Offline Quickstart



Situation in context

What problems do you face when connectivity is unreliable?

Some of the issues



Credit: Khaase CC0



Service worker solutions

Problem Solution Technology

You click on a Cache the Caching API link and the content page doesn't appear

Service worker solutions

Problem	Solution	Technology
You submit a form and nothing happens	Cache the data	IndexedDB



Service worker solutions

Problem	Solution	Technology
When	Cache and	Background
connectivity	save data until	Sync
returns you lose	connectivity is	
all your data	restored	

Caching static assets

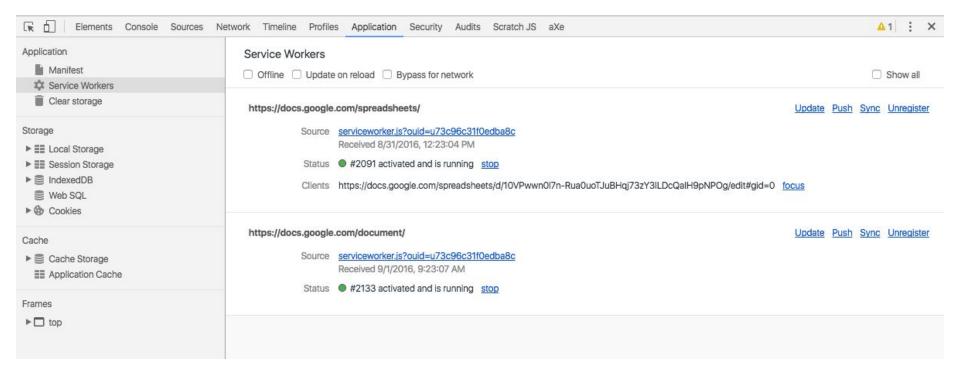
```
addEventListener('install', event => {
  event.waitUntil(
      caches.open('static-cache-v1')
        .then(cache => {
          return cache.addAll([
            'offline/index.html',
            'offline/main.js',
            'offline/main.css'
          1)};
```

Retrieving static assets from the cache

```
self.addEventListener('fetch', function(event) {
  event.respondWith(
    caches.match(event.request)
    .then(response => {
       return response ? response
                        : fetch(event.request);
```

Load the script via Service Worker

```
if ('serviceWorker' in navigator) { //1
navigator.serviceWorker.register('service-worker.js',
  {scope: './'}) //2
 .then(function(registration) {
  console.log('Service worker successfully registered'); // 3
 })
 .catch(function(error) {
  console.log('Registration failed:', error); // 4
});
} else {
window.alert('Service Worker is not supported in this browser'); //5
```





Install to Homescreen via manifest.json

```
"name": "Demo Blog Application",
"short name": "Demo Blog Application",
"start url": "index.html",
"icons": [{
      "src": "images/touch/icon-128x128.png",
      "sizes": "128x128",
      "type": "image/png"
    }],
"background color": "#3E4EB8",
"display": "standalone",
"theme color": "#2E3AA1"
```

Lab overview

- Create service worker
 - Cache files
 - Intercept network requests
- Install service worker on index.html
 - Installation
 - Scope

Lab steps

- Create service worker
 - Install event
 - Fetch event
- Install service worker on index.html
 - Installation
 - Scope

References and sample applications

General Information

- Is ServiceWorker Ready?
- Mozilla Developers Network
- Introduction to service workers
- Fetch Event
- Your first push notifications web app

Sample Applications

- IO 2106
- Trained to Thrill
- Chrome Dev Summit
- Push Demo