

Run Internationalized HTML5 App as Native Windows Program



Andreas Breitschopp



Andreas Breitschopp



End User Products Based on .NET
Targeting the Online and Retail Market



Overview

- **Internationalization of a HTML5 App**
 - JSON Language File
 - HTML File
 - I18n JavaScript Library
 - Helper Functions
 - Main Localization Function
 - I18n Test Program
- Intel AppUp Encapsulator
- Conclusion





JSON Language File

```
{  
    "Internationalization Test":  
        "Internationalisierungstest",  
    "This is an Internationalization Test!":  
        "Dies ist ein Internationalisierungstest!",  
    "With any subtitle.":  
        "Mit irgendeinem Untertitel.",  
    "Show in English":  
        "Auf Englisch anzeigen",  
    "Show in German":  
        "Auf Deutsch anzeigen",  
    "Localizing the document title...":  
        "Lokalisiere den Dokumententitel...",  
    "Localizing other HTML tags...":  
        "Lokalisiere andere HTML-Tags...",  
    "Localizing done!":  
        "Lokalisierung fertig!"  
}
```



HTML File

```
<!doctype html>
<html>
<head>
  <meta charset="utf-8">
  <title>Internationalization Test</title>

  <link rel="localization" hreflang="de"
        href="lang/de.json" type="application/vnd.oftn.110n+json"/>
  <script type="text/javascript" src="js/i18n.js"></script>
  <script type="text/javascript" src="js/script.js"></script>
</head>
<body onload="loaded()">
  <h1 id="headertext">This is an Internationalization Test!</h1>
  <h2 id="subtitledtext">With any subtitle.</h2>
  <a id="showinenglish" href="index.html?lang=en">Show in English</a>
  <a id="showingerman" href="index.html?lang=de">Show in German</a>
</body>
</html>
```



I18n JavaScript Library

Get the I18n JavaScript library here:

<http://eligrey.com/blog/post/passive-localization-in-javascript>

One small code change is necessary:

```
[...]
req.open("GET", uri, FALSE);
req.send(null);
if (req.status !== 200 && req.status !== 0) {
    // warn about error without stopping execution
}
[...]
```



Helper Functions

```
var _ = function (string) {  
    return string.toLocaleString();  
};  
  
function localizeHTMLTag(tagId) {  
    tag = document.getElementById(tagId);  
    tag.innerHTML = _(tag.innerHTML);  
}
```



Main Localizing Function

```
function loaded() {  
    var lang = getParameterValue("lang");  
    if (lang != "") String.locale = lang;  
  
    alert(_("Localizing the document title..."));  
    document.title = _(document.title);  
  
    alert(_("Localizing other HTML tags..."));  
    localizeHTMLTag("headertext");  
    localizeHTMLTag("subtiletext");  
    localizeHTMLTag("showinenglish");  
    localizeHTMLTag("showingerman");  
  
    alert(_("Localizing done!"));  
}
```



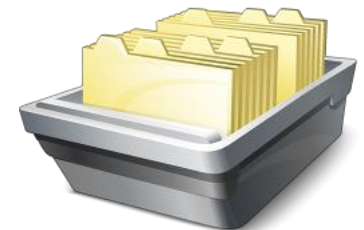

I18n Test Program





Overview

- Internationalization of a HTML5 App
- **Intel AppUp Encapsulator**
 - What is AppUp?
 - Why an App Store for Windows?
 - Why using Encapsulator?
 - Preparations
 - Upload Application
 - Download MSI and RPM
 - App as Windows Binary
- Conclusion





What is AppUp?

- App store for netbooks, tablets and Ultrabooks
- AppUp client pre-installed on new devices
- Customers browse app catalogue
- Purchase of apps is save and easy





Why an App Store for Windows?

- Inexperienced users don't like to search for apps in the internet
 - Apps in AppUp are validated: therefore guaranteed clean and virus-free
 - If they buy an app: they want a secure and easy purchase gateway
- ☞ Intel AppUp as trusted platform





Why using Encapsulator?

- Create a native Windows program from your HTML5 app
- Users can access your app just as any other Windows program with a desktop and a start menu icon
- No need to have a special browser
- Opportunity to submit your app to the Intel AppUp program





Preperations

- Create a program icon (at least 128·128 pixels)
- Compress all files (HTML, JavaScript, CSS and the program icon) into one ZIP file
- Open webpage

[http://appdeveloper.intel.com](http://appdeveloper.intel.com/en-us/encapsulator-beta)
[/en-us/encapsulator-beta](http://appdeveloper.intel.com/en-us/encapsulator-beta)

in your browser





Upload Application

Intel AppUp™ developer program Language: English

Get Started | Develop | SDKs and Tools | Documentation | Opportunities | Community | Support

AppUp (TM) encapsulator beta. Transform web apps into Intel AppUp(SM) center apps

Introduction | **Make your app** | Check status and download | Next steps | Advanced (APIs etc)

? Organization name: *
AB-SoftCon.net

? Windows App name: *
I18n Test

? Meego Netbook App name: *
I18n Test

? App tool tip: *
I18n Test

? App exe name: *
I18nTest

? App version string: *
1.0.0.0

? App code file (.zip, .air): *
C:\I18nTest\I18nTest.

