

Internet Explorer 8 for developers

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Agenda

- Compatibility
- New features
- Accelerators, Web Slices & Search Providers



e6



Write Once... If Only!





TWO Layout Engines



Standards Compliance



CSS 2.1



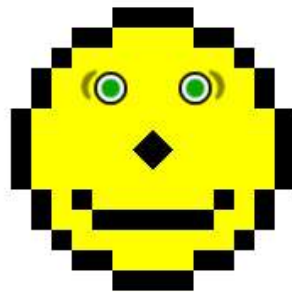
HTML



Hello World!



ACID 2



- CSS 2.1 compliance
- DOM Improvements
- HTML Improvements
- Acid2 Test compliance

- This means
 - Data URI Support
 - Improved Namespace Support
 - And more



Getting There...



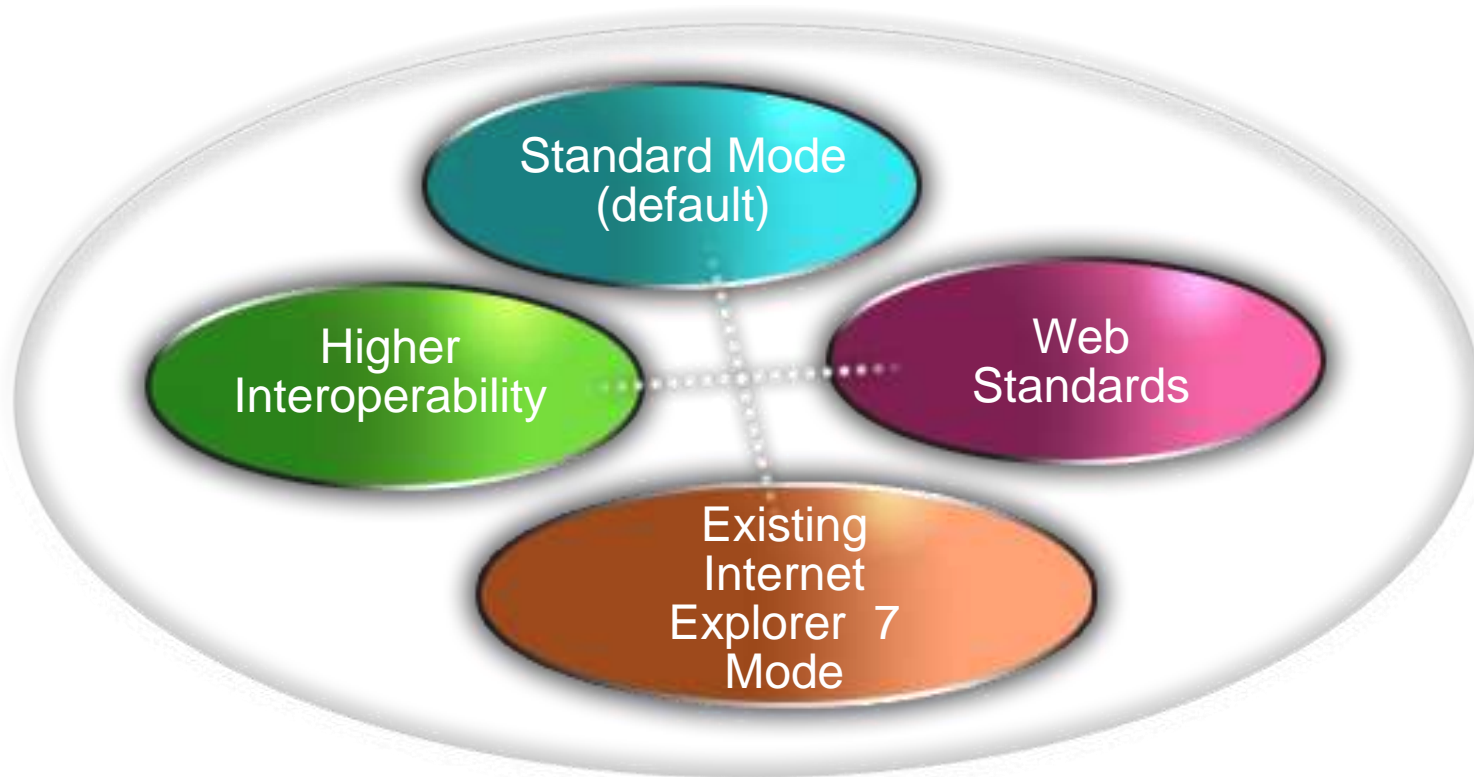
Page Built For Browsers
that best understand
standards

