



IE8 FOR WEBSITES

(A Developer Overview)

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Sesija: 25H

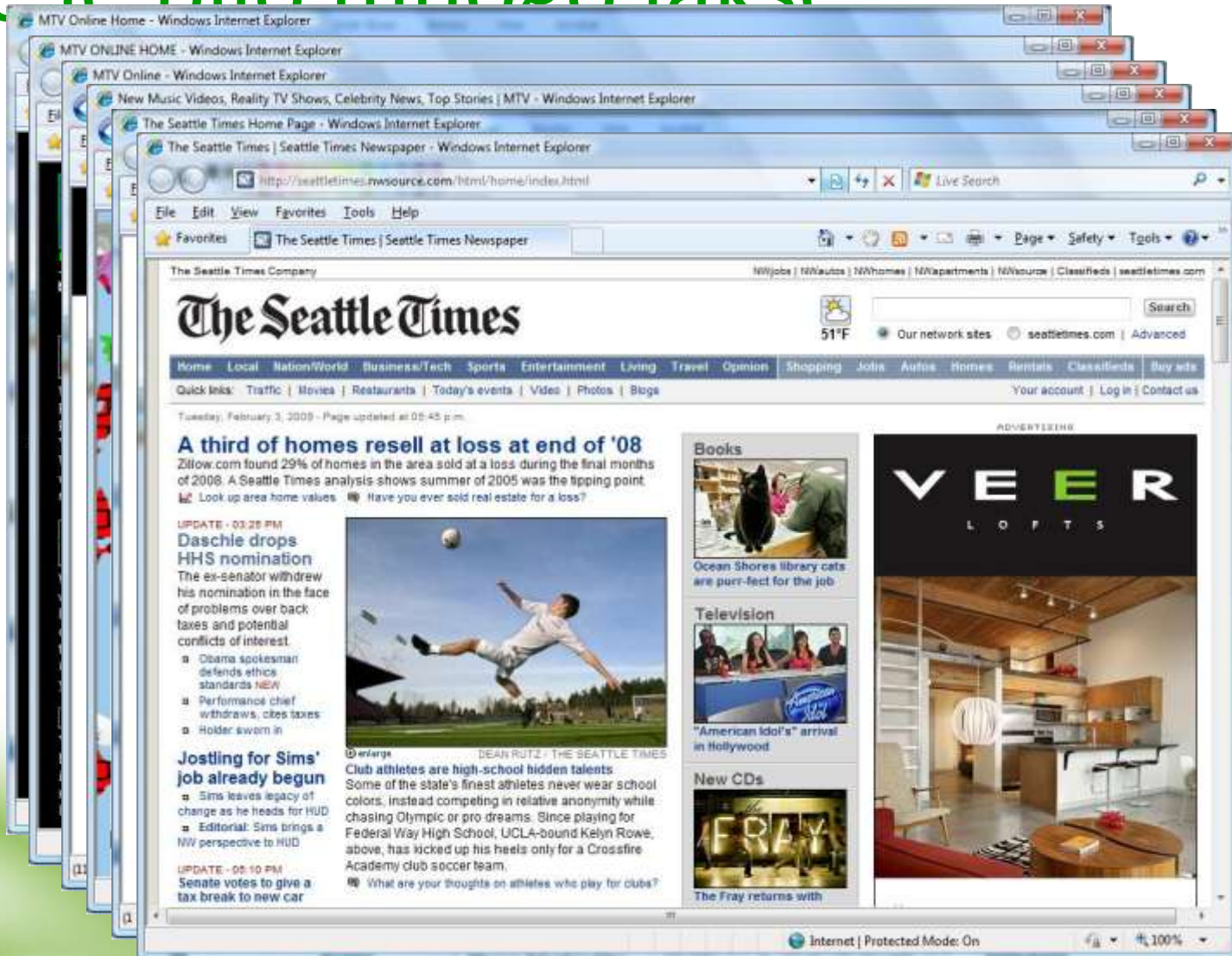
Nivo: L200



Sadržaj

- IE Kompatibilnost
- Razvojni alati
- Kako zadržati korisnike

Prije je bilo mnogo lakše



Best Before: 18.10.2006



Kad bi svi razumjeli isti jezik...

