

The `relid.c` file contains a single function, *relativize_id*, which is used to calculate a relative identifier (ID) based on the sequence number of a packet.

The function takes two arguments: *seqnum*, which is the sequence number of the packet, and *ip_id*, which is a pointer to the IP ID of the packet.

Inside the function, two static variables *last_seq* and *last_id* are used to store the sequence number and IP ID of the last packet processed by the function. These are initialized to 0 and -1 respectively.

The function first backs up the current *ip_id* into *backup_id*. Then, if *last_id* is -1 (which means this is the first packet), it sets *last_id* and *last_seq* to the current *ip_id* and *seqnum*.

If this is not the first packet, the function calculates the difference between the current sequence number and the last sequence number (*seq_diff*). If *seq_diff* is greater than 0, it means the packets are in sequence.

In this case, the function calculates a new *ip_id* based on the difference between the current and last IP IDs, divided by *seq_diff*. If the last IP ID is greater than the current IP ID, it means the IP ID has wrapped around, so the function adds (65535 - *last_id*) to the current IP ID before dividing by *seq_diff*.

The function then updates *last_id* and *last_seq* with *backup_id* and *seqnum*, and returns TRUE.

If *seq_diff* is not greater than 0, it means the packets are out of sequence. In this case, the function increments a global counter *out_of_sequence_pkt* and returns FALSE.