

Open Market Data Initiative

>> Canonical Messaging

Data is exposed to applications without exposing details of the wire format or underlying transport through self-describing messages containing strongly typed data (e.g., integer, floating point, string) together with field descriptions. Data elements may be simple (e.g., a price) or complex (e.g., time series pricing or a coupon payment schedule for a bond). For example, reference data is implemented with its own service, data schema and metadata, separate from real-time market data.

Use Case: Request/Response

The BLPAPI interface is comprehensive, clear and simple to use. This section illustrates the use of the request/response interface to obtain reference data.

The first step is for the application to establish a session with the server. This is trivial if authentication is not required as the following sequence diagram shows:

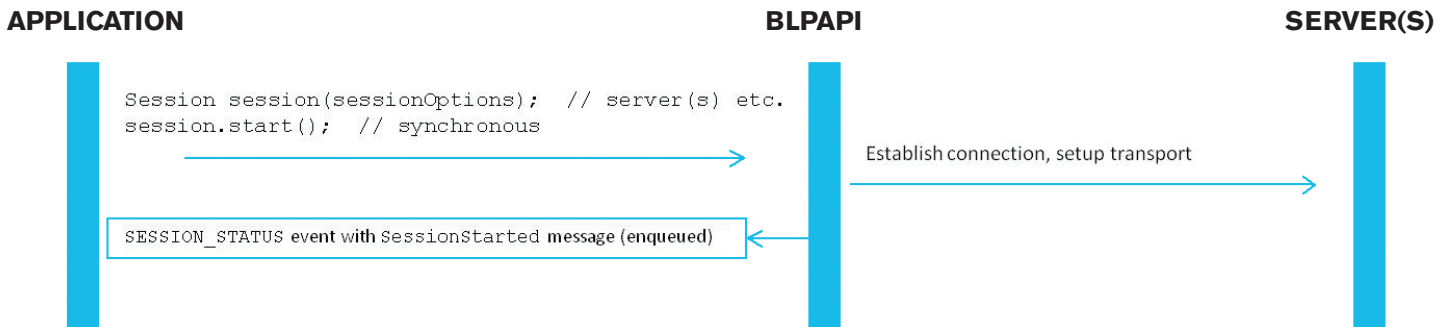


Figure 2. Session establishment (using synchronous API)

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In the next step, a synchronous request is made for specific fields for a single security. Note that the service needs to be opened only once, no matter how many requests are made. The response(s) provide the requested information, and the use case is complete:

