

Herdict Plugin API

Herdict Plugin API.....	1
1. Background.....	2
2. Transaction Overview.....	2
3. Browser startup / initialization.....	3
4. User views a new website.....	3
5. User reports a page as accessible or inaccessible.....	3
6. Periodically update location.....	3
7. T01 – Get categories.....	4
8. T02 – Get countries.....	4
9. T03 – Get locations.....	4
10. T04 – Get interests.....	5
11. T05 – Get reasons.....	5
12. T06 – Get current location.....	5
13. T07 – Get site summary.....	6
14. T08 – Report page.....	6
15. T09 – Check current version.....	7
16. Version History.....	8

1. Background

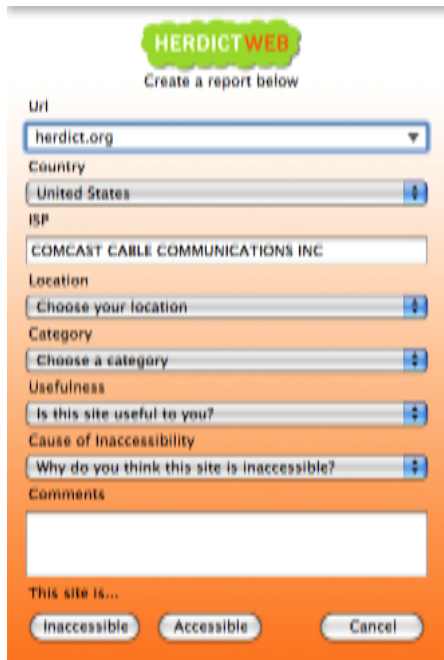
The Herdict plugins allow users to report inaccessible or accessible sites as they browse, without having to go the Herdict website. There are currently two plugins – an Internet Explorer toolbar and a Firefox extension. Although these plugins use different technologies, they use the same interface to interact with the Herdict website. This document describes that interface, and is intended as a guide for anyone developing a plugin for another platform or browser.

2. Transaction Overview

This is the general sequence of transactions for a plugin

- Browser startup / initialization
 - a. Get categories (T01)
 - b. Get countries (T02)
 - c. Get locations (T03)
 - d. Get interests (T04)
 - e. Get reasons (T05)
 - f. Get current location (T06)
 - g. Check current version (T09)
- User views a new website
 - a. Get site summary (T07)
- User reports a page as accessible or inaccessible
 - a. Report page (T08)
- Periodically update location
 - a. Get current location (T06)

3. Browser startup / initialization

The screenshot shows a web form titled "HERDICT WEB" with the subtitle "Create a report below". The form contains several input fields: a text box for "Url" containing "herdict.org", a dropdown for "Country" set to "United States", a text box for "ISP" containing "COMCAST CABLE COMMUNICATIONS INC", a dropdown for "Location" set to "Choose your location", a dropdown for "Category" set to "Choose a category", a dropdown for "Usefulness" set to "Is this site useful to you?", a dropdown for "Cause of Inaccessibility" set to "Why do you think this site is inaccessible?", and a text area for "Comments". At the bottom, there are three buttons: "Inaccessible", "Accessible", and "Cancel".

There are many optional and required fields that a user can submit along with their report. This screenshot of the Firefox extension shows the complete list. The Country, Location, Category, Usefulness, and Cause of Inaccessibility are all dropdown lists populated with reference data from the server. The values for these lists are retrieved using transactions T01-T05. The labels and values are localized into the user's language, based on the preferred locale in the header of the HTTP request.

The user's ISP and default country are also retrieved from the server, based on a reference table that does a lookup based on the user's IP address. This information is retrieved using transaction T06. Finally, a version check on the plugin is done using T09. The form of this

transaction is platform-dependent.

4. User views a new website

When a user browses to a new website, the plugin sends the current location and site to the server and receives a summary of accessibility reports for that site, both globally and in the user's country. This is done using T07.

The plugin can then display this back to the user. The IE and Firefox plugins do this using a colored sheep icon and tool tip. To reduce load on the server, the summary should only be retrieved for a site only once in each browser session.

