



adaptTo()

APACHE SLING & FRIENDS TECH MEETUP
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Remote Resources
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Bridging the gap

- SLING
- Backend Services
- Remote Resources

A close-up photograph of a road sign. The sign is painted on a dark, textured surface and features the words "MIND THE GAP" in large, bold, yellow, block letters. The sign is flanked by two parallel yellow lines. The background of the image shows a blue structure above and a red structure to the right.

- RemoteResourceProvider & Factory
- RemoteResource
- RemoteProviderService
- RestJsonRemoteProvider
 - RequestProcessor
 - DataTransformer

- Maps certain paths
 - Eg: /remote
- Maintains a list of RemoteProviderService's
- Dispatches call to RemoteProviderService's

- Provides implementation of Resource, backed by data fetched from a remote service
- `adaptTo()`
 - `JSONObject`
 - `ValueMap`



- Worker for getting data from remote service
 - Bring-your-own
 - Ready-made

- Configurable (path -> URL template)
- Uses HttpClient
- Extendable
 - RequestProcessor
 - DataTransformer

- Process requests before they are sent
 - Headers manipulation
 - URI manipulation
 - Data manipulation
- Ready-made
 - HeaderInjectionRequestProcessor

- Alter data
 - Add/remove properties/children
 - Combine data from multiple sources

DEMO – Does this even work?

Configuring RemoteResourceProviderFactory

Apache Sling Remote Resource Provider Factory

Defines a resource provider factory with remote persistence.

Root paths + -
Root paths for resource provider. (provider.roots)

Configuration Information

Persistent Identity (PID)	org.apache.sling.remote.provider.RemoteResourceProviderFactory.factory.config.c4d3c186-7abb-443d-bd17-d2dd3a3f38a9
Factory Persistent Identifier (Factory PID)	org.apache.sling.remote.provider.RemoteResourceProviderFactory.factory.config
Configuration Binding	<input type="text" value="Unbound or new configuration"/>