1. Identify browser
2. Serve right page

Firefox
Safari



Interoperability



A New Layout Engine

- Users expect their sites to “just work”
- What do developers want?
 - IE6 Rendering
 - IE7 Rendering
 - IE8 Rendering
- IE7 and IE8 rendering engine built in
- How do we give developers what they want?
- Compatibility Meta Tag or HTTP Header

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



Site Compatibility Best Practices

Test Your Site

- Test With IE6, IE7 & IE8 VPC's
- Try Expression Web SuperPreview

Existing & Legacy Sites

- Use The IE=EmulateIE7 tag

New Sites

- Code Using Best Standards Practices
- Use IE=EmulateIE8

New DOM Features

- Mutable DOM Prototypes
- Native JSON Support
- *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

AJAX Navigation



HTML5
Feature!

- 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



HTML5
Feature!

- 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()*

DOM Store



HTML5
Feature!

- 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

Selectors API

- Query and select elements based on their CSS class
- 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



Developer Tools – F12

- Built In Tools
- Console.Log
- JavaScript Profiler
- JavaScript Debugger
- Live HTML Editing
- Live CSS Editing
- View MetaData On Page
- Trace Styles
- Clear Cache
- Ruler
- Save Changes To File

New Services

Accelerators, Web Slices & Search Providers

● **Accelerators**

- Provide your services from anywhere on the web

● **Web Slices**

- Bring pieces of your site directly to the user

● **Search Providers**

- Provide visual search and search suggestions

Create a sticky connection to your user!





Search Providers

Open Search Descriptor

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

Adding Your Provider

//check the user agent string if client is MSIE 8.0

//for more info: <http://msdn2.microsoft.com/en-us/library/ms537509.aspx>

//check if service is already installed

window.external.IsSearchProviderInstalled

 ('http://example.com/SearchProvider.xml');

//if false, display button to add service

window.external.AddSearchProvider

 ('http://example.com/SearchProvider.xml') ;





Accelerators

Accelerators Format

Main components of Accelerators

- Accelerators don't do any manipulations
- Can do POST or GET requests
- Adding a Preview uses a 320x240 window
- Can send several parameters
 - HighlightedText, {selection}
 - DocumentName, {documentTitle}
 - DocumentDomain, {documentDomain}
 - DocumentHost, {documentHost}
 - Link, {link}
 - LinkText, {linkText}
 - LinkRel, {linkRel}
 - LinkType, {linkType}
 - LinkDomain, {linkDomain}
 - LinkHost, {linkHost}

OpenService Format

```
<?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>
  <accelerator category="Map">
    <acceleratorAction 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>
    </acceleratorAction>
  </accelerator>
</openServiceDescription>
```

Accelerator Deployment

//check the user agent string if client is MSIE 8.0

//for more info: <http://msdn2.microsoft.com/en-us/library/ms537509.aspx>

//check if service is already installed

window.external.IsServiceInstalled

(*'http://example.com/Service.xml', 'category'*);