5. User reports a page as accessible or inaccessible

When a user reports a page as inaccessible or accessible the plugin may collect additional information from the user, and then submits a report to the server, as described in T08

6. Periodically update location

As a user may change their location without restarting the browser (for example, putting a laptop to sleep at work, and then bringing it home), the plugin may periodically update the user's location using T06.

7. T01 – Get categories

Request:

<http://www.herdict.org/action/ajax/plugin/init-categories/{version}>

Example:

<http://www.herdict.org/action/ajax/plugin/init-categories/FF0.9>

Response:

JSON formatted array of dictionaries with “value” and “label” tags

Example:

```
[{"value":"tag.news","label":"News/Information"}, {"value":"tag.entertainment","label":"Entertainment/Gaming"}, {"value":"tag.politics","label":"Politics"}, {"value":"tag.humanrights","label":"Human Rights"}, {"value":"tag.communities","label":"Social networks/communities"}, {"value":"tag.sexual","label":"Sexually explicit"}, {"value":"tag.health","label":"Health"}, {"value":"tag.blogs","label":"Blogs/blogging platforms"}, {"value":"tag.religion","label":"Religion"}, {"value":"tag.internettools","label":"Internet tools/proxies"}, {"value":"tag.filesharing","label":"P2P/bittorrent/file-sharing"}]
```

8. T02 – Get countries

Request:

<http://www.herdict.org/action/ajax/plugin/init-countries/{version}>

Example:

<http://www.herdict.org/action/ajax/plugin/init-countries/FF0.9>

Response:

JSON formatted array of dictionaries with “value” and “label” tags

Example:

```
[{"value":"AF","label":"Afghanistan"}, {"value":"AX","label":"Aland Islands"}, {"value":"AL","label":"Albania"}, {"value":"DZ","label":"Algeria"}, {"value":"AS","label":"American Samoa"}, {"value":"AD","label":"Andorra"}, {"value":"AO","label":"Angola"}, {"value":"AI","label":"Anguilla"}, {"value":"AQ","label":"Antarctica"}, {"value":"AG","label":"Antigua and Barbuda"}, {"value":"AR","label":"Argentina"}, {"value":"AM","label":"Armenia"}, [more]
```

9. T03 – Get locations

Request:

<http://www.herdict.org/action/ajax/plugin/init-locations/{version}>

Example:

<http://www.herdict.org/action/ajax/plugin/init-categories/FF1.0>

Response:

JSON formatted array of dictionaries with “value” and “label” tags

Example:

```
[{"value": "location.home", "label": "Home"}, {"value": "location.work", "label": "Work"}, {"value": "location.school", "label": "School"}, {"value": "location.library", "label": "Library"}, {"value": "location.cybercafe", "label": "Cybercafe"}, {"value": "location.publicwifi", "label": "Public wifi"}, {"value": "location.other", "label": "Other"}]
```

10. T04 – Get interests

Request:

<http://www.herdict.org/action/ajax/plugin/init-interests/{version}>

Example:

<http://www.herdict.org/action/ajax/plugin/init-interests/FF1.0>

Response:

JSON formatted array of dictionaries with “value” and “label” tags

Example:

```
[{"value": "interest.low", "label": "Not very useful"}, {"value": "interest.medium", "label": "Moderately useful"}, {"value": "interest.high", "label": "Very useful"}, {"value": "interest.dontunderstand", "label": "Site is in a language I don't understand"}]
```

11. T05 – Get reasons

Request:

<http://www.herdict.org/action/ajax/plugin/init-reasons/{version}>

Example:

<http://www.herdict.org/action/ajax/plugin/init-reasons/FF1.0>

Response:

JSON formatted array of dictionaries with “value” and “label” tags

Example:

```
[{"value": "reason.accessible", "label": "This site is accessible"}, {"value": "reason.error", "label": "Unintentional network or server error"}, {"value": "reason.dead", "label": "Dead site / bad URL"}, {"value": "reason.geolocation", "label": "Geolocational filtering"}, {"value": "reason.govispfilter", "label": "Government or ISP filtering"}, {"value": "reason.institutionfilter", "label": "Institutional filtering"}]
```

12. T06 – Get current location

Request:

