How can I monitor the fullness of the receive ring in Sniffer10G?

**Model:**

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

**Software:**

Sniffer10G

**Operating System:**

Supports both Windows and Linux operating systems.

**Information:**

For full details, please read the Sniffer10G API Documentation, available in the `/share/doc/directory` in the software distribution.

Sniffer10G version 2.x/3.x has this function:

```c
int snf_ring_recv_qinfo(snf_ring_t ring, struct snf_ring_qinfo *);
```

With the structure as defined below:

```c
text/html
/** Queue consumption information **/

struct snf_ring_qinfo {
    uintptr_t q_avail; /**< Amount of data available not yet received (approximate) */
    uintptr_t q_borrowed; /**< Amount of data currently borrowed (exact) */
    uintptr_t q_free; /**< Amount of free space still available (approximate) */
};
```

All these values are in bytes.

Sniffer10G also has this function to obtain statistics from a receive ring.

```c
int snf_ring_getstats(snf_ring_t ringh, struct snf_ring_stats *stats);
```

With the structure as defined below:

```c
/**
 * Structure to return statistics from a ring. The Hardware-specific counters apply to all rings as they are counted before any demultiplexing to a ring is applied.
 */
```
New packets are dropped if the ring is full. There is no warning for when the ring might overflow. The
\texttt{snf\_ring\_recv\_qinf()} and \texttt{snf\_ring\_getstats()} are written to non-invasively check the ring stats and it is left to the
application to use these functions to monitor the ring.

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