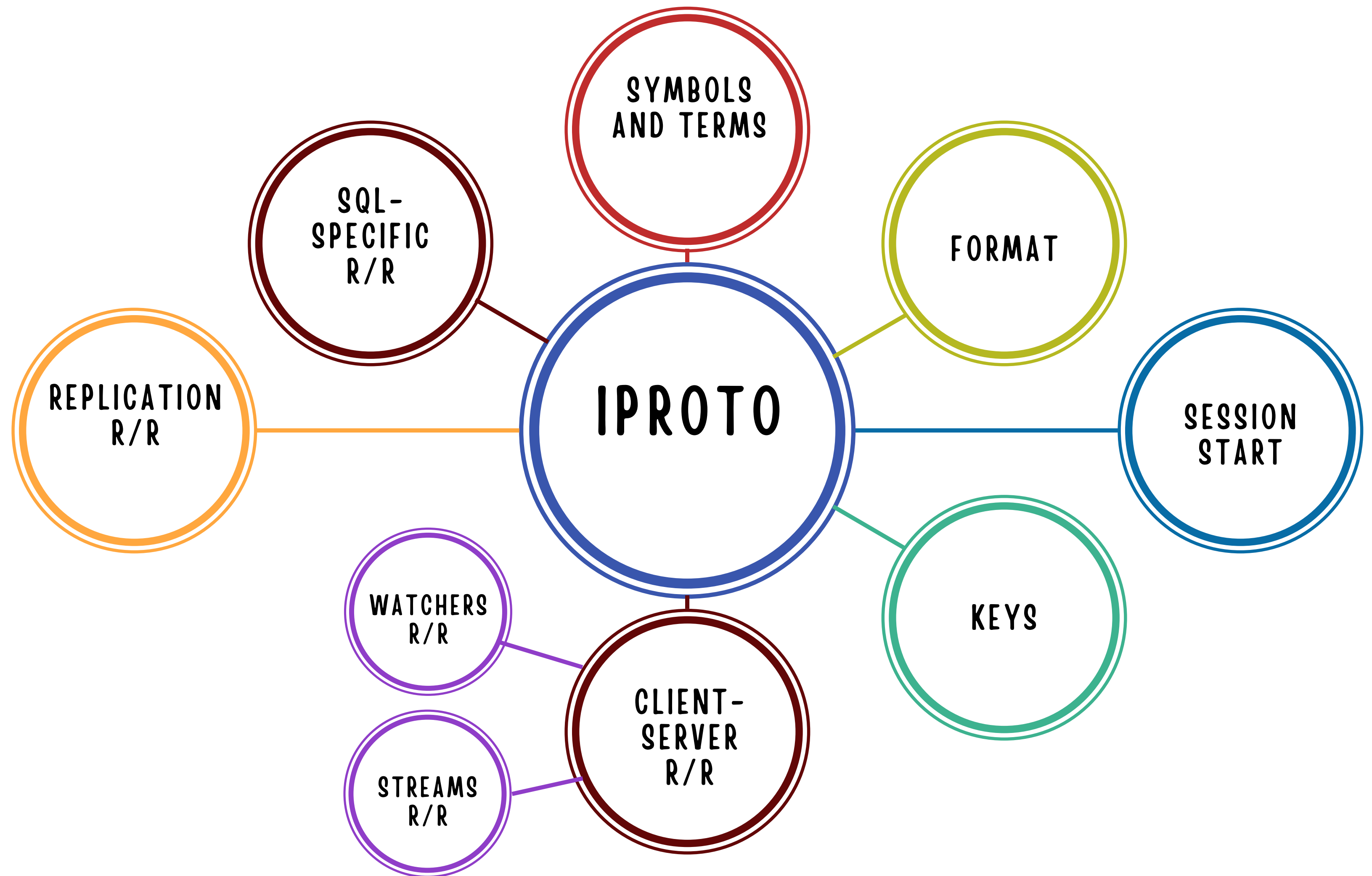




Introduction



**What is
iproto?
Purpose?**



**Encoding
and decoding**

Symbols and terms



**MP_
MessagePack
types**



**Example
description
convention**

Format



General packet structure

- Size
- Header
- Body



Header

Link to:

