

MIB Multicast Address Usage

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Description =====

This file lists all multicast addresses in use on the MIB in Framework code revision 0.19.

The addresses are broken up by Receiver (RX) and Transmitter (TX). There are currently no multicast addresses that are both.

Port Number Assignments =====

Here are the port numbers being used for each type of output, regardless of the address used for that type of output.

Output Type	Port
archive data	20010
alert data	20011
screen data	2004
logger output	20000

Multicast Addresses Definition =====

RX Multicast Addresses =====

224.000.000.001 All-hosts group
224.000.001.001 NTP group (uses NTP_PORT)

TX Multicast Addresses =====

TX Address Formation =====

Three methods are available in the MIB to form the data addresses, and two are available to form the logger address in 0.19 and later MIB code.

Data addresses (archive, alert, and screen) can be formed by one of the following methods:

- 1) in the configuration XML file in the device "ipsetup".
- 2) by turning off the code that uses site and antenna ID to form defaults
- 3) by turning on that code.

The code that uses site and antenna ID to form the addresses is currently turned off in the MIB code via a compiler symbol; with it turned off the default addresses shown below are created. With it turned on, the addresses listed under "Site and Antenna ID Based TX Multicast Addresses" are used.

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Current Default TX Multicast Addresses:

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239.192.000.001 - archive data
239.192.000.002 - alert data
239.192.000.003 - screen data
239.192.002.001 - logger output

Site and Antenna ID Based TX Multicast Addresses:

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These have the form 239.192.SSS.XXX, where:

SSS is the site location field as follows:

Base address value is 0 for the AOC and 1 for the VLA.
0 is the default if the code can't determine the site location.

To that base value, add one of the following offsets:

data address + 0 offset
logger address + 2 offset

So, AOC data address value for SSS is 0, and logger address is 2.
VLA data address value for SSS is 1, and logger address is 3

XXX is the antenna ID field as follows:

The base address value is derived from the Antenna ID.
The Antenna ID is normalized to fall in the range 0 to 49.
If the ID is > 100, subtract 100; otherwise, subtract 50.

To that base value, add the following offsets for each type of address:

archive or logger address offset is +0
alert address offset is +50
screen address offset is +100
So for Antenna ID 0 (the Control Building), the result would be 0
for archive and logger, 50 for alert, and 100 for screen.

Examples of addresses formed when using site location and antenna ID:

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Antenna 13 at the site:

Address	Function
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239.192.001.013	archive data
239.192.001.063	alert data
239.192.001.113	screen data
239.192.003.013	logger output

Bench/office systems (Antenna 98) at the AOC:

Address	Function
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239.192.000.048	archive data
239.192.000.098	alert data
239.192.000.148	screen data
239.192.002.048	logger output

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Test Rack (Antenna 99) at the AOC:

Address	Function
239.192.000.049	archive data
239.192.000.099	alert data
239.192.000.149	screen data
239.192.002.049	logger output