

## Is there any way to read the library version via API?

### Model:

ARC Series C Adapter (10G-PCIE2-8C2-2S)

### Software:

Sniffer (Version 3)

### Operating System:

Support both the Linux and Windows Operating System.

### Information:

The version management is defined by a 16bit value that is used to indicate major API version differences or what would be incompatible differences between a rev of the API, these are represented as differences in the upper 8b of the 16b API value. The lower 8b reflect minor differences between the revs of the API but are not incompatible.

The history and latest version of the API can be found in `snf.h`, which is included in the include folder of the installed RPM. For your convenience I cut out the SNF version of the v3 API below this, providing its C comment about the history of revs and the current API rev, 0x0007, which is represented in the constant: `SNF_VERSION_API`.

There is a function, `SNF_FUNC(uint16_t) snf_version_api (void)`, that nTOP can invoke to get the SNF API version (it just returns `SNF_VERSION_API` as defined in `snf.h`).

At some point in nTOP's app they must invoke `snf_init ()` and its only argument is to pass in the SNF API that it has coded to. For example, let's say that the last rev nTOP coded to was 0x0003 they would pass that in and in `snf_init ()` it will determine if the application can use the current rev of the SNF API. If there were a difference in the upper 8b of what the customer passes in vs. what is defined in `SNF_VERSION_API` of `snf.h` that they are building against then it would fail. The idea is to catch incompatible API differences, minor ones (lower 8b) are fine. Although internal to SNF it will deal with the minor differences for your application automatically so your app will work seamlessly.

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- . SNF API version number (16 bits)
- . Least significant byte increases for minor backwards compatible changes
- . in the API. Most significant byte increases for incompatible changes in the API



```

*
. 0x0007: Add Multiple Application support and snf_set_app_id() function.
*
. 0x0006: Internal driver/library API changes.
*
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*
. 0x0004: Add more injection support and aggregate port opens
*
. 0x0003: Add injection support and 3 send counters in statistics.
*
. 0x0002: Add nic_bytes_rcv counter to stats to help users calculate the
. amount of bandwidth that is actually going through the NIC
. port.
*/
#define SNF_VERSION_API 7

```

<u>Revision</u>	<u>Date</u>	<u>Change</u>
1	8/15/2016	Initial Draft