SUMO/Lithium User Agent

(this document was written mostly by Paul aka Seburo one of our fab volunteers! With a few edits and additions and clarifications by Roland)
Tl;dr: how Kitsune User Agent Detection works now; proposals for Lithium UA detection

Kitsune UA Extraction (with a JS code link!):

When a user posts a question, the following information is captured and displayed by the Kitsune Ask a Question (AAQ) software (The code is at: https://github.com/mozilla/kitsune/blob/master/kitsune/sumo/static/sumo/js/aaq.js - the code seems like straightforward JS that could easily be incorporated into Lithium or any other system), distilled from the User Agent information produced by the browser and auto-tagged:

- Firefox version number
- Firefox platform (Desktop / Android / iOS / future browser products etc)
- Operating system (e.g. Windows 10, Mac OS X 10.10, Linux, Android, iOS)

Examples of Kitsune UA extraction:

https://support.mozilla.org/en-US/questions/firefox

Example questions with auto-tags (full user agent is available by clicking "Additional System Details" on the right sidebar):

- Firefox (FF) Desktop: https://support.mozilla.org/en-US/questions/1145285
  - Auto-tagged tags from the UA: Desktop, firefox 49.0, Windows 10
  - "User Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:49.0) Gecko/20100101 Firefox/49.0"
- FF Android: https://support.mozilla.org/en-US/questions/1145281
  - Auto-tagged tags from the UA: Android, Firefox 49.0
  - "User Agent: Mozilla/5.0 (Android 4.4.2; Tablet; rv:49.0) Gecko/49.0 Firefox/49.0"
- FF iOS: https://support.mozilla.org/en-US/questions/1145275
  - Auto-tagged tags from UA: iOS, no Firefox version - **When Firefox for iOS came out in late 2015 we didn't have the Kitsune developer resources to add Firefox for iOS User Agent detection to the Kitsune AAQ; hopefully we can get them for Lithium**
  - *"User Agent: Mozilla/5.0 (iPad; CPU OS 10_1_1 like Mac OS X) AppleWebKit/602.2.14 (KHTML, like Gecko) FxiOS/5.3 Mobile/14B100 Safari/602.2.14"*
- *Example of Thunderbird user agent string: "Mozilla/5.0 (Macintosh; Intel Mac OS X 10.11; rv:45.0) Gecko/20100101 Thunderbird/45.4.0"*

(This information is also visible when the contributor "opens" the question to answer it.)

Why is this UA information useful?

The SUMO contributor can easily see the operating system:

- E.g. If the question indicates that the user is using a Mac or Windows system, an expert Linux contributor might not know how that works and would therefore probably avoid it, but if it was Linux, a expert Linux contributor might try to answer it.

The SUMO contributor can see the Firefox version:

- Does the user need to update?
- Is the user using ESR? (ESR is the roughly one per year Mozilla Extended Support Release intended for enterprise and corporate users who can't handle internal web app breakage caused by the normal roughly 6 week Firefox release cycle) *shudder* :-)
- Is the user on a pre-Release channel?

Without this information SUMO will either have to ask users to supply it as part of the question flow, or to have contributors ask for it. In both cases we could get answers that are vague such

as "the latest version" or "the version installed on my device". This would delay us in getting to an answer, could mean that we cannot diagnose a problem, or fail to highlight that a user could fix the problem by updating.

Where does this information come from?

This is information that is distilled from the user agent data that all browsers broadcast.   In its raw form it looks like:

Mozilla/5.0 (X11; Linux x86_64; rv:52.0) Gecko/20100101 Firefox/52.0

Kitsune currently distills this into a presentable form, and gives users the opportunity to provide further information about plugins and add-ons.

Requirements for Lithium UA Extraction

In an ideal world we would have a similar display to Kitsune, but we appreciate that this may not (initially) be possible.

Minimum viable product

Raw user agent seen alongside a question and alongside the question once opened (in both cases possibly hidden by a "Show User Agent" button for if it looks a bit ugly). With minimum training, SUMO contributors have enough information to be able to see operating system and Firefox version.

2nd iteration

Information distilled for easier use by contributors

Future iterations

Ability to ask for capture Firefox plugin and Firefox add-on details from users.

Contingency Plan

Should Lithium not be able to support this from day one (the first release), a contingency plan will be required until this can be included (hopefully) in the next update. Three proposals for this:

1) Do nothing.

- Not very Mozilla (we are people that do stuff). No developer work needed. Terrible end user experience due to contributors not having information to better understand the issue

2) User selected tags

As part of the "ask a question" flow, the user selects tags for operating system (from within a choice) and, (for desktop) Firefox version (ESR, plus two versions before Release and numbers up to Nightly post Release (similar for Thunderbird).
- Too much developer work for what is supposed to be a contingency plan.

3) Make use of about:support

As part of the "ask a question" flow, the user is asked to :

- Firefox (desktop) users - copy and paste the UA string from about:support into a separate text box.
- Android, iOS, Webmaker and Focus users - select a radio button to insert the word "Android" or "iOS" or "Webmaker" or "Focus".
- Thunderbird users - asked to copy and paste the UA information from Help > "Troubleshooting information".

This information is displayed as has been input alongside the user's question.

- Much less developer work, potentially easier to transition into a permanent solution, maybe make this mandatory (as UA information is broadcast and not optional)

None of the above are great for users and contributors, but number three possibly has the best balance between user experience and development work. Even then, this needs to be seen as a short term fix. The sooner we have functionality that does not require user input and (possibly, it is not vital to) distills it into a simple form for contributors, the better for SUMO.