- SYNC
- SCHEMA_VERSION
- STREAM_ID (insert Streams info)



Request body

- Can be absent or empty map



Response body

- IPROTO_OK if no error
- Contains error code if error
- SQL: different body, link to SQL

Session start



Greeting



Authentication

- [Link to IPROTO_AUTH](#)

Keys

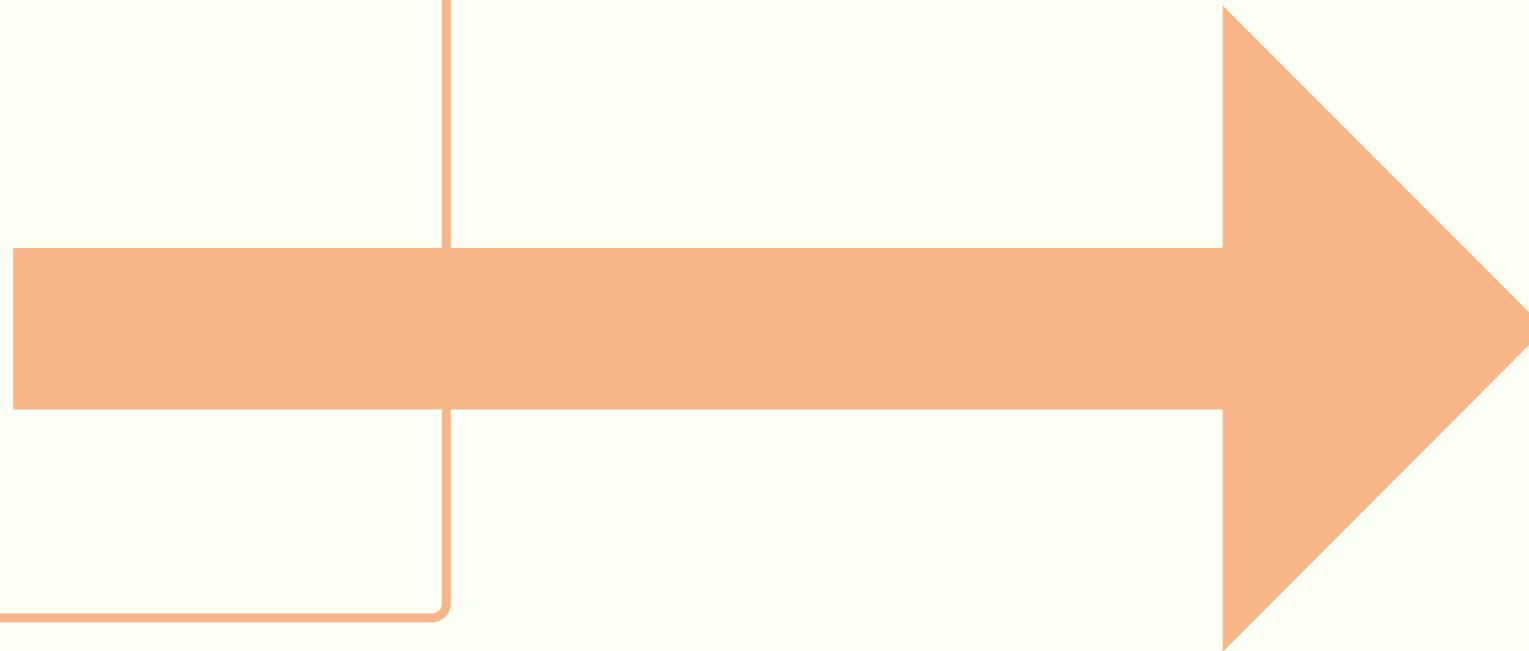


General table

- General
- Replication
- Watchers
- SQL-specific



Details



Keys



General

- IPROTO_VERSION
- IPROTO_FEATURES
- IPROTO_SYNC
- IPROTO_SCHEMA_VERSION
- IPROTO_STREAM_ID
- IPROTO_LSN
- IPROTO_TIMESTAMP
- IPROTO_TXN_ISOLATION
- IPROTO_OK
- IPROTO_ERROR
- IPROTO_ERROR_24
- IPROTO_CHUNK
- IPROTO_DATA
- IPROTO_LSN

