API Development Guidelines

All Treasury Services APIs should follow the below mentioned guidelines. These guidelines are based on the NEXEN API Guidelines. We have summarized those here to help the Treasury Services development teams. Make sure all the information listed below is available before you start the API review process with the Treasury Services architecture team.

- Provide name & a brief description of the API.
    - Choose a name that correctly represents the business capability provided by the API and does not conflict with other API names used within Treasury Services.
- Do proper resource modeling to represent business entities correctly.
    - Use generic nouns, not verbs. Use plural, lowercase, and (if required) hyphenated names. Examples of bad resource names: "getCustomers", "ActiveCustomers". Examples of good resource names: "customers", "transactions", "investment-cycles".
- Create a simple resource model diagram to represent the resources and their relationship (similar to a database schema diagram)
- Use NEXEN API security model (OAuth 2.0, JWT)
- Use this URI Path pattern: /<apiName>/<version>/<resource> (e.g. /bkoin/v1/users)
- Use JSON as the default format (i.e. Content-Type: application/json)
- Create API Documentation using Swagger
- Use 2 base URLs per resource: one for the collection and one for a specific element in the collection (e.g. /transactions, /transactions/123)
- Verb usage: GET (retrieve), PUT (update), DELETE (delete), POST (create)
- To get expanded sub-collections within a response object use "?expand=true" query parameter
- Use lowerCamelCase for attribute names (e.g. accountNumber), and use the same name in query parameters (if required)
- Use ISO formats for date-time, country code, currency code and other common fields
- Implement pagination. Use limit, offset, sortKey, and dir query parameters to return a specific page of sorted records. For example, offset=100&limit=50,sortKey=name,dir=asc means sort the records on ascending names and then return records #101 to #150 to the client.
    - Limit - Number of rows of data that the result set should contain
    - Offset - The page # of the (paginated) result set
    - SortKey - The column(s) that the result set should sorted on
    - dir - Sort Order
- Use this error code format = "<Application Mnemonic><code>" e.g., BKN1001
- Use proper HTTP response codes (e.g. 200, 201, 304, 400, 401, 403, 404, 500). See NEXEN API Guidelines for more details.
- Do not put any sensitive data in API url
- Be mindful of disallowed URL Characters (e.g. //,./,/.,/*,*.,~)
- Publish Stateless, RESTful APIs to NEXEN API Store
- Always validate incoming payload
- Create a quick start guide for clients with code examples
- Share the Resource model, API description, swagger and other related documents to Treasury Services API Group
- Provide approximate Dev, test, QA, Prod timelines