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ACC API Design Primitives

Design Primitives
Transport

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API Protocol

- Rest / JSON is the default API protocol with ASCII strings in camelCase
- We'll maintain a roadmap of other potential protocols

Roadmap

- Possible options include webhooks
- We'll inform the sector in advance if an addition or change is to be implemented

Error Handling

- Error responses include an error code, a message in English, and technical details
- 4xx = Validation failures. 5xx = Server side failures

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URI design

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Versions

- Version # will be in the base of the resource path
- eg. /v1 for major version 1

Non - Breaking Changes

- Multiple updates, backward compatible to a major version, are likely
- eg. addition of new resources, or new JSON properties, or support for new HTTP verbs

Breaking Changes

- We'll inform the sector in advance if a change requiring you to change is to be implemented
- eg. changes to a response or error message, or removing an HTTP verb

Namespaces

- Our APIs will support namespaces such as /v1/claim
- Resource reference will be subtended such as /v1/claims?claimId=xxx

Design Primitives Standards

HTTP Verbs

- APIs will follow the HTTP/1.1 standard
- This supports the verbs GET, PUT, POST and Delete

Security

- NZISM Requirement TLS 1.2

API

- https://www.ict.govt.nz/guidance-and-resources/standards-compliance/api-standard-and-guidelines

Design Primitives Representation

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GET

- To access information.eg.GET/v1/claims?claimId=xxx
- Successful response: 200 OK HTTP
- Failure or exception: 400 Bad Request HTTP status
- Concurrency: Supports request headers If-modified & If-non-match

PUT / DELETE

- To update / delete a single resource. Note: No working examples yet
- Partial PUT updates will not be supported
- Successful response: 204 No Content
- Exception: 404 Not found

POST

- To create a single resource eg. POST /v1/claims/xxx
- Successful response: HTTP/1.1 201 Created Location http://www.acc.co.nz/v1/claims/{claim-d}
- Failure / Exception: 400 Bad Request

Design Primitives
Caching, Paginate, Sort & Filter

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Caching

- To speed up service the default is to cache

Paginate

- APIs use sensible default values for page size & item count
- GET allows optional page-size, total items, & total pages
- APIs use hypermedia links including next, previous, first, & last

Sort & Filter

- You can optionally use the query parameters sort-by & sort-order
- Sort order can be ascending or descending
- Successful response: 200 OK
- Exception: 400 Bad Request