Stranica prilagođena
za Internet Explorer 6



Stranica prilagođena
za Internet Explorer 7

1. Prepoznaaj browser
2. Pošalji odgovarajuću stranicu

Stranica prilagođena
browserima koji najbolje
„razumiju“ standarde



Naredni korak (na pravom putu)



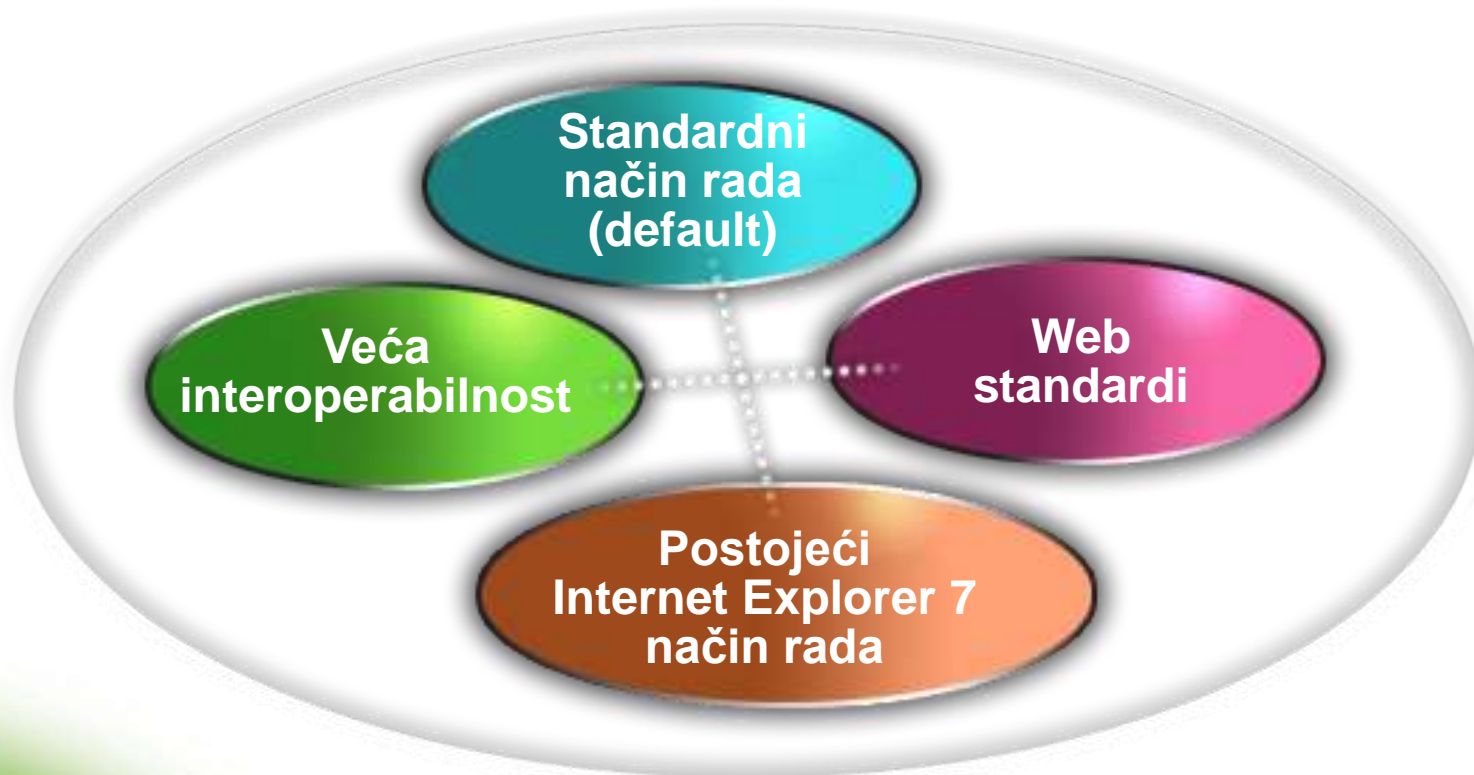
Stranica prilagođena
browserima koji najbolje
„razumiju“ standarde