- IPROTO_SPACE_ID
- IPROTO_INDEX_ID
- IPROTO_REQUEST_TYPE
- IPROTO_KEY
- IPROTO_LIMIT
- IPROTO_OFFSET
- IPROTO_ITERATOR
- IPROTO_INDEX_BASE
- IPROTO_TUPLE
- IPROTO_TUPLE_META
- IPROTO_FIELD_NAME
- IPROTO_FIELD_TYPE
- IPROTO_FIELD_COLL
- IPROTO_FIELD_IS_NULLABLE
- IPROTO_FIELD_IS_AUTOINCREMENT
- IPROTO_FIELD_SPAN

- IPROTO_OPS
- IPROTO_TIMEOUT
- IPROTO_EXPR
- IPROTO_FUNCTION_NAME
- IPROTO_USER_NAME

Watchers

- IPROTO_EVENT_KEY
- IPROTO_EVENT_DATA

Keys



Replication

- IPROTO_REPLICA_ID
- IPROTO_INSTANCE_UUID
- IPROTO_RAFT_TERM
- IPROTO_RAFT_VOTE
- IPROTO_RAFT_STATE
- IPROTO_RAFT_VCLOCK
- IPROTO_RAFT_LEADER_ID
- IPROTO_RAFT_IS_LEADER_SEEN
- IPROTO_VCLOCK
- IPROTO_CLUSTER_UUID
- IPROTO_BALLOT
- IPROTO_BALLOT_IS_RO_CFG
- IPROTO_BALLOT_IS_RO
- IPROTO_BALLOT_VCLOCK
- IPROTO_BALLOT_GC_VCLOCK

- IPROTO_BALLOT_IS_ANON
- IPROTO_BALLOT_IS_BOOTED
- IPROTO_BALLOT_CAN_LEAD

Synchronous replication:

- IPROTO_FLAGS
- IPROTO_FLAG_COMMIT
- IPROTO_FLAG_WAIT_SYNC
- IPROTO_FLAG_WAIT_ACK
- IPROTO_ID_FILTER

SQL-specific

- IPROTO_OPTIONS
- IPROTO_METADATA
- IPROTO_BIND_METADATA
- IPROTO_BIND_COUNT
- IPROTO_SQL_TEXT
- IPROTO_SQL_BIND
- IPROTO_SQL_INFO
- IPROTO_STMT_ID
- SQL_INFO_ROW_COUNT
- SQL_INFO_AUTO_INCREMENT_IDS