//if false, display button to add service

window.external.AddService

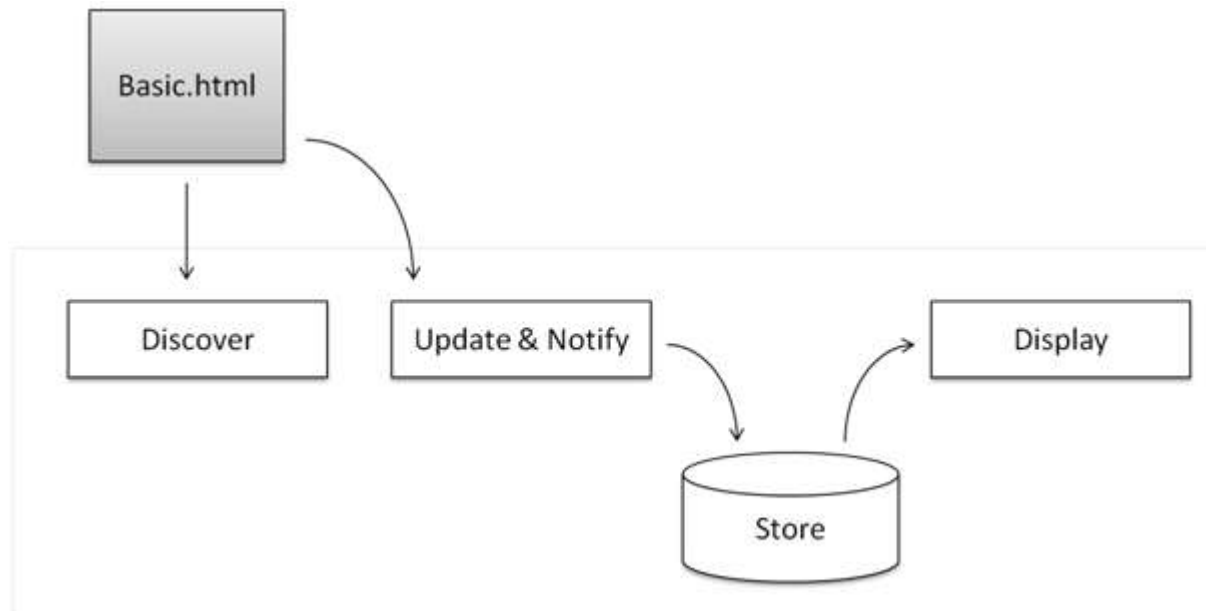
(*'http://example.com/Service.xml'*) ;