1. Prepoznavaj browser
2. Pošalji stranicu

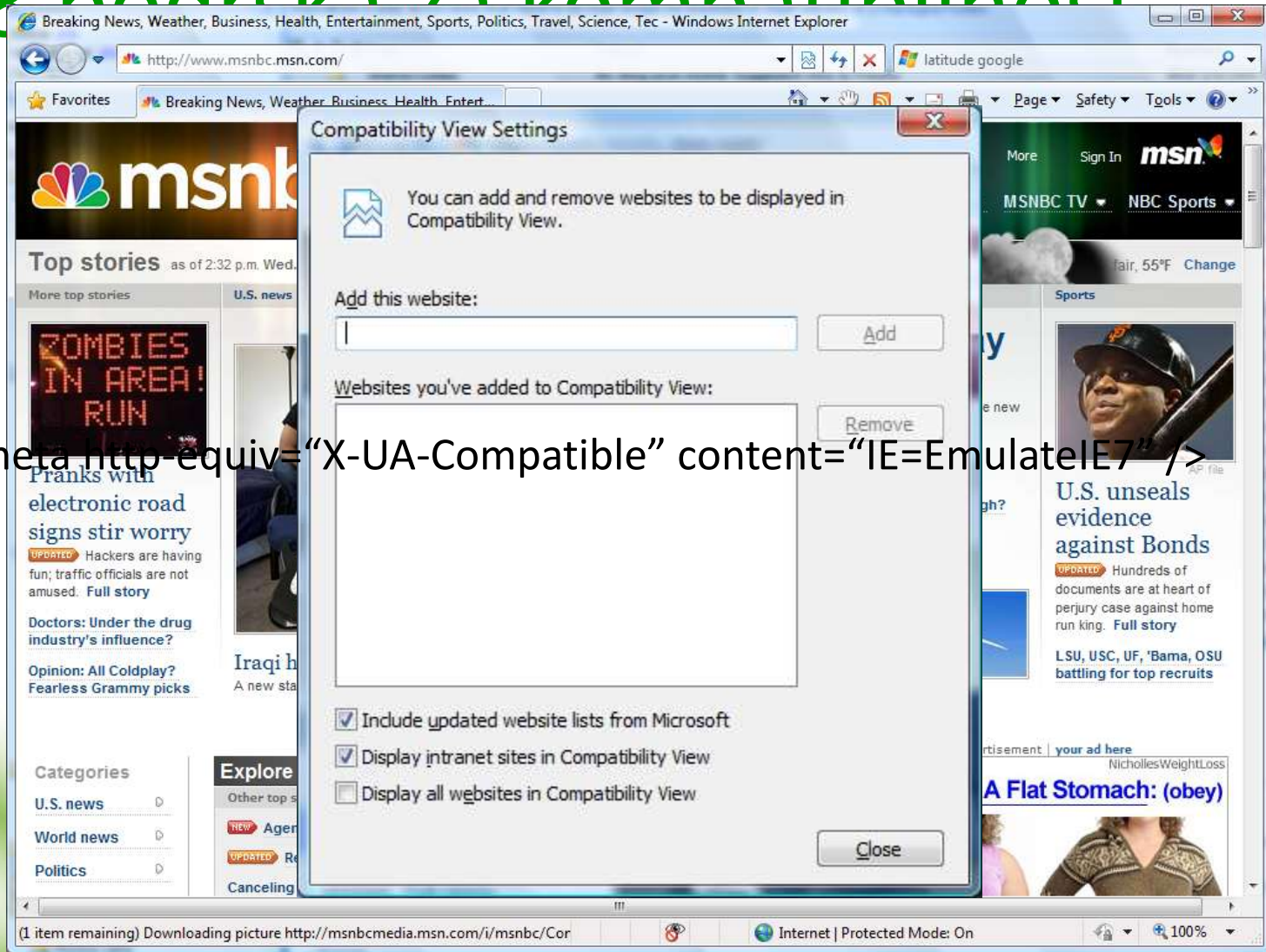
Firefox



Koji je pravi način rada?



