

Asynchronously Manipulating Resources



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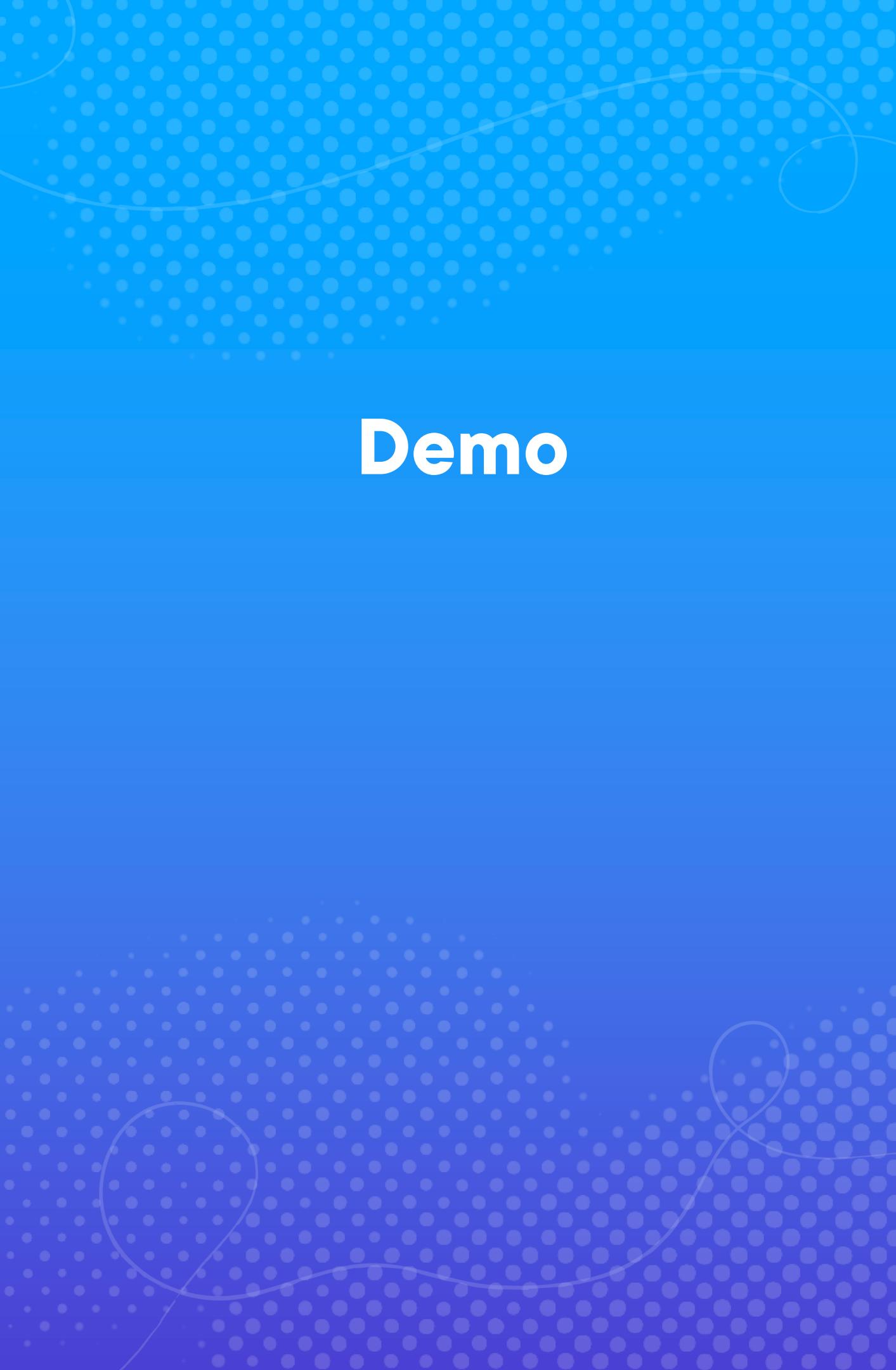
Architect

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Coming Up

Creating a resource
Supporting bulk inserts





Demo

Creating a resource



Supporting Bulk Inserts

Sending 10 requests to api/books to create 10 books leads to

- Overhead
- Performance loss
- Overuse of threads
 - Scalability suffers



Supporting Bulk Inserts

Supporting bulk inserts leads to

- Less overhead
- Performance increase
- Higher availability of threads
 - Better scalability



