

# Architecture and Watson Work Services

Watson Work Services is a set of endpoints for:

- REST services
- GraphQL queries
- Webhooks

The endpoints can be called via a REST client authenticated as an application or as a user. The Java SDK provides a Watson Workspace Apache HTTP Client, the `org.opencode4workspace.WWClient` class. This class provides methods to build for application or user authentication, `authenticate`, as well as basic helper methods to retrieve the various GraphQL queries. For more complex GraphQL queries and REST calls, the `WWClient` will be passed to the relevant endpoint.

All required endpoints can be found as static strings in the `org.opencode4workspace.endpoints.WWDefinedEndpoints` class:

```
public static final String AUTHENTICATION = "https://api.watsonwork.ibm.com/oauth/token";
public static final String GRAPHQL = "https://api.watsonwork.ibm.com/graphql";
public static final String V1_SPACE_ID = "https://api.watsonwork.ibm.com/v1/spaces/";
```

The authentication endpoint is passed when instantiating the `WWClient` class. The GraphQL endpoint is used by the `WWGraphQLEndpoint` class, which should be used for all GraphQL queries and mutations, to ensure only supported calls are made with the correct arguments, fields and children. The v1 space id endpoint is used for posting messages to a space.