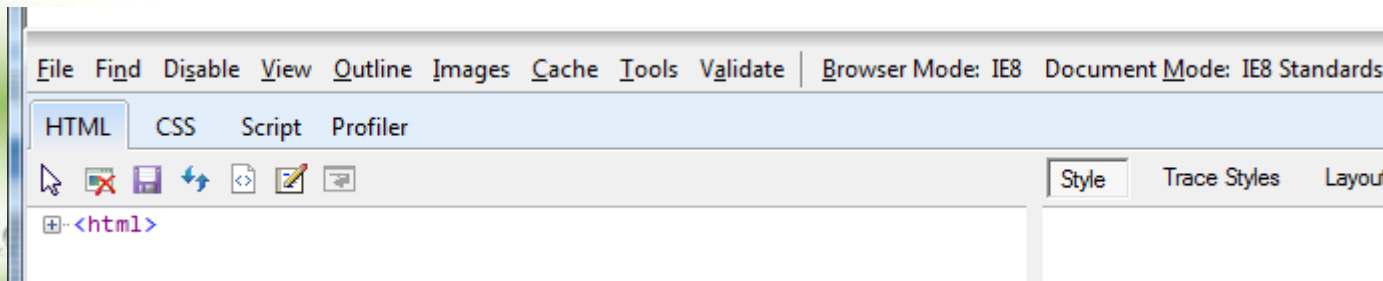
IE8 podrška za kompatibilnost



<meta http-equiv="X-UA-Compatible" content="IE=EmulateIE7" />

Pomoću razvojnih alata

- Browser Mode
 - Mijenja UA string
 - Mijenja način prikazivanja koji IE koristi
- Document Mode
 - Ne mijenja UA string
 - Samo mijenja rendering engine koji IE koristi



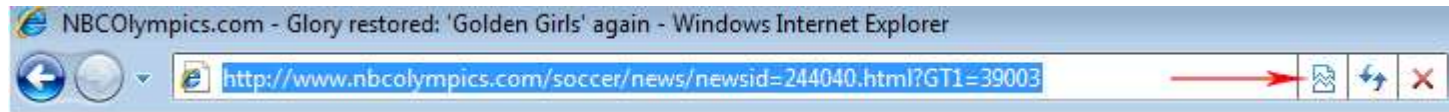
Dešifrovanje stringa User Agent

- Internet Explorer 8; Vista; Compatibility Mode
 - **Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 6.0; Trident/4.0)**
- Internet Explorer 8; Vista; Standards Mode
 - **Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 6.1; Trident/4.0)**
- Internet Explorer 8; Windows 7; Compatibility Mode
 - **Mozilla/4.0 (compatible; MSIE 7.0; Windows NT 6.1; Trident/4.0)**
- Internet Explorer 8; Windows 7; Standards Mode
 - **Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 6.1; Trident/4.0)**