<http://www.herdict.org/action/ajax/plugin/init-reasons/{version}>

Example:

<http://www.herdict.org/action/ajax/plugin/init-currentLocation/FF1.0>

Response:

JSON formatted dictionary with country name, ISP name, and the IP range in the database that was used to retrieve this information

Example:

```
{"countryLong": "United States", "ipTo": 417005567, "countryShort": "US", "ipFrom": 416940032, "ispName": "COMCAST CABLE COMMUNICATIONS HOLDINGS INC"}
```

13. T07 – Get site summary

Since some countries block content based on strings in the URL, including the name of an inaccessible in the URL can lead to the site summary request itself being blocked. Therefore, the server supports ROT13 encoding for site summary requests.

Request:

http://www.herdict.org/action/ajax/plugin/site/{encoded_url}/{country}/{encoding}/{version}

Example 1 (New York Times in Iran, no encoding):

<http://www.herdict.org/action/ajax/plugin/site/nytimes.com/IR/none/FF1.0>

Example 2 (New York Times in US, ROT13 encoding):

<http://www.herdict.org/action/ajax/plugin/site/algvzrf.pbz/US/ROT13/FF1.0>

Response:

JSON formatted dictionary with sheep color indicator (0 = green, 1 = yellow, 2 = orange), total global inaccessible reports, total inaccessible reports in the requested country, Herdict site id, url, country.

Example:

```
{"sheepColor": 0, "globalInaccessibleCount": 3, "siteId": 2480, "countryInaccessibleCount": 0, "url": "nytimes.com", "countryCode": "IR"}
```

14. T08 – Report page

This transaction reports a site as accessible or inaccessible to Herdict. The fields are:

report_type: siteAccessible | siteInaccessible

report.url: encoded url to be reported

report.country.shortName: two-letter code for the country of the report, as selected by the user

report.ispName: name of the user's ISP, as selected by the user

report.location: value from the label/value pair returned by T03

report.interest: value from the label/value pair returned by T04

report.reason: value from the label/value pair returned by T05

report.sourceID: 1 for Firefox add-one, 2 for IE toolbar

report.tag: either the value from the label/value pair returned by T01, or a value entered by the user

report.comments: user comments

defaultCountryCode: two-letter code for the country of the report, as retrieved by T06

defaultISPName: name of the user's ISP, as retrieved by T06

encoding: ROT13 if the URL is ROT13 encoded, any other value otherwise

Request:

```
http://www.herdict.org/action/ajax/plugin/report?{report_type}&report.url={report.url}&report.country.shortName={report.country.shortName}&report.ispName={report.ispName}&report.location={report.location}&report.interest={report.interest}&report.reason={report.reason}&report.sourceId={report.sourceId}&report.tag={report.tag}&report.comments={report.comments}&defaultCountryCode={defaultCountryCode}&defaultISPName={defaultISPName}&encoding={encoding}
```

Example:

```
http://www.herdict.org/action/ajax/plugin/report?siteInaccessible&report.url=algvzrf.pbz&report.country.shortName=US&report.ispName=COMCAST&report.location=location.school&report.interest=interest.high&report.reason=reason.dead&report.sourceId=1&report.tag=tag.news&report.comments=&defaultCountryCode=US&defaultISPName=COMCAST&encoding=ROT13
```

Response:

The string "SUCCESS" if successful, or an HTTP Error 500 on failure

Example:

SUCCESS

15. T09 – Check current version

The purpose of this transaction is to check whether there is a more recent version of the plugin, and take the necessary action. It is platform specific.

For the Firefox plugin, we use the standard Firefox update mechanism, using the RDF file at <http://www.herdict.org/assets/update.rdf>.

For the IE Toolbar, we check the contents of the file at <http://www.herdict.org/assets/ie-version.txt>, and check to see if the version string in that file is more recent than the version of the currently running toolbar

16. Version History

Date	Updated By	Changes made
July 20, 2009	Jeffrey Licht (jeff@podconsulting.com)	Initial version
December 24, 2009	Jeffrey Licht	Extracted Herdict API-specific information into a separate document
January 4, 2010	Jeffrey Licht	Formatting changes
October 21, 2011	Jeffrey Licht	Updated URLs