## Cross-Domain LocalStorage

As you may know, [LocalStorage](http://diveintohtml5.info/storage.html) is domain based. You can’t read or write from localstorage that’s on different domain, even if that’s subdomain. But there is iframe trick that you can use to store data from domain to it’s subdomain.

Basically you create an iframe that’s hosted on your other domain, then you send PostMessage to that iframe and inside iframe you set that value of localStorage.

Here is the code:

**iFrame**

window.onmessage = function(e) {  
 if (e.origin !== "http://domain.com") {  
 return;  
 }  
 var payload = JSON.parse(e.data);  
 localStorage.setItem(payload.key, JSON.stringify(payload.data));  
};

**main file**

window.onload = function() {  
 var win = document.getElementsByTagName('iframe')[0].contentWindow;  
 var obj = {  
 name: "Jack"  
 };  
 win.postMessage(JSON.stringify({key: 'storage', data: obj}), "\*");  
};  
  
<iframe style="display:none" src="http://sub.domain.com/iframe.html"></iframe>

If you want to save and load value from LocalStorage, you can PostMessage with method key that will indicate what action it need to take. You can also send message back from iframe to it’s parent with data read from localStorage.

**iframe**

document.domain = "domain.com";  
window.onmessage = function(e) {  
 if (e.origin !== "http://domain.com") {  
 return;  
 }  
 var payload = JSON.parse(e.data);  
 switch(payload.method) {  
 case 'set':  
 localStorage.setItem(payload.key, JSON.stringify(payload.data));  
 break;  
 case 'get':  
 var parent = window.parent;  
 var data = localStorage.getItem(payload.key);  
 parent.postMessage(data, "\*");  
 break;  
 case 'remove':  
 localStorage.removeItem(payload.key);  
 break;  
 }  
};

Your main page on [**domain.com**](https://domain.com/)

window.onload = function() {  
 var win = document.getElementsByTagName('iframe')[0].contentWindow;  
 var obj = {  
 name: "Jack"  
 };  
 // save obj in subdomain localStorage  
 win.postMessage(JSON.stringify({key: 'storage', method: "set", data: obj}), "\*");  
 // load previously saved data  
 win.postMessage(JSON.stringify({key: 'storage', method: "get"}), "\*");  
 window.onmessage = function(e) {  
 if (e.origin != "http://sub.domain.com") {  
 return;  
 }  
 // this will log "Jack"  
 console.log(JSON.parse(e.data).name);  
 };  
};

Here is [a demo](http://jcubic.pl/sysend.php) that use [sysend library](https://github.com/jcubic/sysend.js) to send messages to other tab in same browser (the library use localStorage for this). It use iframe proxy to send message from **jcubic.pl** to **terminal.jcubic.pl** and vice versa. Iframe is hosted on both domains.