Real World Solutions

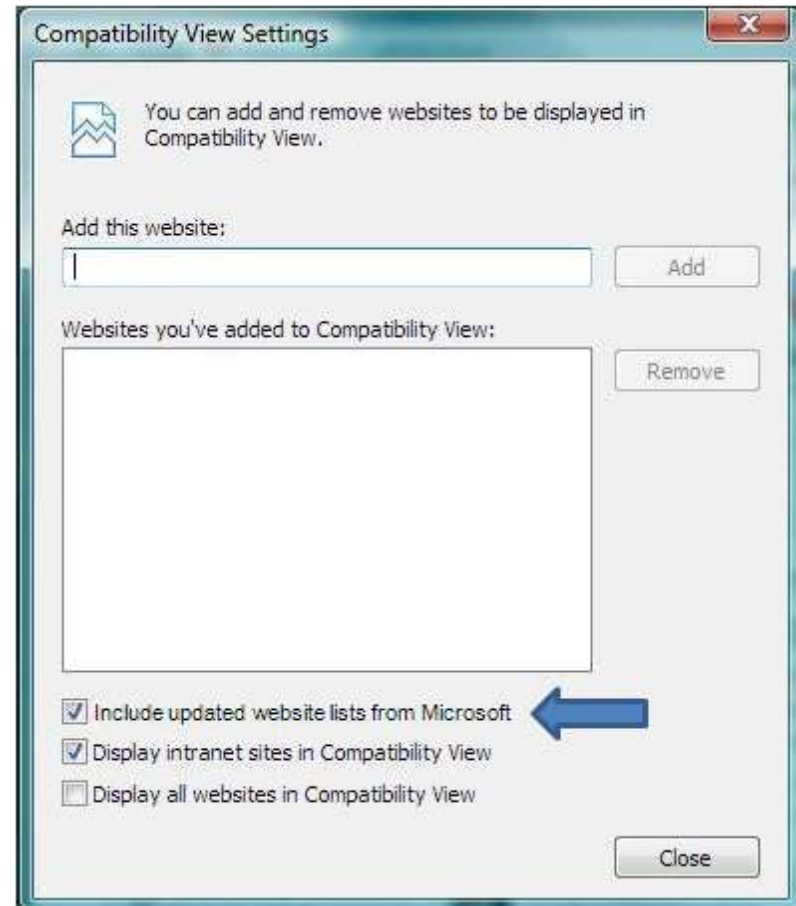
Najlošije: Compat taster



- Pored tastera „refresh“ desno od polja adrese
- Pretpostavka je da korisnik razumije da su problemi sa prikazivanjem uzrok neispravnog izgleda sajta

Manje prihvatljivo: Compatibility View List

- Ako sajt spada u klasu najpopularnijih svjetskih sajtova I problem sa prikazivanjem je prijavljen Microsoft-u
- IE8 automatski prikazuje taj sajt koristeći compatibility mode
- „Skidanje sa liste“ implementacijom X-UA-Compatible tag-a ili obavještanjem Microsoft-a



res:///iecompat.dll/iecompatdata.xml

Željeno: Kodiranje prema standardima



CSS 2.1



- CSS 2.1
- DOM Unapređenja
- HTML Unapređenja
- Acid2 Test

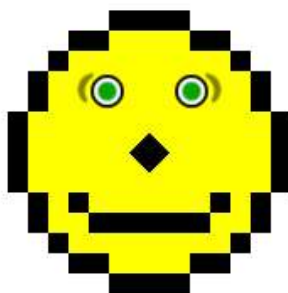


HTML



- Što znači
 - Podrška za Data URI
 - Improved Namespace Podrška
 - I više...

Hello World!



ACID 2

Najbolje: Standardi i X-UA-Compatible

- Postojeći ili stari sajtovi: IE=EmulateIE7
- Novi i budući sajtovi: IE=EmulateIE8

Content Value	Meaning
IE=5	“Quirks” mode
IE=7	IE7 Standards mode
IE=EmulateIE7	Display standards DOCTYPEs in IE7 Standards mode; Display quirks DOCTYPEs in Quirks mode
IE=8	IE8 Standards mode
IE=EmulateIE8	Display Standards DOCTYPEs in IE8 Standards mode; Display Quirks DOCTYPEs in Quirks mode. Use this tag to override compatibility view on client machines and force Standards to IE8 Standards.
IE=Edge	Display in latest mode; In the IE8 release, this is equivalent to IE=8

```
<meta http-equiv="X-UA-Compatible" content="IE=EmulateIE7" />
```

Usaglašenost sa CSS 2.1

**“...they can use any other algorithm
even if it results in different
behavior.”**

CSS 2.1 Table Width Algorithms

CSS 2.1 Table Width Algorithms

DISCUSSION

Novi Layout Engine

- Korisnik očekuje da sajt radi
- Programer želi mogućnost izbora:
 - IE6 prikazivanje
 - IE7 prikazivanje
 - IE8 prikazivanje
- Ugrađeni IE7 i IE8 rendering engine
- Kako dati programerima ono što žele?
- Compatibility Meta Tag ili HTTP Header

```
<meta http-equiv="X-UA-Compatible" content="IE=7" />
```

