256 pixels (actually +/-128 from the radar). It only supports the AED projection, and only intensity data types (dBT, dBZ, or rainrate), and only CAPPI, PPI, and SRI product types. The product scale in nm/pixel must be an integer power of 2. The converter will log the scale error when it make a product. This all combines to mean that you must make a special product for asterix conversion. Please see the *IrisToAsterix.conf* file for some more details.

4. **AsterView** is a new program to test the asterix files produced by *IrisToAsterix*. It can print out various levels of detailed header information. If the data file consists of Cartesian vectors, it will build an array of the vectors, and display it. You can compare it with your radar picture. Type *AsterView -h* to see the command line options.
5. Enhancements were made to **upi_xmt** to support testing the input socket notification.
6. Enhancements also made to **upi_rcv** to support testing the output socket notification.
7. IRIS now includes new pipe programs to convert back and forth between NORDRAD2’s HDF5 format and IRIS format. Many product types and data types are supported.
8. The **change_raw** utility now has a new option “–scan” which tells you if your file is swapped and which version format it is.
9. Added full support within IRIS for the Gnomonic projection.

Setup Changes

1. IRIS inputs now can select a form of input notification. They use either polling or socket notification. Polling is the legacy mechanism, so set it to polling in all cases for now. The socket notification uses a message just like our normal network receiver, just using a different port number.