

# 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="_ZN8eprrosima7fastdds4rtps18
SharedMemTransport4sendEPKhjPNS1_16LocatorsIteratorES6_RKNSt6chrono10time_pointIN
S7_3_V212steady_clockENS7_8durationISt5ratioIIL1ELI1000000000EEEEEE",
fn_name="trace_write")
b.attach_uprobe(name="/opt/ros/humble/lib/libfastrtps.so",sym="_ZN8eprrosima7fastdds4rtps18
SharedMemTransport12push_discardERKSt10shared_ptrINS1_16SharedMemManager6Buffer
EERKNS_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
```