Razvojni alati

- Dolaze „u paketu“, nema dodatne instalacije
- Debugging HTML i CSS
 - Primijenjeni stilovi, praćenje stilova, View layout, Edit HTML iCSS
- Debugging JavaScript
 - Kontrola izvršavanja, praćenje promjenljivih, Immediate prozor
- Jednostavno mijenjanje rendering engine-a
 - Mijenjanje layout moda bez promjene koda stranice

Razvojni alati

- JavaScript Profiler
 - Pokretanje i zaustavljanje profilera – jedan klik
 - Lako se uočava šta povećava vrijeme učitavanja
 - Function ili Call Tree View
- Snimanje izmjena
 - Edutovanje kao u Notepad-u ili inline
 - Dodavanje/Izmjena atributa, klasa i properti-ja
 - Izmijenite HTML, CSS, i snimate na disk

Demo

- Internet Explorer razvojni alati

Akceleratori

- Web servisi na dohvat (desnog) klika
 - Mape, Blog, Email, Social Networking
- Korisnici se brzo preusmjeravaju na vaš sajt
- Koriste Open Service Format
 - XML file
- Lako se instaliraju korisnicima
 - *window.external.IsServiceInstalled()*
 - *window.external.AddService()*

XML Opis akceleratora

```
<?xml version="1.0" encoding="utf-8" ?>
<openServiceDescription xmlns="http://www.microsoft.com/schemas/openservicedescription/1.0">
  <homepageUrl>http://maps.live.com</homepageUrl>
  <display>
    <name>Map with Live Maps</name>
    <icon>http://maps.live.com/favicon.ico</icon>
  </display>
  <activity category="Map">
    <activityAction context="selection">
      <execute method="get"
        action="http://maps.live.com/default.aspx?where1={selection}" />
      <preview method="get" action="http://maps.live.com/geotager.aspx">
        <parameter name="b" value="{selection}" />
        <parameter name="clean" value="true" />
        <parameter name="w" value="320" />
        <parameter name="h" value="240" />
        <parameter name="format" value="full" />
      </preview>
    </activityAction>
  </activity>
</openServiceDescription>
```

Web Slice-ovi

- Korisnici prate mnogo sadržaja na webu
 - Aukcije, Vrijeme, Vijesti, Blogovi...
- Koristeći Web Slice korisnici se mogu pretplatiti na sadržaj direktno na stranici
- Web slice na stranici „uključuje“ se korištenjem nekoliko novih CSS klasa

Web Slice primjer

http://www.ebay.com/amazonkindle20543521543

```
<div class="hslice" id="facebookSlice" >
```

```
  <p class="entry-title">Facebook Status Updates</p>
```

```
  <div class="entry-content">
```

```
    Will Mason is going to see Steve Berkoff ...
```

```
    <hr />
```

```
    Tony Chor had a great night sailing. End of a fun season.
```

