

chrome.languageSettingsPrivate - New Chrome API Proposal

Proposal Date

May 2015

Who are the primary Eng and PM contacts for this API? (email addresses)

Eng: michaelpg@

PM: tbuckley@

What are the relevant bug(s)?

crbug.com/479043

Which team will be responsible for this API? (team email address)

chromium-settings@chromium.org

Do you know anyone else, internal or external, that is also interested in this API?

Not currently.

What's a reasonable Chrome milestone target for landing most of the code on Trunk?

M45

Overview

An extension API to enable WebUI and component apps to show and change language and input method settings.

Use cases

We aim to deprecate chrome.send calls in the current Settings UI, relying instead on extension APIs in the [new Settings UI](#). Other apps or WebUI, like Get Help and OOB, could use this API to handle input and language changes without needing custom logic.

Can you imagine any other similar use cases which your API might address?

Not really, it's intentionally intended for setting these settings.

How would you implement your desired features if this API didn't exist?

We'd need to use chrome.send(), which would preclude us from writing a component app and is unnervingly non-contractual and error-prone.

Is this something that could/should be part of the web platform, or an existing chrome.*

API?

No. At first glance, languages are closely related to input methods on Chrome OS, and `chrome.inputMethodPrivate` exposes information about the currently enabled input methods for use by input method extensions. However, the ability to adjust user settings for languages and input methods should be scoped separately. The proposed API has more settings than are needed for `chrome.inputMethodPrivate`'s use case.

Does this API expose any functionality to the web?

No.

Do you expect this API to be fairly stable? How might it be extended or changed in the future?

Yes. The interface has been designed to be relatively independent of future changes to the internals of the input method, locale, spellchecking and translate systems.

If multiple apps/extensions used this API at the same time, could they conflict with each other? If so, how do you propose to mitigate this problem?

Not really. Today you could open two Settings instances and make changes to languages and input methods; the last changes made always take effect, and those changes should be reflected in the other consumers.

List every UI surface belonging to or potentially affected by your API:

The new material design Settings UI will include pages for languages and input methods, which will use this API. See mocks in <http://crbug.com/460269>.

Actions taken with app/extension APIs should be obviously attributable to an app/extension. Will users be able to tell when this new API is being used? How? Can it be spoofed?

As a private API, it is Chrome's responsibility to use this API in a clear manner -- namely, only when the user is changing settings via a clear interface.

Does this API impose any requirements on the Chrome Web Store ?

No.

Does this API have any interaction with other Chrome APIs? Does it impose any restrictions on other APIs that can be used in conjunction?

No.

How could this API be abused?

This is no more a concern than the existing Setting page `chrome.send` calls.

Imagine you're Dr. Evil Extension Writer, list the three worst evil deeds you could commit with your API (if you've got good ones, feel free to add more):

1. Change someone's keyboard layout to Dvorak.
2. Change someone's display language to Klingon.
3. Wait, is Dr. Evil a committer? This is a private API. Please revoke his/her credentials.

What security UI or other mitigations do you propose to limit evilness made possible by this new API?

None.

Could a consumer of your API cause any permanent change to the user's system using your API that would not be reversed when that consumer is removed from the system?

Settings are sticky, but can always be changed unless we remove the UI to do so.

Draft Manifest Changes

📝 Please mention new permissions and any other new manifest attributes.

Draft API spec

[CodeReview for language_settings_private.idl draft.](#)

Open questions

There are some changes that will need to be made to `chrome.inputMethodSettings` and `chrome.settingsPrivate`, but those can be discussed elsewhere.