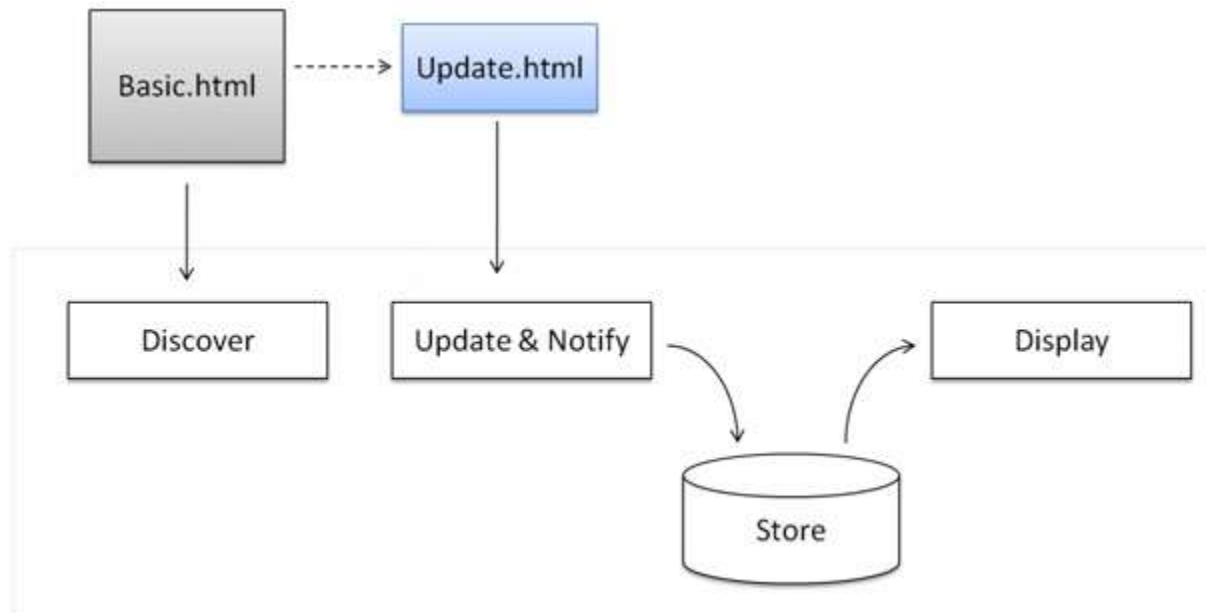


Web Slices

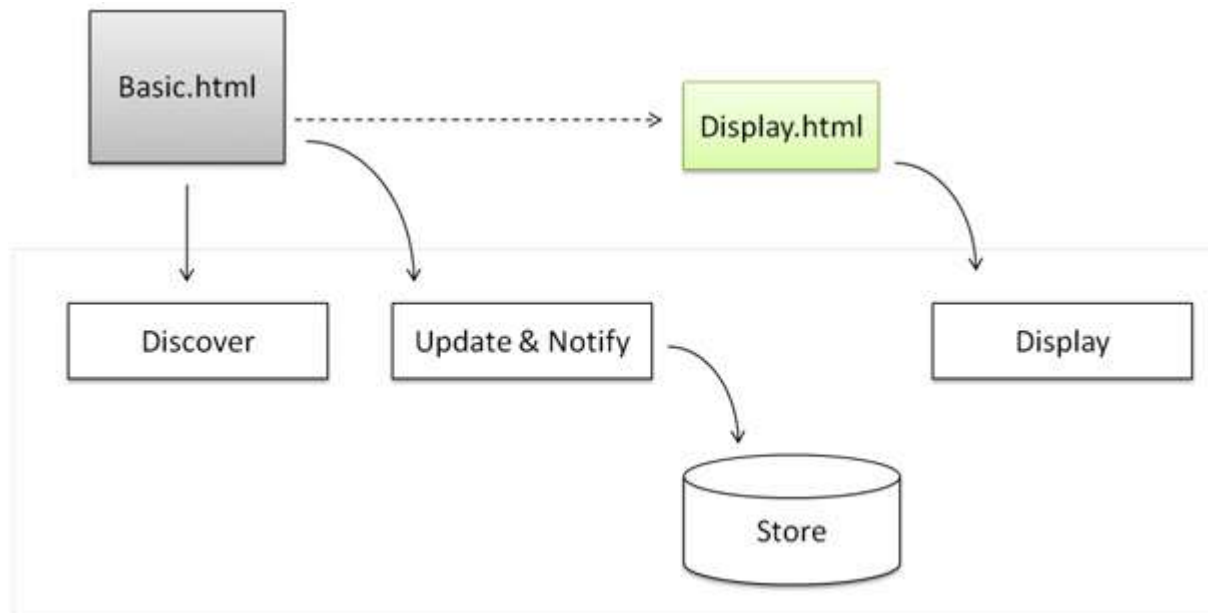
Basic Web Slice



Alternate Update Source



Alternate Display Source



Basic Example

```
<div class="hslice" id="1" >  
  <p class="entry-title">Amazon Kindle, Unopened</p>  
  <div class="entry-content">  
      
    <p>Current bid: <b>US $282.11</b></p>  
  </div>  
</div>
```



Web Slice Parameters

● **hslice**

- **entry-title** – the title of the feed item
- **entry-content** – the description of the feed item
- **ttl** – time-to-live value
- **feedurl** – alternative path to get updates
- **endtime** – the date in which the item is no longer relevant





question & answer

Community Booth



- Become part of our technological communities
- Network with colleagues and experts
- Ask the Experts sessions

Exhibition Area
Level -1

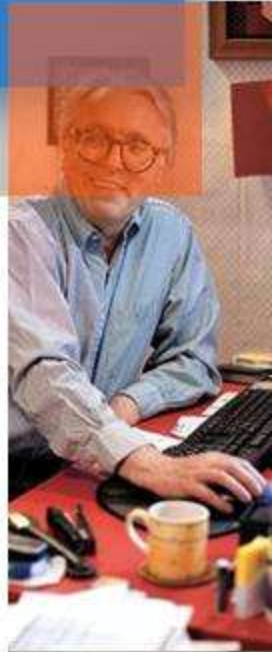
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<http://MSDN.com/IE>

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Appendix

Road to compatibility

- Existing or legacy sites: IE=EmulateIE7
- New and current sites: 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" />
```



Search Provider Resources

- Create Your Own Search Provider
 - <http://www.microsoft.com/windows/ie/searchguide/en-en/default.mspx>
- More Information about Search Descriptor Files
 - <http://www.opensearch.org>
- Internet Explorer 8 Search Provider Extensibility
 - [http://msdn.microsoft.com/en-us/library/cc848862\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/cc848862(VS.85).aspx)



Accelerator Resources

- OpenService Accelerators Developer Guide
 - [http://msdn.microsoft.com/en-us/library/cc287851\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/cc287851(VS.85).aspx)



Web Slice Resources

- **Subscribing to Content with Web Slices**

- [http://msdn.microsoft.com/en-us/library/cc196992\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/cc196992(VS.85).aspx)

- **Web Slice Format Specification**

- [http://msdn.microsoft.com/en-us/library/cc304073\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/cc304073(VS.85).aspx)

- **Web Slice Tutorials**

- [http://msdn.microsoft.com/en-us/library/cc956159\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/cc956159(VS.85).aspx)