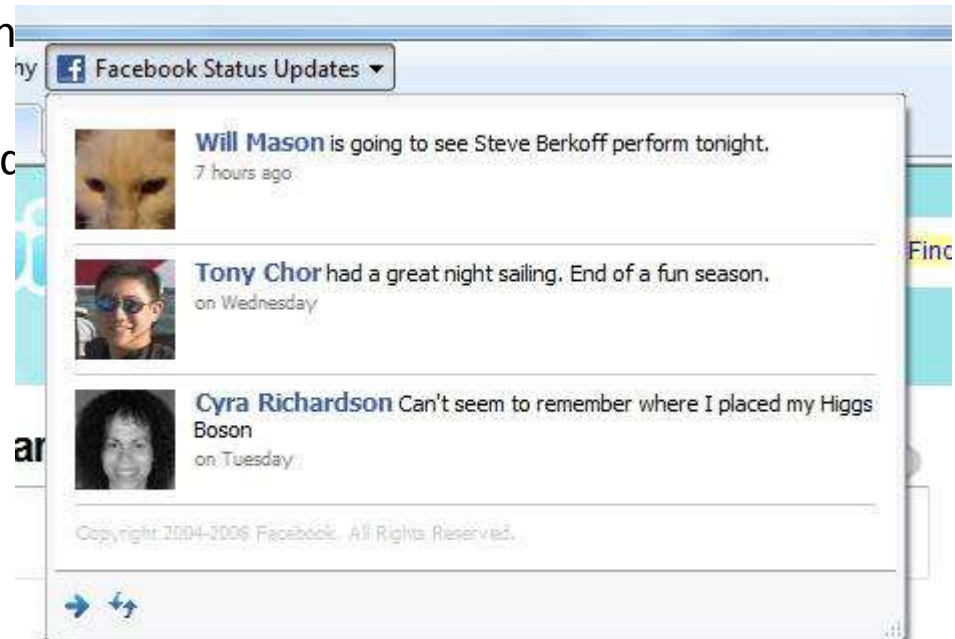
```
    <hr />
```

```
    Cyra Richardson Can't seem to remember where I placed my Higgs
```

```
    <hr />
```

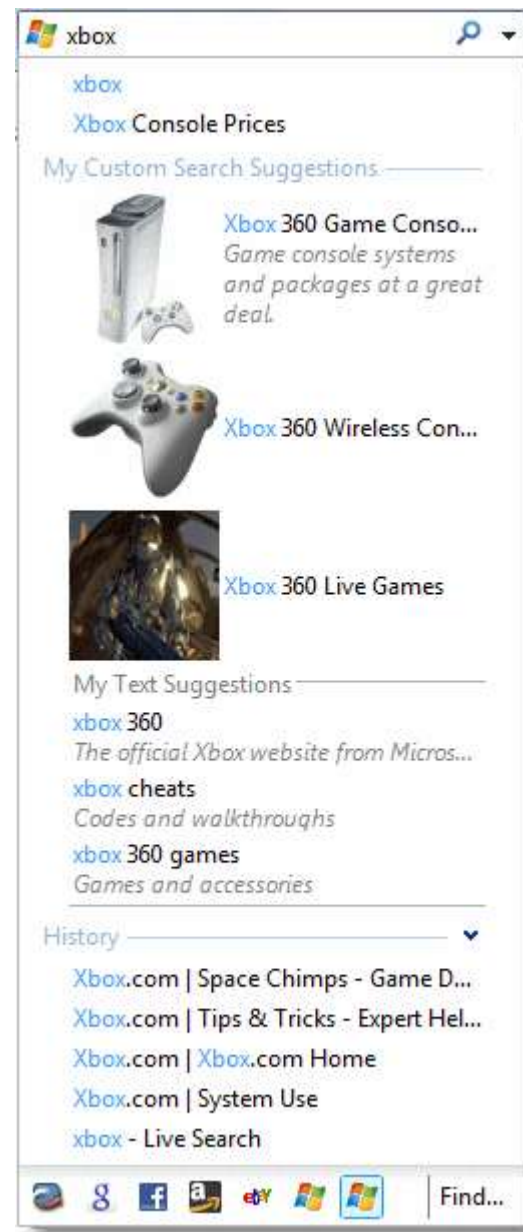
```
  </div>
```

```
</div>
```



Vizuelna pretraga

- Search Providers postoje još iz vremena IE7
- U skladu sa OpenSearch specification
- IE8 omogućava da i slike budu dio XML koda isporučenog korisnicima
- Kreiraju se na isti način kao i bilo koji drugi OpenSearch dobavljač pretrage.



