

API Versioning in Spring Framework 7



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Goals for Today

Brief intro to API versioning topic

Add some perspective

Tour of new features in Spring Framework 7

Why is API versioning important?

Evolution

Iterative development

Manage change

The common advice

Not easy to come by

Typically just a listing of common strategies

Roy Fielding says “DON’T”

Have you seen websites with versions?

Software engineering on the scale of decades

No need to anticipate breaking change

“DON’T” version ?

Browser/human vs machine client

Favor compatibility (but mileage will vary)

Roy Fielding: “use new hostname”

Not a new API version, rather a new system/brand

New host or new paths => New site

Loose association between old and new

Deep change

Version in header or query param

Selective versioning by endpoint

Manage same data for multiple versions

Lightweight change

*Favor
compatibility*

*Lightweight
change*

*Structural
change*



*Version by header
or query param*

*Version by URL
(path or host)*

Version from the start?

Not really

Add version header, or entity URLs later

Map request w/o version to unversioned endpoint

Selective Versioning by Endpoint

Selective update of request mappings

Endpoints without change support higher version

Examples

Microsoft [REST Guidelines](#)

Google guidelines on [API versioning](#)

GitHub [API versions](#)

StackExchange [Changelog](#)

API Versioning in Spring

Historically no explicit support

Possible, but not easy [spring-framework#33599](#)

First-class feature provides a common mechanism

Target nuances

Server Support

WebMvc and WebFlux config API versioning

@RequestMapping version attribute

Strategies to extract, parse, and validate versions

Demo server

Client Support

RestClient, WebClient support for ApiVersionInsertter

Default or per request version

Version in @HttpExchange interface

Demo clients



Test Support

MockMvc, WebTestClient support for ApiVersionInserter

API versioning setup for mock servers

Demo tests



Resources

[springio25-versioning](#) demo

[springio25-service-registry](#) demo (versioning branch)

[Reference docs](#) for Spring Framework 7

Q & A



THANK YOU

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