Supporting Bulk Inserts

POST api/books

```
{  
  one book  
}
```

POST api/bookcollections

```
{  
  one collection of books  
}
```



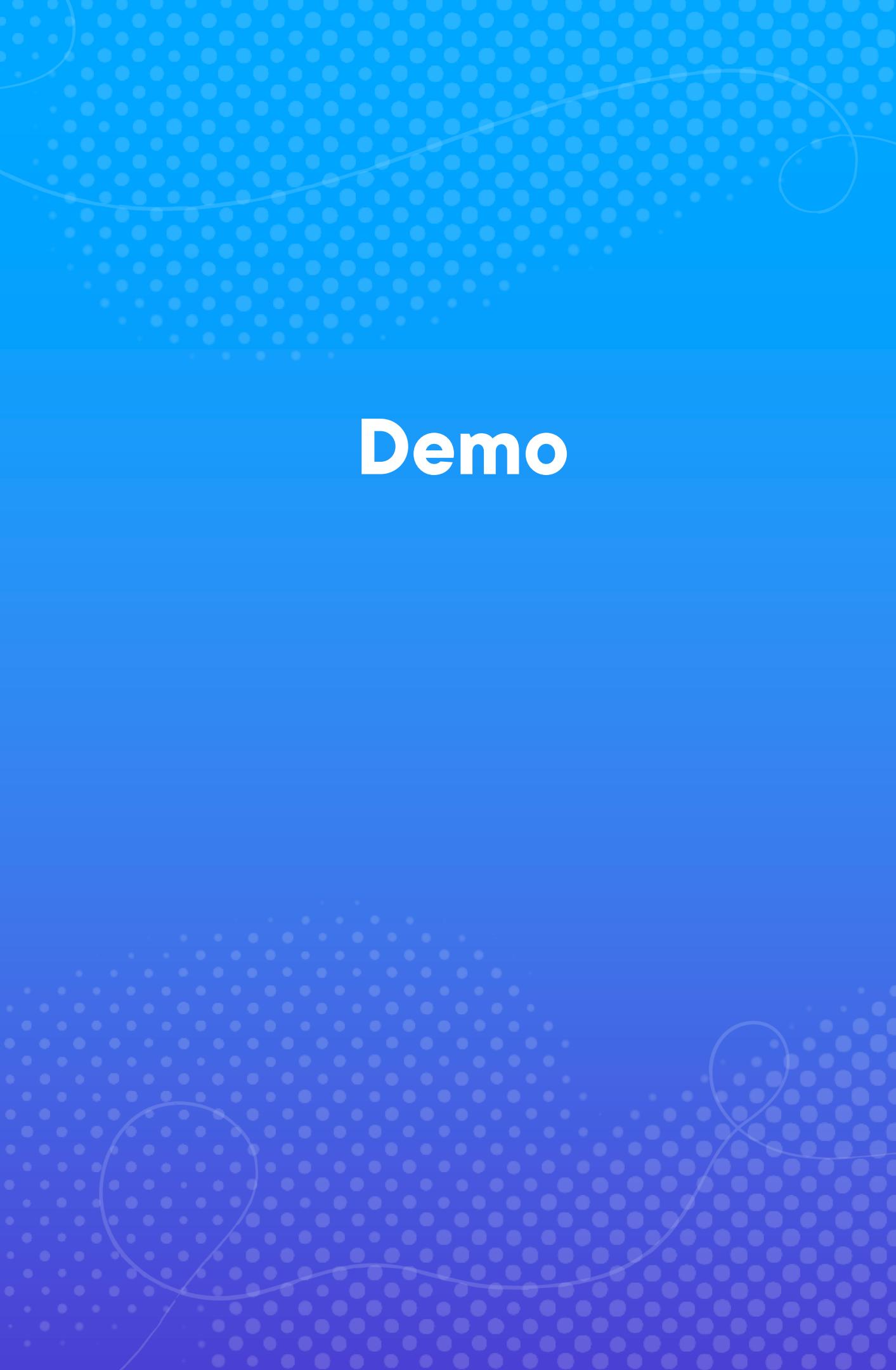
Supporting Bulk Inserts

Alternative approach: /bulk endpoint

- A set of resources
- A set of resources and operations on them

Lowers maturity of the API according to the Richardson Maturity Model





Demo

Supporting bulk inserts



Demo

**Supporting a location header for
bulk inserts**



Summary

Use async for I/O bound work

- Adding an entity to the context isn't I/O-bound work

Bulk inserts can help with scalability



Supporting Asynchronous Streaming

