

## 9.5 IRIS General Setups

### 9.5.1 Modes and Protocols

<i>Modes and Protocols</i>		<i>Help</i>
Timezone for data recording	<input type="checkbox"/> Local Time	
Operating system's time	<input type="checkbox"/> Unaffected by IRIS	
Memory-mapped I/O	<input checked="" type="checkbox"/> Available in OS	
External RCP mode change	<input type="checkbox"/> Disabled	
External socket mode change	<input type="checkbox"/> Disabled	
Status product mode change	<input type="checkbox"/> Disabled	
Response to fatal errors	<input checked="" type="checkbox"/> Restart Processes	
Maximum number of IRIS clients	10 clients	

- *Timezone for data recording* — This controls whether the task schedule and the product schedule are run on UTC or on local time. Also the times shown in the menus and in the file names. Note that in either case, you should set your computers system clock to the correct local time zone. In both cases, IRIS records all the information needed to display the data using either UTC or local time. If this is set to “Local Time”, be sure to use a local time zone which does not switch to and from summer time. If set to “UTC”, it is OK to have the summer time switch.
- *Operating system's time* — Select “select from RCP” to indicate whether the INGEST process should set the system time from the RCP serial line time reports if the time difference is between two and twenty seconds. For values higher than that, it signals a message.  
  
If your RCP does not report the time, select “unaffected by IRIS.”
- *Memory mapped I/O* — Select either “Available in OS” for most systems or “unsupported” for HP9000/800, which does not support a memory mapped I/O file.

- *External RCP mode change* — Answer “enabled” if you want to allow the RCP to control the IRIS configuration that is loaded into the Radar Status menu. This is only available on radar systems, set to “disabled” on analysis systems. If enabled, then the *External socket mode change* feature below is not available, and the automatic mode switch button on the Radar Status menu is not manually controlled.
- *External socket mode change* — Answer “enabled” if you want to allow socket messages to control the IRIS configuration that is loaded into the Radar Status menu. If enabled the automatic mode switch button on the Radar Status menu is not manually controlled.
- *Status product mode change* — Answer “enabled” if you want to slave your system’s mode to another IRIS system. Whenever a status product arrives from the selected system, your IRIS will change to match the mode. This is used for redundant system switching. If enabled, you will see:
  - *Supplied by (Site Code)* — Enter the site you wish to slave to.
- *Response to fatal errors* — Select “Restart Processes” or “No Action” to indicate whether you want IRIS processes to restart automatically after a fatal error occurs.
- *Maximum number of IRIS Clients* — Enter the maximum number of IRIS client menu programs that can be connected to the IRIS server at one time. A suggested value for this is 10. IRIS takes about 30 seconds to free a client slot upon disconnection, so this parameter should be set slightly larger than the actual maximum number you want. The menus display the message “IRIS is not running on the selected node” if the client table is full.

## 9.5.2 Speech and Signaling

<i>Speech and Signaling</i>		<i>Help</i>
Signal network warnings <	<input type="button" value="i"/> 600 seconds old	
Speak/Beep text products	<input type="checkbox"/> No	
Speak/Beep mode changes	<input type="checkbox"/> No	
Speak/Beep fatal errors	<input type="checkbox"/> No	
Speak/Beep BITE faults	<input type="checkbox"/> No	

- *Signal network warnings less than* — When a product that contains a warning is received over the network, a signal and beep will be produced if the data time is within the following number of seconds of the current time. Zero means do not signal at all. The default setting is 600 seconds old.
- *Speak/Beep text products on arrival*  
*Speak/Beep mode changes*  
*Speak/Beep fatal errors*  
*Speak/Beep BITE faults*

IRIS can be configured to generate spoken output for important messages. Warning instances are configured in the PRODUCT configuration menu. Other possible speech options are configured here. Any of the options can be turned off by selecting “No.” This setup can be overridden by the newer message configuration file.

### 9.5.3 File System Quotas

<b>File System Quotas</b>		<b>Help</b>
Total space for INGEST files	90.0 megabytes	
Kept INGEST file space	50% of total	
Total space for RAW products	125.0 megabytes	
Kept RAW-Product file space	50% of total	
Total space for Other-Products	160.0 megabytes	
Kept Other-Product file space	50% of total	

- *Total space for INGEST files* — When the INGEST data exceeds this level, old data is automatically deleted. It is important to keep at least 10% of the disk free when the INGEST, RAW, and other product files have reached their maximum usage. To estimate the available space for these files, delete all the files, then find out how much disk space is available by typing **df**.

Take the free size minus 10% of the full size and divide by 2000 to convert blocks to megabytes.

