

Test Pilot Containers Requirements

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POCs

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We believe the the containers feature provides a differentiating feature among current popular browsers that may be attractive to security-minded, privacy conscious users, users who manage multiple online identities, heavy web users, and users seeking a more organized browsing experience.

Background

Currently, the Containers feature in Nightly provides an interface for users seeking to manage different aspects of their online life. Containers works by isolating cookie jars using separate origin-attributes defined visually by colored 'Container Tabs'. The benefits of the system as it currently exists are as follows:

- Provides the ability to log into the same site in the same session with multiple identities by leveraging multiple Containers.
- If used carefully, Containers can prevent tracking. If a site is only opened in one Container, cookies set on that container cannot follow the user to other sites visited in non-container tabs or other containers.

While the Containers feature in Nightly has received positive notice, some critiques and questions around this UX remain such as:

- Will a general Firefox audience understand the Containers feature?
- Is the UI as currently implemented in Nightly clear or discoverable?

Before moving Containers through the Trains in Firefox, we wanted to consider possible alternate implementations and similar technologies. We conducted three phases of research to better understand the design space:

- [A Design Sprint exploring an alternate implementation of a containers-like feature called 'Spaces'](#)
- [A user test of Chrome's Profile switcher.](#)

- [A user test of Nightly's implementation of Containers.](#)

While none of these studies definitively answer the question of whether Containers make sense as a feature in Firefox, they nevertheless suggest several changes to the current UI that might strengthen user understanding and adoption of the feature.

- The Containers feature provides a clear value-added for people managing multiple accounts online.
- Making Container creation/deletion UI easily discoverable can help re-enforce intended usage patterns.
- In addition to the privacy and security enhancements provided by Containers, our user research suggests their disposable nature may make them a handy tool to help heavy tab users stay organized.
- For more details, please see the full UR reports above.

Goals

We intend to ship a modified version of the containers feature in Firefox Test Pilot to understand the following:

- Is this feature valuable to users in Test Pilot?
- Do containers users retain at a higher rate than non-containers users across Test Pilot experiment and no-experiment cohorts?
- Do users make use of container tabs, and with what frequency?
- Do users pull containers into new windows using the experiment UI.
- Does containers non-interaction with Firefox' library and URL bar limit utility? (we will determine this via survey)
- What are the reported satisfaction scores for this feature with a Test Pilot audience?
- Do users make use of the sort feature to better organize their tabs?

Shipping requirements

[A complete set of acceptance criteria can be found here.](#)

UX Requirements

UI will be based on the current containers feature with the following changes/additions:

- Color coding will be made more visible on a per tab basis.
- Container Tab CRD will happen in a toolbar icon with the following controls
 - Container creation UI
 - Container deletion

- Toggle container visibility (show/hide)
- Sort containers (rearrange tabs in order)
- Open containers in a new window

See also: <https://mozilla.invisionapp.com/share/WF9INQMBM#/screens/211368104>

UX Non-requirements

This experiment will not modify any of the following UX

- [The awesome bar](#)
- Library UI
- About:newtab
- Sync

Measurement & Test Requirements

In order to understand how users interact with this feature we should instrument event telemetry on all controls including:

- Container tab creation
- Total tab creation
- Types of container tabs created (names of opened containers)
- Container destroys
- Container window creations
- Unique URI counts

We should also conduct *two* cohort tests:

Test Pilot A/B Test

Over the course of the study we should introduce at least two features through A/B tests.

Feedback Surveys

Feedback survey should focus on three areas

- Mental model: questions to determine if users' mental models of the feature matches the feature.
- Feature set: is this feature complete in itself or is it missing anything obvious?
- User self-identification: understanding how users identify themselves (security minded, organizationally minded, etc)
- Do self described privacy/security minded users feel that this feature adds to their sense of personal privacy/security.

- Do self described heavy web users (multiple accounts/identities) feel that Containers provide increased utility in managing content on the web.

Outcomes

We believe that the containers experiment will give us significant insight into user needs around privacy, identity management, and workflows in general as well as the efficacy of the specific experiment UI.

The underlying origin-attributes capabilities behind containers are built into the browser platform. We believe that the Test Pilot experiment gives us a unique opportunity to explore one possible method of leveraging origin-attributes to provide a UX that empowers users to manage their online identities. However, given the relative lack of technical expertise among Firefox users, and the novelty of the Containers feature, there is no guarantee that our first effort will prove to be the canonical always-correct-in-perpetuity UI wrapper for the origin-attributes capability. Primary success criteria for this experiment are as follows:

- We should have a large set of qualitative feedback to help us reason about users mental models WRT online identity, privacy, security etc.
- We should have a clear understanding of the utility of the Containers feature through metrics such as cohort retention, and heartbeat surveys.
- We should be able to propose concrete next steps for modifying or augmenting both the underlying origin-attribute platform features and containers UX.

Should these success conditions come to pass, Containers would be a viable candidate for inclusion in a Shield study. Such a study would then provide insight into the utility of the feature across a representative sample of general release users. Measurement criteria for moving from Shield into general release (or other) will be defined in a separate document (example).

Graduation Path

For the first month of the Containers experiment there will likely be significant bug fixing as well as feature requests by participants. As much as possible engineering resources should be allocated to the former, while product resources should be allocated to triaging and prioritizing the latter.

After this initial period we should conduct cohort test on feature suggestions derived from user feedback and monitor ongoing health and cohort retention metrics.

After three months, we will be able to make determinations about moving the experiment into Shield. Graduation for Containers should mean that the experiment is no longer installable through Test Pilot, but because there is no backing service to maintain, we should still allow study participants to keep the extension installed until final determinations are made about its long term future post-Shield.

Risks + Failure Conditions

While the Containers feature seems sensible based on previous UR, there are not any directly analogous features in the browser space. There is some risk that users will not understand the point of this experiment, or that we may not be able to explain the utility of the feature adequately. We should leverage user research conducted prior to launch to help tune our language around this feature to mitigate this risk.