Client-server requests/responses



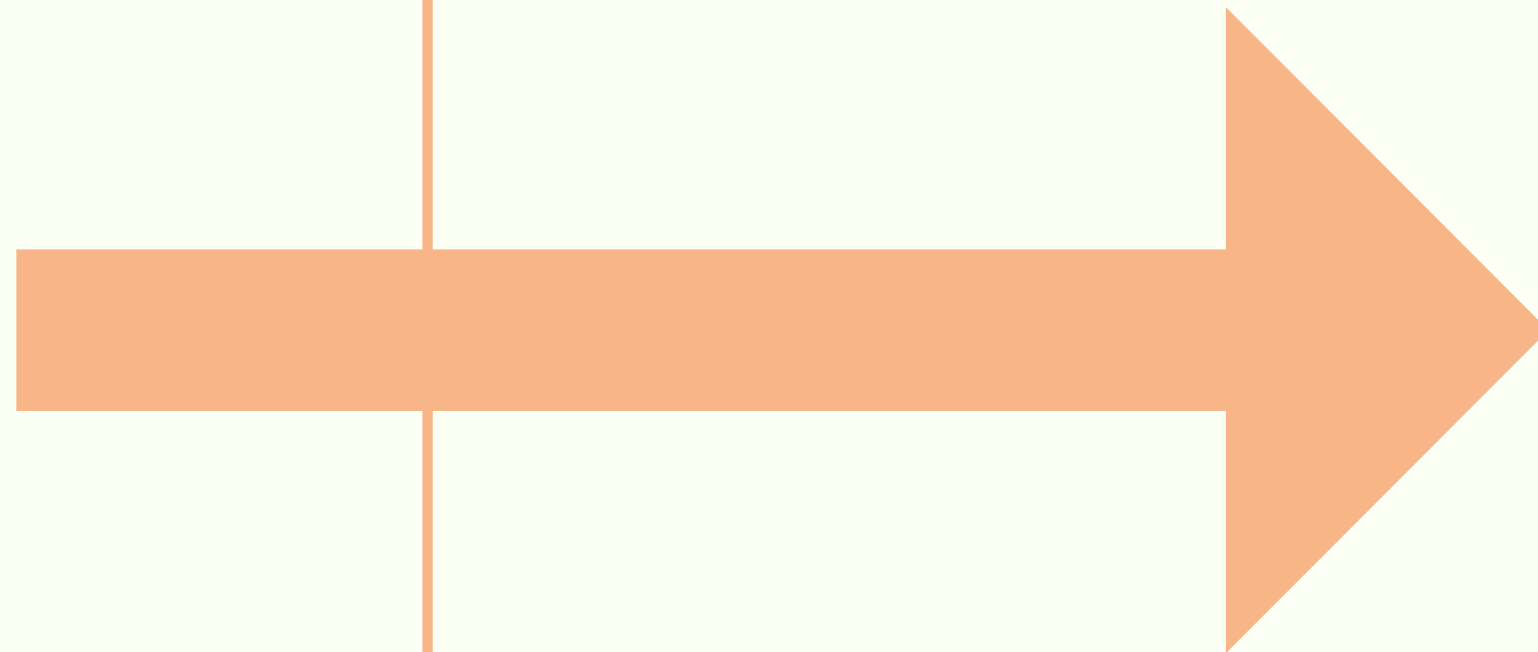
General table

Link to:

- Format
- Watchers
- Replication
- SQL-specific



Details



Client-server requests/responses



General

- IPROTO_ID
- IPROTO_AUTH
- IPROTO_PING
- IPROTO_NOP
- IPROTO_CALL
- IPROTO_CALL_16 (depr)
- IPROTO_EVAL

- IPROTO_SELECT
- IPROTO_INSERT
- IPROTO_REPLACE
- IPROTO_UPDATE
- IPROTO_UPSERT
- IPROTO_DELETE

Streams

- IPROTO_BEGIN
- IPROTO_COMMIT
- IPROTO_ROLLBACK

Watchers

- IPROTO_WATCH
- IPROTO_UNWATCH
- IPROTO_EVENT

Replication requests/responses



General table

Link to:

- Format
- General
- Watchers
- SQL-specific



Details: general

- Heartbeats
- IPROTO_BALLOT
- IPROTO_JOIN
- IPROTO_SUBSCRIBE
- IPROTO_REGISTER
- IPROTO_FETCH_SNAPSHOT

Details: synchronous

- IPROTO_RAFT
- IPROTO_RAFT_PROMOTE
- IPROTO_RAFT_DEMOTE
- IPROTO_RAFT_CONFIRM
- IPROTO_RAFT_ROLLBACK
- IPROTO_VOTE
- IPROTO_VOTE_DEPRECATED

SQL-specific requests/responses



General table

Link to:

- Format
- General
- Replication
- Watchers



Details

- IPROTO_EXECUTE
- IPROTO_PREPARE