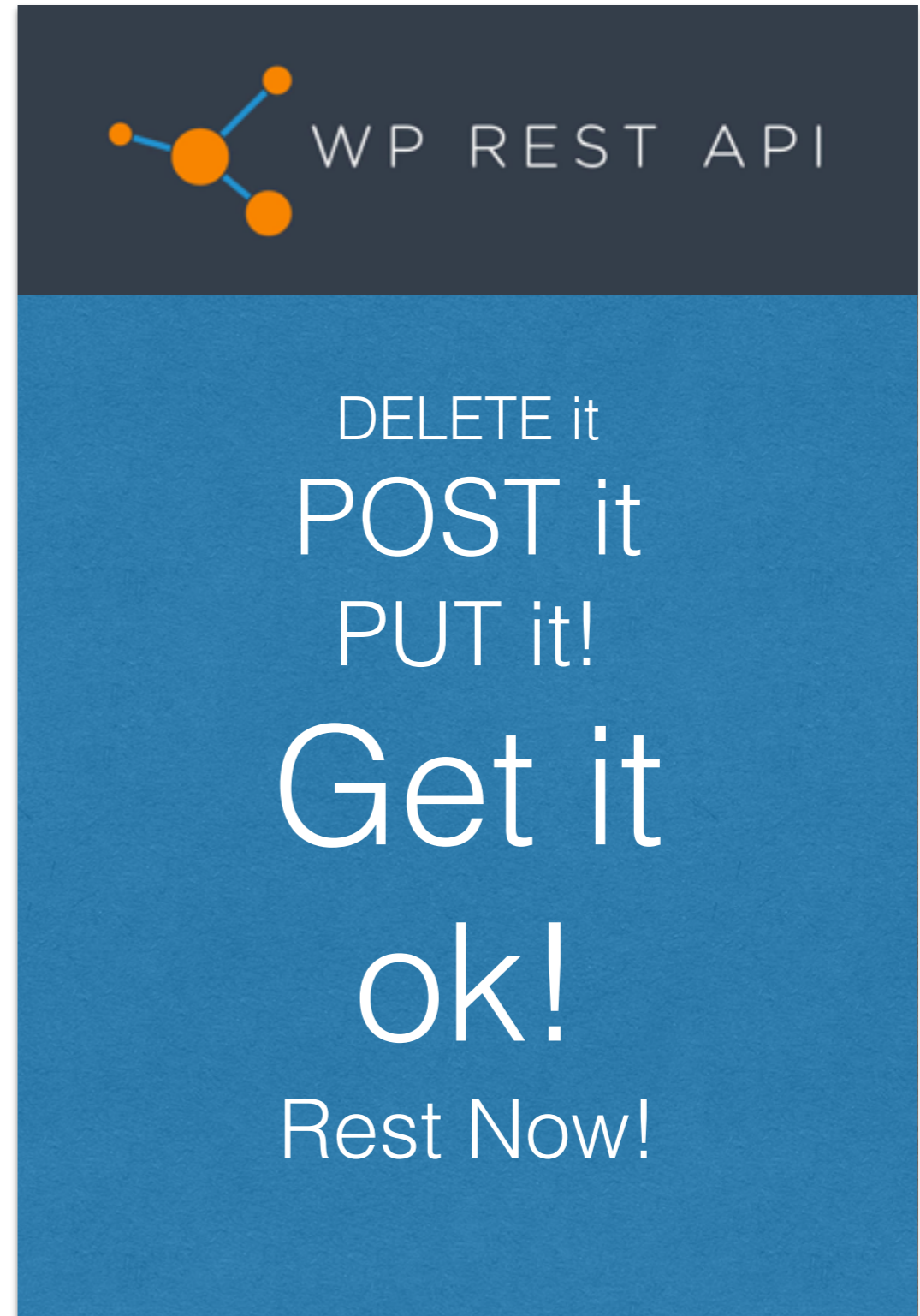




The WordPress Rest API

What is it, Where we can
use, **How to use** &
How to extend.

By Ayushdeep Singh



Find Slide and Snippet
at

<https://restudaipur.wordpress.com/>

What is API ?

- Application programming interfaces (API)
- Opening your Product Data/Functionality to other Products.
- In simple meaning.
 - API allows one piece of software to talk to another.

We use API often.

- Example ATM
 - User Authenticates & Submits Request
 - ATM communicates with bank to get information
 - ATM Gives Response to User.
- In the ATM Case - API Break Down..
 - **Application** is ATM - Which is Machine.
 - **Programming** Where it does requests to the bank server.
 - **Interface** The Touch Screen & Keyboard Part of The ATM.

