REST endpoints

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You can set up your Db2® system so that application programmers can create Representational State Transfer (REST) endpoints that can be used to interact with Db2. 6.6.8

Each endpoint is associated with a single SQL statement. Authenticated users of web, mobile, or cloud applications can use these REST endpoints from any REST HTTP client without having to install any Db2 drivers.

The Db2 REST server accepts an HTTP request, processes the request body, and returns results in JavaScript Object Notation (JSON).

- **Downloading the IBM Db2 REST Service from the IBM Cloud Container Registry**
  The IBM® Db2 REST service container is hosted on the IBM Cloud® Container Registry.
- **Activating and initializing REST capability**
  Before application programmers can create REST services, you need to activate and initialize the REST capability.
- **Authenticating REST commands**
  All REST calls require an authentication token to confirm the identity of the issuer.
- **Required privileges for working with REST endpoints in Db2**
  Before users can use REST endpoints to access Db2 statements from a web, mobile, or cloud application, they need to have specific privileges assigned to them for the Db2 database objects with which they will interact.
- **Running the IBM Db2 REST server without HTTPS**
  For environments where the risk of outside access is low, you can run your IBM Db2 REST server using HTTP only.
- **Providing a TLS certificate for your IBM Db2 REST server**
  The IBM Db2 REST service comes equipped with a self-signed TLS certificate for your REST server. You can replace this certificate with your own certificate (signed or self-signed).
- **Providing TLS key store and key stash files for your IBM Db2 REST server**
  To connect to Db2 using certificate-based authentication, the TLS keystore and keystash files must be available inside the IBM Db2 REST service container.
- **Disabling direct SQL execution**
  In addition to creating and executing services, Db2 REST allows you to directly run SQL using the `/v1/services/execsql` end-point. You can disable the use of this end-point when you start the IBM Db2 REST service container from the command line.
- **Creating REST SQL services**
  Application developers use REST APIs to create, manage, and monitor SQL services. Each service is implemented by means of a REST endpoint, and is associated with a single SQL statement that is executed when the service is called.
- **Creating applications that use REST services**
  Your application programs can use REST services either synchronously or asynchronously.
- **Listing jobs**
  Use the `monitor` REST endpoint to list all jobs and their statuses. Jobs that were stopped manually cease to exist and are not listed.
- **Operating a REST server**
  Use scripts to operate a REST server.