- *Kept INGEST file space* — Enter the percentage of the total disk space that can be used for kept ingest files (files that cannot be deleted by the Watchdog process). When the kept files exceeds this quota, the oldest are deleted first. A reasonable value is 50%.
- *Total Space for RAW Products* — When file space used by RAW product data exceeds this level, old data are automatically deleted.
- *Kept RAW-Product File Space* — Enter the percentage of the total disk space that can be used for kept raw product files. When the kept files exceeds this quota, the oldest are deleted first. A reasonable value is 50%.
- *Total space for Other-Products* — When the file space used by non-RAW product data exceeds this level, old data are automatically deleted.
- *Kept Other-Product file space* — Enter the percentage of the total that can be used for kept product files. If the kept files exceed this quota, the oldest are deleted first. A reasonable value is 50%.

Kept Other-Product file space	50% of total
Maximum Products on Disk	5000
Maximum Products on Archive	40000
Number of LOG files to retain	5

- *Maximum products on Disk* — This is the maximum number of products which will be allowed on disk at one time. It is used to allocate memory for the inventory. A value like 10000 might be typical.
- *Maximum products on Archive* — This is the maximum number of products which be allowed on an archive media. Configure this dependent on your media capacity. A value like 20000 would be a good starting point.
- *Number of LOG files to retain* — IRIS produces a new message log file each time it is started. Often operators restart IRS or reboot the computer to solve a problem during critical data recording. Keeping old log files preserved allows postanalysis of these problems. Log files are kept in the \${IRIS\_LOG} directory.

## 9.5.4 Run-Time Priorities

***Run-Time Priorities***
***Help***

INGEST process priority	<b>i</b>	-8
INGFIO process priority	<b>i</b>	-8
INPUT process priority	<b>i</b>	0
PRODUCT process priority	<b>i</b>	8
REINGEST process priority	<b>i</b>	8
NETWORK process priority	<b>i</b>	4
OUTPUT process priority	<b>i</b>	4
ARCHIVE process priority	<b>i</b>	4
SERVER process priority	<b>i</b>	0
WATCHDOG process priority	<b>i</b>	0

- *Process priority* — Set the priority of each IRIS process. This is what is called the “nice priority” on UNIX systems. Almost all the normal processes run at nice priority 0. Valid numbers are in the range -20 to +20, and the **ps** command shows these numbers with 20 added to them. The smaller the number, the higher the priority, suggested values are shown.

### 9.5.5 Window Alert Configuration

**Window Alert Configuration** Help

Alert Style Red X and Text

Display alert for site faults ☒ Yes

Multi-site fault rule FAULT on one

Display alert for stale image ☒ Yes

Display timeout **i** 6.0 minutes

Window alerts are a way of displaying important fault information in a way impossible to ignore. This consists of displaying a big red “X” on top of the display, and/or a big text message indicating what is wrong. This is intended to clearly indicate that the displayed data is suspect.

- *Multi-site fault rule* — This controls both the widow alert, and the summary shown on the RST menu. You can display a fault if either any one system has failed, or require that all systems fail. The list of sites to consider is selected below in the site name section.
- *Alert Style* — Choices here are: “Disabled”, “Red X and Text”, “Red X Only”, and “Text Only”. Selecting “Disabled” turns off the feature, and the remaining questions.
- *Display alert for site faults* — You can enable alerts based on the site fault summary shown on the RST menu. Note that an alert is shown for timeout and critical faults only. Normal faults do not alert.
- *Display alert for stale image* — You can enable an alert when the image displayed on the screen is not current. This is to prevent operators from seeing an old image for many hours without realizing it. This is only done in auto-update mode.
- *Display timeout* — Controls how long since the last update before alerting that it is a stale image.

## 9.5.6 Site Names and Site Codes

<i>Site Names and Site Codes</i>		<i>Help</i>
Site #0 (Unknown) code	<input type="text" value="XXX"/>	
Check for Fault	<input type="checkbox"/> No	
Site #1 name	<input type="text" value="SIGMET, humid"/>	
Code	<input type="text" value="HUM"/>	
Check for Fault	<input type="checkbox"/> No	
Site #2 name	<input type="text" value="NOAA, RHBrown"/>	
Code	<input type="text" value="RHB"/>	
Check for Fault	<input type="checkbox"/> No	
Site #3 name	<input type="text" value="SIGMET, haze"/>	
Code	<input type="text" value="HAZ"/>	
Check for Fault	<input type="checkbox"/> No	

- *Unrecognized site code* — The recommended value for the unrecognized site code is “XXX.” This is used for all data that does not match anything else in the table.
- *Check for Fault* — Only sites marked will be included in the RST summary and window alerts. This allows you to exclude unimportant display systems.
- *Site #(1–19) name/code* — The remainder of the questions define three-letter site codes for all the expected IRIS sites that generate data on this system. Site codes appear in the Product Output, Ingest Summary, and other menus to indicate the source site. Note that this table is case-sensitive. If you want to remove a site, enter “\*” for the site name and code.

There can be a maximum of 20 sites defined, i.e., the unrecognized site, plus 19 others.