You already using many APIs in WordPress!

- **Plugin API** - All plugins in your WordPress uses Plugin API.
- **Shortcode API** - Allows You to Register New Shortcode into WordPress
- **Database API** - Plugins, Theme, WP Core Uses Database API to Interact with Database.
- **Rewrite API** - When you changes the permalink from WP Settings. WP uses Rewrite API.
- **Widgets API** - Love Widget ? they all got arrived on your sidebar from Widget API.
- **Theme Customisation API** - When you customise your theme. All settings are registered into WP using Theme Customisation API
- **HTTP API** - WP is popular for there easy update. So that functionality uses HTTP API.
- **Others...** - Everything Else - https://codex.wordpress.org/WordPress_APIs



“WordPress is Just a Blog!”

After Years

“WordPress is not just a Blog!”

The Present



“WordPress is not just a CMS!”

Future

“WordPress It's an application framework.”

Nope! It's **today**
WordPress 4.7 “**Vaughan**”

Thanks to WordPress Rest API Plugin



So! What About **REST API**

- REST (**RE**presentational **S**tate **T**ransfer)
- Works pretty same way website works!
- Uses http methods (GET, POST, PUT, DELETE, etc.)
- It's not a specific tool or framework.
- Often use examples.
 - Facebook Graph API
 - Twitter API.
 - Google API

HTTP & CRUD

- Rest API uses HTTP to do CRUD.
 - Uses **GET** for retrieving data from the API.
 - Uses **POST** for creating new resources
 - Uses **PUT** for updating resources
 - Uses **DELETE** for deleting resources

What About WP Rest API

- It's Rest API for WordPress, available via HTTP.
- Grab your site's data in simple JSON format.
- The WordPress REST API “lives” at /wp-json/ e.g <http://yoursite.com/wp-json/>
- The index provides information regarding what routes are available for that particular WordPress install.



Demo Time!

API URL Explanation

<http://example.com/wp-json/wp/v2/posts/1>

- **Red Part** is the root installation of your wordpress.
- **Blue Part** is the base of your rest api access point.
- **Green Part** is the Route which hold the data endpoints.

Endpoints

- Each route has 3 Endpoints
 - GET triggers a `get_item` method, returning the post data to the client.
 - POST triggers an `update_item` method, taking the data to update, and returning the updated post data.
 - DELETE triggers a `delete_item` method, returning the now-deleted post data to the client.

Available Routes

- **Posts** `wp-json/wp/v2/posts` or `/<id>`
- **Categories** `wp-json/wp/v2/categories/` or `/<id>`
- **Users** `wp-json/wp/v2/users/` or `/<id>`
- **Media** `wp-json/wp/v2/media/` or `/<id>`
- **Settings** `wp-json/wp/v2/settings/`
- **Comments** `wp-json/wp/v2/comments/` or `/<id>`
- **And Others...**
- **Reference** :- <https://developer.wordpress.org/rest-api/reference/>



Demo Time!

Chances are, if you can do it with WordPress, the API will let you do it.

- WP Rest API at WordPress.org

What if not! ?

Custom Endpoint

Some Snippets

Consider `/wp-json/myapi/v1/cars/`

- Simple GET Endpoint. - <https://goo.gl/oGDZn4>
- Simple POST Endpoint.- <https://goo.gl/ugBt51>
- Simple DELETE Endpoint. - <https://goo.gl/qlyDZo>
- Register Post Type Endpoint - <https://goo.gl/UytPaV>

Extend Existing Endpoint

Use `register_rest_field` function

Snippet

<https://goo.gl/zzOqZ4>

Usages / Possibilities

- Applications coded in any languages!
- In your theme!
- Providing/Sharing any functionality to any 3rd party services
- More to Imagine.....

Just for Information

Rest API found to be fast than AJAX API

Comparison :

<https://goo.gl/3ROpU>

PS. I haven't tested personally just saying based on the article.

Create Themes with WP Rest API

- Making theme using REST API is Possible.
- It's not that Hard!
- Benefits
 - Light & Fast
 - No Reloading
 - Maintains State

Useful Links & References

- Plugin for WordPress < 4.7
<https://wordpress.org/plugins/rest-api/>
- Full Documentation of WP Rest API v2
<https://developer.wordpress.org/rest-api/>
- <https://make.wordpress.org/core/components/rest-api/>
- Join #core-restapi Slack Channel at wordpress.slack.com

Thanks..
Question?

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