

# Trace SharedMemTransport::send() and SharedMemTransport::push\_discard() functions in shm layer

```
nm -D /opt/ros/humble/lib/libfastrtps.so | grep SharedMemTransport
```

```
# Attach uprobes to your functions
```

```
b.attach_uprobe(name="/opt/ros/humble/lib/libfastrtps.so",sym="_ZN8eprosima7fastdds4rtps18SharedMemTransport4sendEPKhjPNS1_16LocatorsIteratorES6_RKNSt6chrono10time_pointINSt7_3_V212steady_clockENS7_8durationIISt5ratioLI1EL1000000000EEEEEE",  
fn_name="trace_write")
```

```
b.attach_uprobe(name="/opt/ros/humble/lib/libfastrtps.so",sym="_ZN8eprosima7fastdds4rtps18SharedMemTransport12push_discardERKSt10shared_ptrINS1_16SharedMemManager6BufferEERKNS_8fastrtps4rtps9Locator_tE", fn_name="trace_read")
```

SharedMemSegment::pop() ← actual memory read

↓

SharedMemTransport::push\_discard() ← filter / copy buffer

↓

TransportReceiverInterface::OnDataReceived() ← middleware delivery

↓

DataReader::take\_next\_sample() ← application fetch