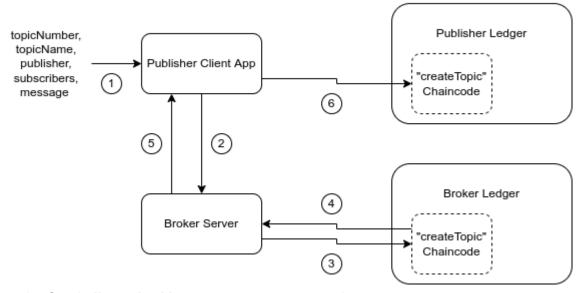
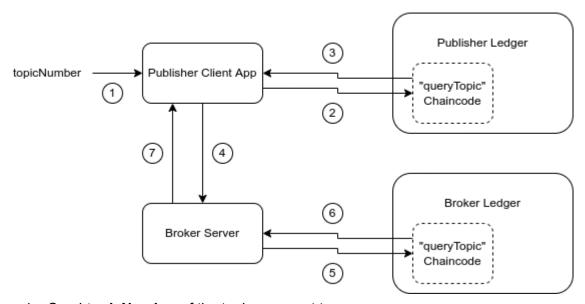
Create a new topic



- 1. Send **all required inputs** to create a new topic.
- 2. Client App sends a http request with all the inputs to Broker Server.
- 3. Broker Server invokes "createTopic" chaincode inside Broker Ledger with **all** received inputs.
- 4. "createTopic" chaincode creates a new topic inside Broker Ledger and sends back notification to Broker Server whether a new topic is successfully created or the topicNumber already existed inside Broker Ledger and so fails to create a new topic.
- 5. Broker Server sends back the **result** of the request to Client App.
- 6. If the creation is successful, Client App invokes "createTopic" chaincode to record **basic information** about the created topic.

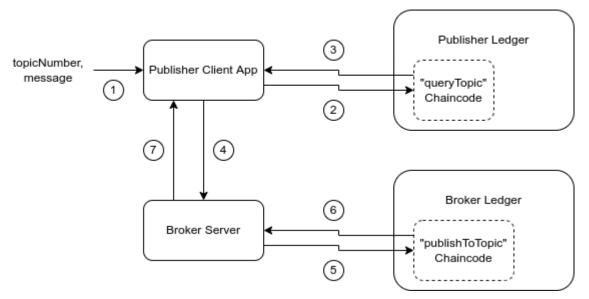
Query a topic



- 1. Send **topicNumber** of the topic you want to query.
- 2. Client App invokes "queryTopic" chaincode with the input **topicNumber** to check whether the topic exists or not.

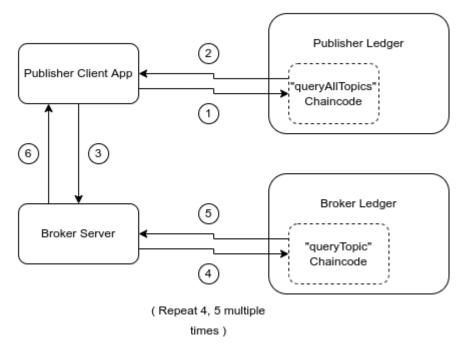
- 3. "queryTopic" chaincode sends a message to the Client App whether the topic exists or not.
- 4. If the topic exists then Client App sends a http request with **topicNumber** to Broker Server.
- 5. Broker Server invokes "queryTopic" with the received **topicNumber** to get data about the topic which is stored in Broker Ledger.
- 6. "queryTopic" chaincode sends back the requested **data about the topic** to Broker Server.
- 7. Broker Server sends back the requested data about the topic to Client App.

Publish to a topic



- 1. Send **topicNumber** of the topic and **message** you want to publish to the topic.
- 2. Client App invokes "queryTopic" chaincode with the input **topicNumber** to check whether the topic exists or not.
- 3. "queryTopic" chaincode sends a message to the Client App whether the topic exists or not.
- 4. If the topic exists then Client App sends a http request with **topicNumber** and **message** to Broker Server.
- 5. Broker Server invokes "queryTopic" with **topicNumber** and **message** to publish the message to the topic.
- 6. "queryTopic" chaincode sends back the notification about **whether successfully publish to the topic or not**.
- 7. Broker Server sends back the notification to Client App about **whether successfully publish to the topic or not**.

Query all topics



- 1. Client App invokes "queryAllTopics" chaincode to get all topics available on Publisher Ledger.
- 2. "queryAllTopics" chaincode returns **topicNumbers of all available topics** to the Client App.
- 3. Client App sends a http request with **topicNumbers of all available topics** to Broker Server.
- 4. Broker Server invokes "queryTopic" with the received **topicNumber** to get data about the topic which is stored in Broker Ledger.
- 5. "queryTopic" chaincode sends back the requested **data about the topic** to Broker Server.
- 6. Broker Server sends back data about all the requested topics to the Client App.