

Plugin API Endpoint

SPECIFICATION

OVERVIEW

We want to provide an API endpoint that allows for the retrieval of file checksums for a plugin.

The endpoint takes the following form:

<https://downloads.wordpress.org/plugin-checksums/<plugin>/<version>.json>

- **<slug>** is the unique slug as it is used in the given plugin's corresponding repository.
- **<version>** is the string that is used to tag the requested version.
- The **.json** extension is optional.

FORMAT

The API endpoint returns **JSON objects**, which are represented as files of type **application/json**.

Field names are **case sensitive**.

DATA TYPES

The schema is defined through the following data types:

Name	Type	Comments
string	string	String of arbitrary length
md5	string	32 hexadecimal characters
sha256	string	64 hexadecimal characters

SCHEMA

Plugin Object

This is the root document object of a request for the '**plugin**' type.

Field Name	Type	Description
plugin	string	REQUIRED. Name of the plugin that the files are indexed from.
version	string	REQUIRED. Version of the plugin that the files are indexed from.
source	string [string]	REQUIRED. Link to the SVN location that this version of the plugin is stored in. Includes an eventual tag in its path (or /trunk if none). NOTE: Can be an array in case multiple SVN location reference the same plugin version.
zip	string [string]	REQUIRED. Full path to the ZIP file that contains all the files in the requested version. NOTE: Can be an array in case multiple ZIP files reference the same plugin version.
files	[File Object]	REQUIRED. Array of files that make up the plugin.

File Object

The File object represents one individual file that is part of a plugin.

Field Name	Type	Description
{filename}	Checksums Object	REQUIRED. Checksums that are valid for the file. NOTE: The filename includes the partial path relative to the plugin's root folder.

Checksums Object

The Checksums object the valid hash(es) for a given file, calculated with multiple hashing algorithms.

Field Name	Type	Description
md5	md5 [md5]	REQUIRED. Single MD5 hash or array of MD5 hashes that are considered valid for the given file. See: https://en.wikipedia.org/wiki/MD5
sha256	sha256 [sha256]	REQUIRED. Single 256-bit SHA-2 hash or array of 256-bit SHA-2 hashes that are considered valid for the given file. See https://en.wikipedia.org/wiki/SHA-2

EXAMPLE

This is an example output, taken from the current generated JSON file at

<https://downloads.wordpress.org/plugin-checksums/exploit-scanner/1.5.2.json>

```
{
  "plugin": "exploit-scanner",
  "version": "1.5.2",
  "source": "https://plugins.svn.wordpress.org/exploit-scanner/tags/1.5.2/",
  "zip": "https://downloads.wordpress.org/plugins/exploit-scanner.1.5.2.zip",
  "files": {
    "ChangeLog.txt": {
      "md5": "acb43c9b2e3bcb1095b511a70e5d5ef",
      "sha256": "b47111bea1455758386f4ca4b0bfcf311aac8affd5295fe065980c30415f8176"
    },
    "exploit-scanner.php": {
      "md5": "17e2ccfc834d691bc68cc5c64f9bed89",
      "sha256": "4f9efbfb43fc5d15b9a99fe5c2ecaa1b5253c6bb222b7580713d21433e23630a"
    },
    "hashes-3.3.1.php": {
      "md5": "3afac26032f45a07aed960445e0d3e8f",
      "sha256": "78cc4882cab34b0c9fc3e2389e4885d34373a24dc128cb9c84084af0bf4a38da"
    },
    "hashes-3.3.2.php": {
      "md5": "f05540186b993c70faa91e8da5dfbdd8",
      "sha256": "9e3453f327d6f48e933483cf38c04e82f3079955d17c8404af96119441e932cb"
    },
    "hashes-3.3.php": {
      "md5": "ac46723d79de84e6f364c893f7a0ecd9",
      "sha256": "c31168c259d3e408ad73316d4243493d78be395e363728e0f75e0c1cbc699225"
    },
    "hashes-3.4.1.php": {
      "md5": "77c6d7386294e48d1f25191dd233095a",
      "sha256": "82dc9420a5e07f580df0a42f78b0d547ba89c3509fd826011c2ac388c9b26f26"
    },
    "hashes-3.4.2.php": {
      "md5": "478bf6ab9cfae7c81dc20333408bef1",
      "sha256": "34dfb70704161c622c5e74be4f6651ee33b70d51c246cee0df95585bc54db8c8"
    },
    [ ... ]
  }
}
```

NOTES

Meta Trac ticket: [#3192](#)

GitHub issues: [wp-cli/ideas#6](#)

Update Oct. 24, 2017:

- Updated the spec to match the actual format that the stored JSON files are being generated. The plan is to just forward from the API request to the stored file for now, so there's no translation/attribute mapping involved for now.

Update Oct. 26, 2017:

- Changed **source_tag** to **source**, and have it include the complete URL to the SVN location.
- Added **SHA-256** as a possible hash variant. Renamed "**checksums**" field to "**md5**" field for disambiguation.

Update Nov. 9, 2017:

- Turned around the schema to have having the filenames be duplicated for every type of hash we include.
- "zip" provides as a full path instead of a name.
- Both "source" and "zip" can be arrays if multiple entries reference the same plugin version.

Update Nov. 27, 2017:

- Endpoint URL has changed to final format.