▼ AppUp center settings

? GUID for MeeGo Netbook (Web only):
0x17CB4F6B,0x6C9B44F1,0x96D449E9,0x5C97013C

? GUID for Windows (Web, AIR):
0xBF4FC234,0x1108423A,0x997FD6C7,0xD97F4868

► Additional app settings

Use of this tool is subject to Intel's [Terms of Use](#). If you do not agree to these terms, do not use this tool.



Download MSI and RPM

Intel AppUp™ developer program

Language: English

Get Started | Develop | SDKs and Tools | Documentation | Opportunities | Community | Support

AppUp (TM) encapsulator beta. Transform web apps into Intel AppUp(SM) center apps

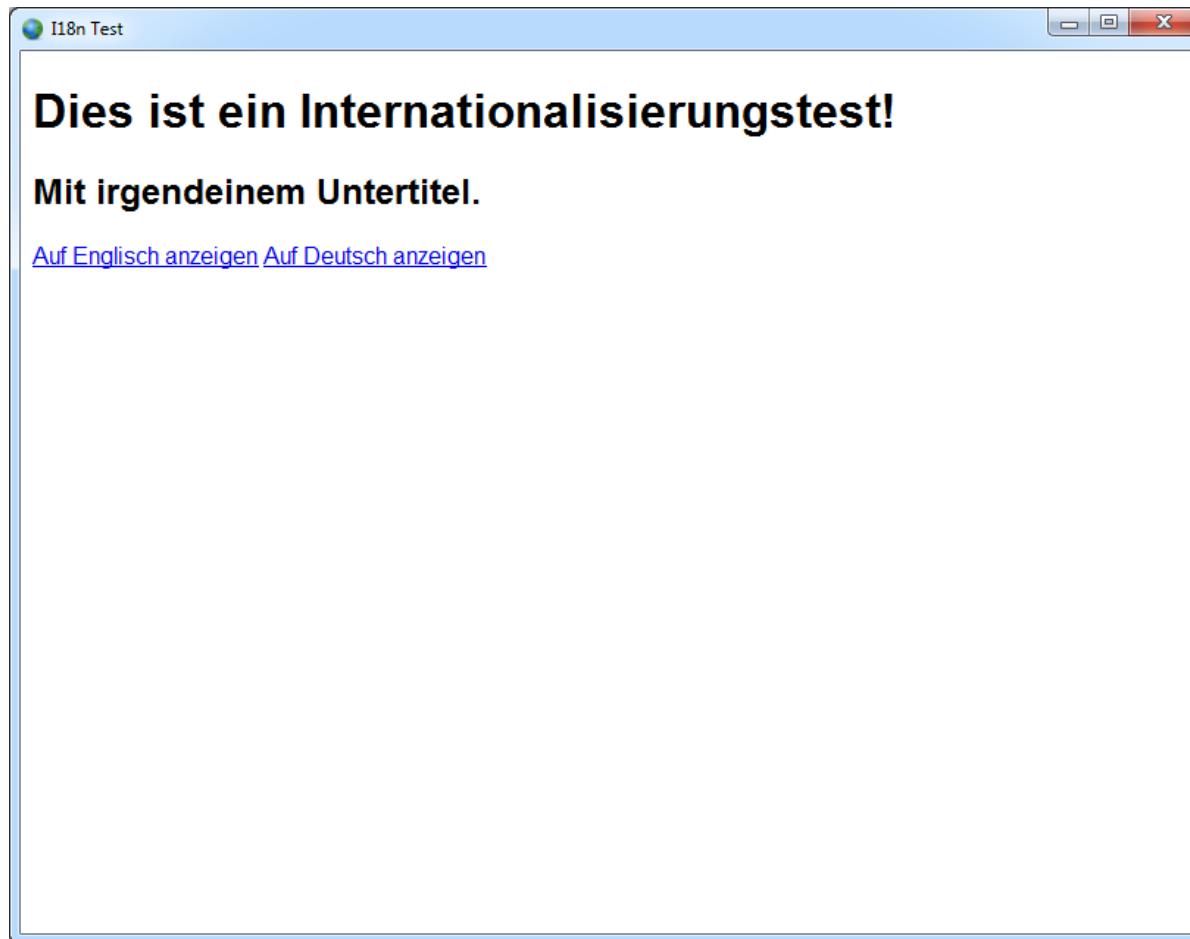
Introduction | Make your app | **Check status and download** | Next steps | Advanced (APIs etc)

no more pending jobs, done automatic status checks...

- I18n Test
 - started: 2012-03-06T07:32:24-0800
 - completed: 2012-03-06T07:33:32-0800
 - Download: [Windows MSI installer package](#)
 - Downloads expire: 2012-03-07T07:33:32-0800
- I18n Test
 - started: 2012-03-06T07:32:24-0800
 - completed: 2012-03-06T07:33:02-0800
 - Download: [MeeGo Netbook RPM installer package \(HOWTO: indicate a netbook app when submitting \)](#)
 - Downloads expire: 2012-03-07T07:33:02-0800



App as Windows Binary





Overview

- Internationalization of a HTML5 App
- Intel AppUp Encapsulator
- **Conclusion**





Conclusion



Developing a localized HTML5 app is very easy by using the mentioned I18n JavaScript library.



If you have an existing HTML5 app use the Encapsulator to generate a native Windows binary.



Thank You for Your Attention!

Questions?



Andreas Breitschopp

a.breitschopp@ab-softcon.net

www.ab-softcon.net

+49 89 38898588

Blog: AB-WebLog.com