Cancel Reset Delete Unbind Save

Configuring RestJsonRemoteProviderService

Apache Sling Remote Resource Provider REST/JSON RemoteProviderService

Defines a simple REST/JSON HTTP client to load remote data

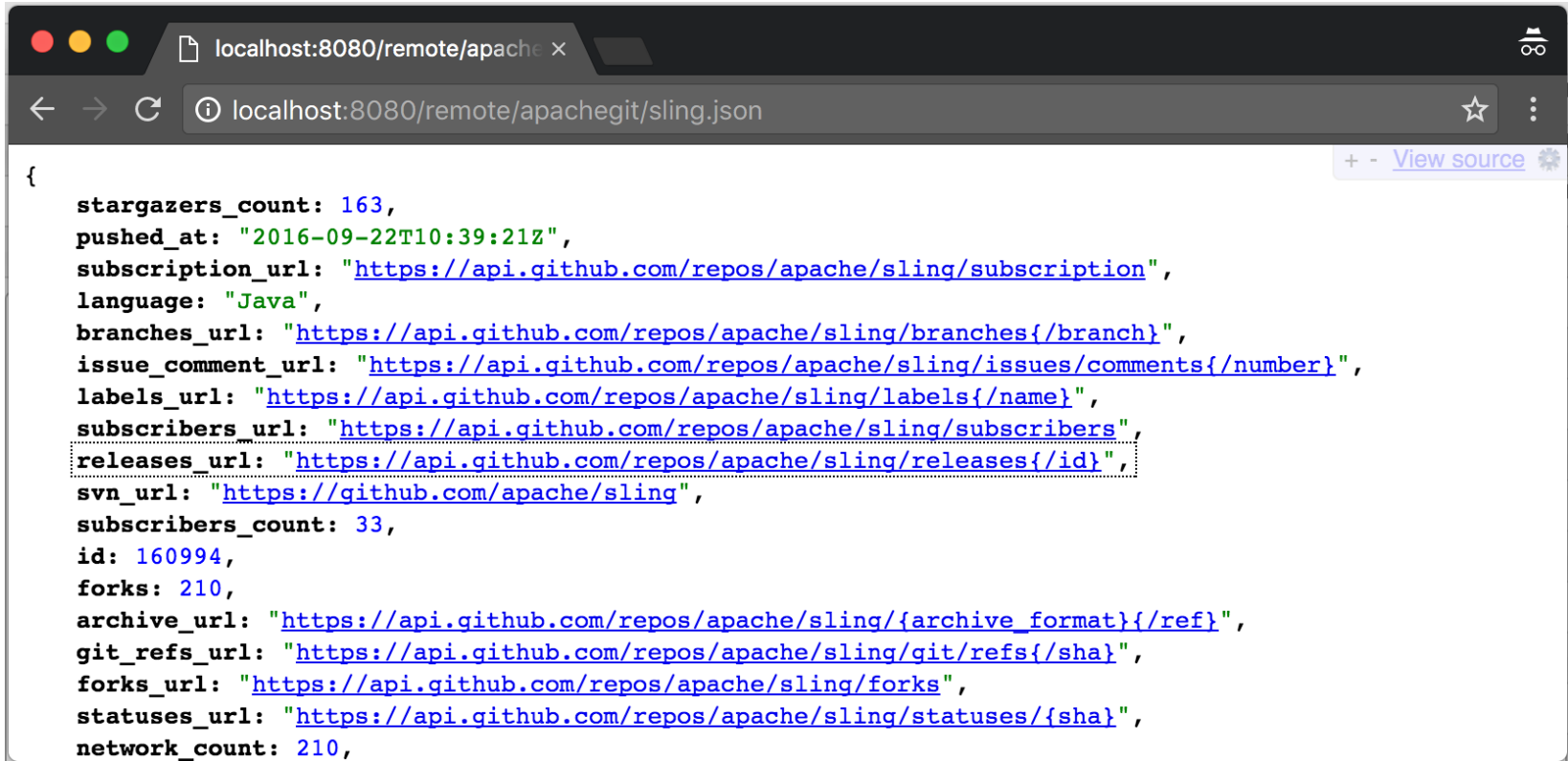
Path	<input type="text" value="/apachegit"/>	+ -
Path to match. (path)		
uri	<input type="text" value="https://api.github.com/repos/apache{}/"/>	+ -
URI for remote REST/JSON service. (uri)		

Configuration Information

Persistent Identity (PID)	org.apache.sling.remote.provider.restjson.impl.RestJsonRemoteProviderService.factory.config.6e58b5d2-0bbf-4bf6-b9ad-5e37cf66f51e
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Cancel Reset Delete Unbind Save

Fetching the remote resource



```
{
  stargazers_count: 163,
  pushed_at: "2016-09-22T10:39:21Z",
  subscription_url: "https://api.github.com/repos/apache/sling/subscription",
  language: "Java",
  branches_url: "https://api.github.com/repos/apache/sling/branches{/branch}",
  issue_comment_url: "https://api.github.com/repos/apache/sling/issues/comments{/number}",
  labels_url: "https://api.github.com/repos/apache/sling/labels{/name}",
  subscribers_url: "https://api.github.com/repos/apache/sling/subscribers",
  releases_url: "https://api.github.com/repos/apache/sling/releases{/id}",
  svn_url: "https://github.com/apache/sling",
  subscribers_count: 33,
  id: 160994,
  forks: 210,
  archive_url: "https://api.github.com/repos/apache/sling/{archive_format}/{ref}",
  git_refs_url: "https://api.github.com/repos/apache/sling/git/refs/{sha}",
  forks_url: "https://api.github.com/repos/apache/sling/forks",
  statuses_url: "https://api.github.com/repos/apache/sling/statuses/{sha}",
  network_count: 210,
}
```

What NEXT?

What NEXT?

- Write support
- Caching
- Query-support
- Resource assembly

WDYT?



THANK YOU!

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- <https://github.com/vladbailescu/sling/tree/remote-resource/contrib/remote>