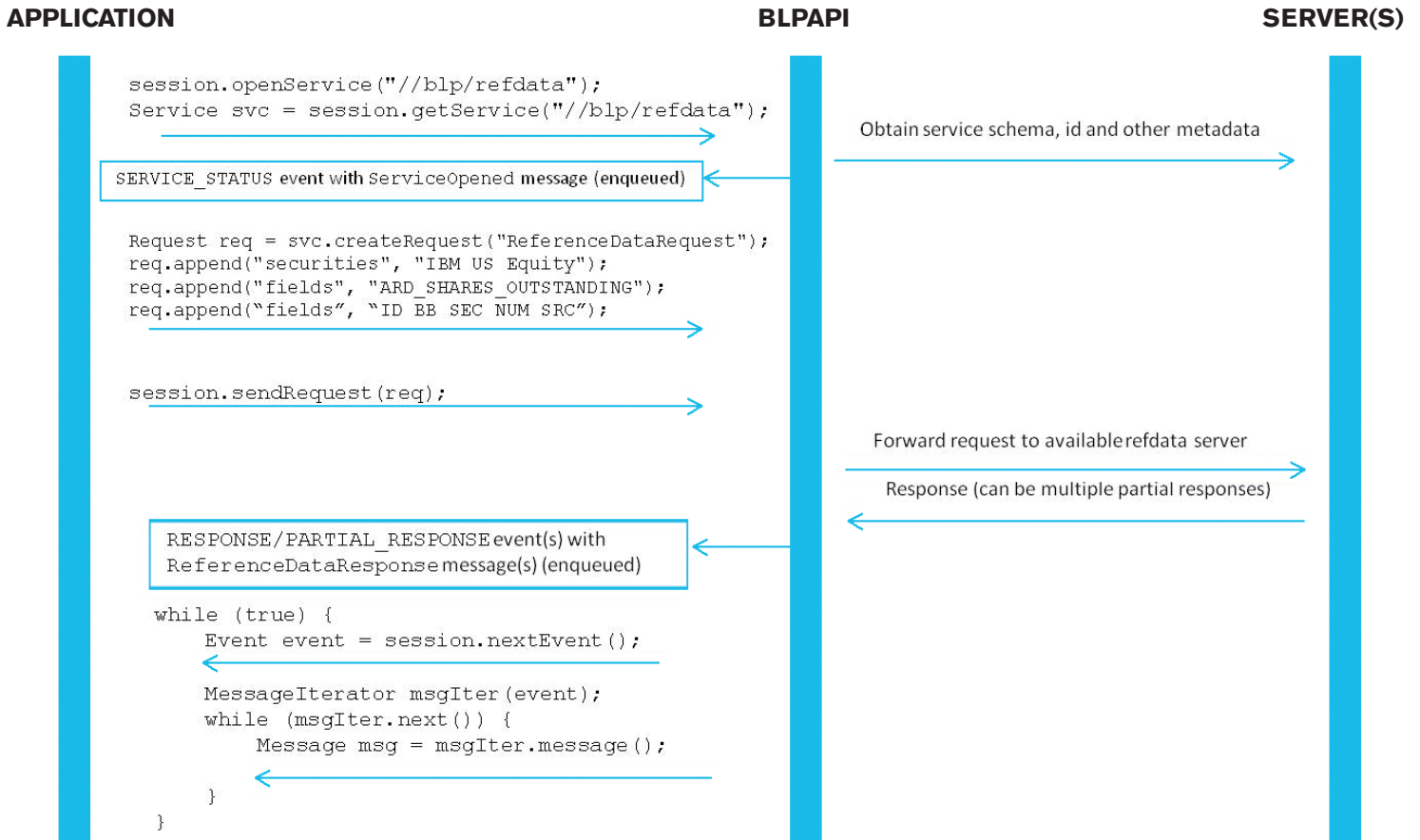


Figure 3. Reference data request/response

Requests are, by definition, asynchronous. Asynchronous operation is also supported for session establishment and for opening services (e.g., above, using the `openServiceAsync` interface).

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Use Case: Subscription Data

This section illustrates an asynchronous subscription to real-time market data (publish/subscribe paradigm). The initial value (i.e., recap) is delivered as an event callback, as are the subsequent real-time updates. The application's event loop is not shown but is the same as shown in Figure 3 for the request/response mode:

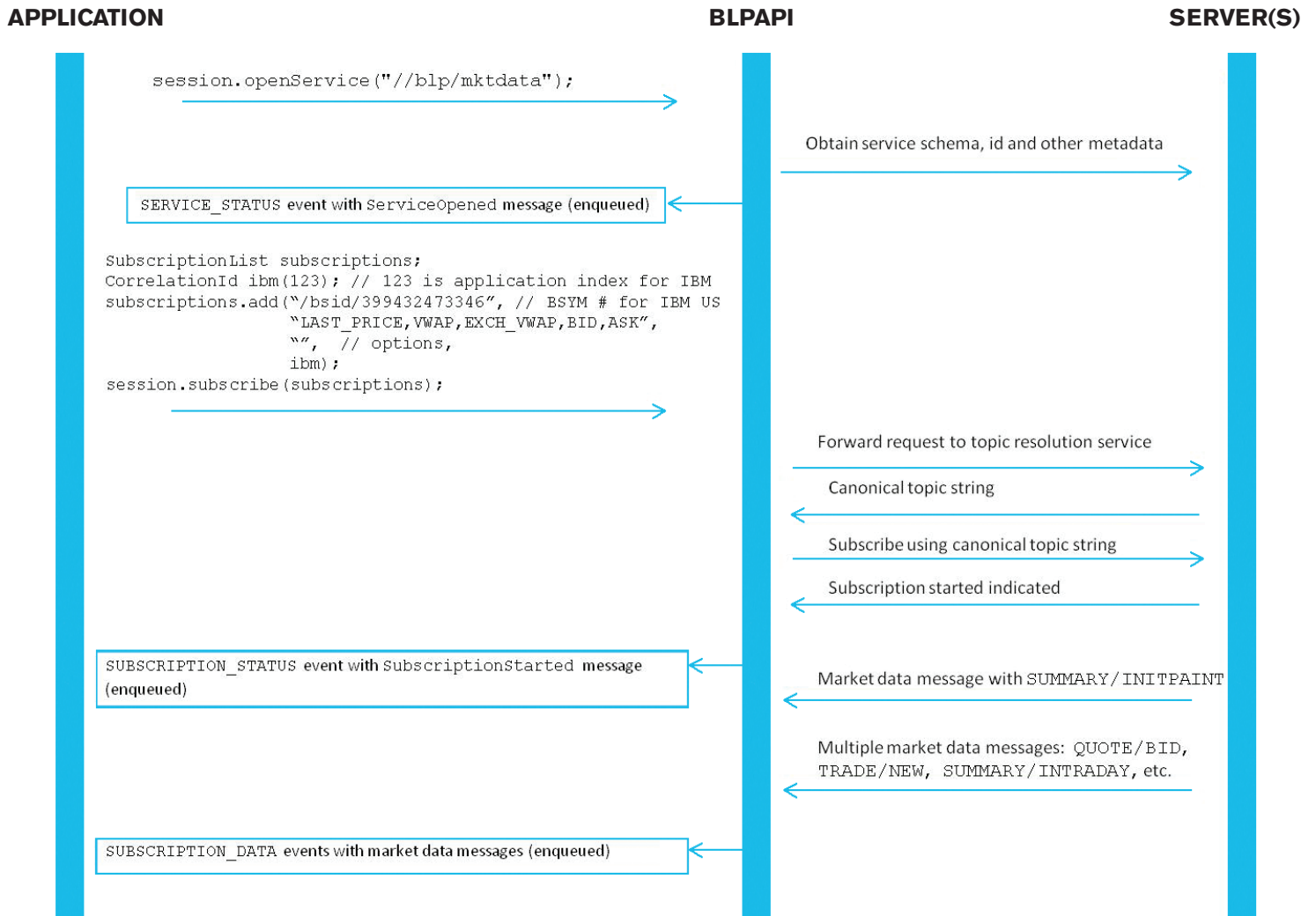


Figure 4. Real-time subscription data