OpenSearch primjer

```
<?xml version="1.0" encoding="UTF-8"?>
<OpenSearchDescription xmlns="http://a9.com/-/spec/opensearch/1.1/"
xmlns:ie="http://schemas.microsoft.com/Search/2008/">
  <ShortName>My Custom Search</ShortName>
  <Image height="16" width="16"
type="image/icon">http://example.com/example.ico</Image>
  <Url type="text/html"
template="http://example.com/search.aspx?q={searchTerms}&source=IE"/>
  <Url type="application/x-suggestions+json"
template="http://suggestions.example.com/search.aspx?q={searchTerms}"/>
  <Url type="application/x-suggestions+xml"
template="http://suggestions.example.com/search.aspx?q={searchTerms}"/>
  <ie:PreviewUrl type="text/html"
template="http://suggestions.example.com/search.aspx?q={searchTerms}"/>
</OpenSearchDescription>
```

Demo

- Akceleratori
- Web slice-ovi
- Dobavljači pretrage
- Primjeri u praksi
 - Esrpska.com
 - Prodaja.ba
 - Hardwarebase.net
 - Posao.ba

Podsjetnik...

- IE Kompatibilnost
- Razvojni alati
- Akceleratori, web slice-ovi, dobavljači pretrage

Hoćete više informacija?

- **Internet Explorer 8 na MSDN**
 - <http://msdn.com/ie>
- **IE Application Compatibility**
 - <http://MSDN.com/IECompat>

Molimo vas da popunite ankete!

Please fill out the evaluations!

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Bonus



Sigurnost & Crash Recovery



- Sigurnost je važna
 - Naglašavanje imena domena
 - Unapređene Add-On mogućnosti
- Crash Recovery
 - Nezavisno funkcionisanje browser tabova
- InPrivate
 - Ne pohranjuju se nikakvi podaci o korištenju
- Podrška za autentikaciju u platformi za Feedove
 - HTTP autentikacija - Basic and Digest
 - Basic autentikacija kroz SSL
 - Mogućnost poranjivanja pristupnih podataka



Performanse i korištenje memorije

- Connection Limits Increased
 - Broadband: 6
 - Modem: 2
 - Configurable via API's
- Pre-Parser doesn't block at script tags
- JScript Improvements
 - DOM object look ups are much faster
 - Circular referenced objects are garbage collected
 - Faster native Jscript operations
 - Function call performance
 - String methods
 - Array methods
 - Read, write, and deleted Object methods
 - Garbage collection algorithm
 - Communication layer between DOM and JScript

New DOM Features

- Mutable DOM Prototypes
 - Add new methods
 - Add new properties
 - Override default built-in behavior for methods
 - Override default built-in behavior for properties
- Native JSON Support
 - Faster JSON access
 - Uses JSON2 nomenclature
 - 3rd party code no longer needed

DOM unapređenja

- *hasAttribute("attrName")* (on Element)
 - Supports “unspecified” attributes
 - Case comparisons for HTML are case-insensitive
 - Getters/setters behave consistently (return strings)
- *ownerElement*, *contentDocument*, and more
- *getElementById()* no longer includes ‘name’d elements
- Dynamic radio buttons and checkboxes now work properly
- *getAttribute(for/style/class/[boolean])* fixed
- Boolean attributes properly returned
- HTML collections fixed
- Operation Aborted parsing error relegated to script error

DOM Store

- Web Applications today use local storage
 - Cookies, UserData control
- Many web applications today would like more
- HTML5 adds the Storage interface
 - Session Store (tab/session specific)
 - Local Store (shared across sessions)
 - Key Value string pairs
 - 10MB per domain
 - 100MB total
- IE8 Extension
 - Check remaining store
 - Clear store

AJAX Navigation

- Feature of HTML 5
- AJAX Applications provide “challenges” when users click the back and forward buttons
- AJAX Navigation allows developers to support back/forward navigation
- Allows copying & pasting of AJAX URLs!
- *window.location.hash*
 - IE fires a *window.onhashchanged* event
 - IE updates the address bar, and back button

XDR & XDM

- Features from HTML 5
- Cross Domain Requests (XDR)
 - Cross domain communication is integral to AJAX development
 - XMLHttpRequest
- Cross Document Messaging (XDM)
 - Cross document messaging allows sharing data across frames
 - *window.postMessage()*

Selectors API

- Added CSS Selector API from W3C WebAPI WG
 - *.querySelectorAll()*
 - *.querySelector()*
- APIs can be called on the document or element
- 50 times faster than JavaScript tree traversal