



dotMobi

# Over-The-Air DeviceAtlas Masterclass

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Device Initiatives  
dotMobi

- Top Level Domain for .mobi
- Joint venture of top industry players
- .mobi is for mobile content
- mobile users have different needs



# Mobile Web can be hard

- Resources

Style Guides  
W3C  
MMA

- Development

DeviceAtlas

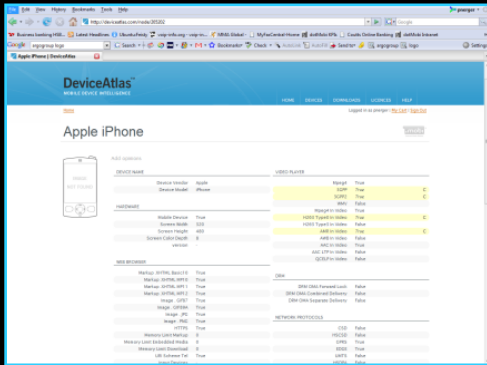
- Testing

ready.mobi

- Support

dev.mobi

# DeviceAtlas™



Web  
GUI



Bulk  
Data  
Sources

UAProf

WURFL

NOKIA



Others



Downloadable  
API

# What is Content Adaptation



- Generate mark-up dynamically
- Re-scale and convert images as needed
- Show or hide appropriate content for best navigation
- Provide optimised downloads

# Device Profile



## Add opinions

### DEVICE NAME

Device Vendor Nokia  
Device Model N95 8GB

### HARDWARE

Mobile Device True  
Screen Width 240  
Screen Height 320  
Screen Color Depth 24  
version -

### WEB BROWSER

Markup .XHTML Basic10 True  
Markup .XHTML MP10 True  
Markup .XHTML MP11 True  
Markup .XHTML MP12 True  
Image . Gif87 True  
Image . GIF89A True  
Image . JPG True  
Image . PNG True  
HTTPS True  
Memory Limit Markup -  
Memory Limit Embedded Media -  
Memory Limit Download -  
URI Scheme Tel True  
Input Devices -  
Mark-up -  
Image Formats -  
Form Text Input Mode -  
scriptSupport 1  
Style Sheets 1  
Cookie True

### VIDEO PLAYER

Mpeg4 True  
3GPP True  
3GPP2 False  
WMV False  
Mpeg4 In Video True  
H263 Type0 In Video True  
H263 Type3 In Video -  
AMR In Video -  
AWB In Video -  
AAC In Video -  
AAC LTP In Video -  
QCELP In Video -

### DRM

DRM OMA Forward Lock True  
DRM OMA Combined Delivery True  
DRM OMA Separate Delivery True

### NETWORK PROTOCOLS

CSD True  
HSCSD True  
GPRS True  
EDGE True  
UMTS True  
HSDPA True

# There is not just 1 mark-up



- XHTML 1.0 Basic
  - the starting point of modern mark-ups
- XHTML-MP 1.0 and above
  - OMA's extension to XHTML 1.0 Basic
    - includes WCSS (mobile CSS)
    - mobile specific tags
- Extensions
  - SMS and tel URI Schemes (sms:, tel:)
- WML
  - Old mark-up based on XML, part of WAP 1



- Add colour to your site
- Do not overload
- Optimise



- Develop of a simple mobile web page with DeviceAtlas

# Best Image - code sample

```
16 <body>
17   <p>
18   <?php
19   require_once 'da_api.php';
20   $tree = da_get_tree_from_file('json/DeviceAtlas.json');
21   $ua = $_SERVER['HTTP_USER_AGENT'];
22   $max_width = da_get_property($tree, $ua, 'displayWidth')+5;
23   if ($max_width >= 500 ) {
24     echo '';
26   } else if ($max_width >= 200 ) {
27     echo '';
29   } else {
30     echo '';
32   }
33   ?>
34   </p>
35   <hr />
36   <h1>Welcome to the Mobile Web!</h1>
37 </body>
38 </html>
```

# Advanced Adaptation - step 1

- Verify mark-up support
  - is it XHTML Basic or MP? Which version of MP?

WEB BROWSER		
Markup .XHTML Basic10		True
Markup .XHTML MP10		True
Markup .XHTML MP11		False
Markup .XHTML MP12		False

- Verify image types
  - Most browsers released in the last 4-5 years will support GIF and JPEG, many will also support PNG

Image . Gif87		True
Image . GIF89A		True
Image . JPG		True
Image . PNG		True

# Advanced Adaptation - step 2

- Width is key
  - most users are comfortable scrolling vertically, horizontally is sometimes uncomfortable
  - 2-way scrolling is hardly comfortable in most mobile devices

HARDWARE	
Mobile Device	True
Screen Width	240
Screen Height	320
Screen Color Depth	18

- Navigation
  - avoid showing content that will be not supported by the current device. Show hints with low priority if you wish.
  - take advantage of the mobile device (use sms and tel schemes to initiate messages or calls)

AUDIO PLAYER	
MIDI Monophonic	True
MIDI Polyphonic	True
AMR	-
MP3	-
AAC	-
QCELP	-

DRM	
DRM OMA Forward Lock	True
DRM OMA Combined Delivery	True
DRM OMA Separate Delivery	True

- Design
  - think mobile
  - use style sheets, WCSS is the starting point
  - do not overload devices on a slow network

NETWORK PROTOCOLS	
CSD	False
HSCSD	False
GPRS	True
EDGE	True
UMTS	False
HSDPA	False

- Main links
  - <http://deviceatlas.com>
  - <http://dev.mobi>
  - <http://ready.mobi>
- Tutorials
  - PHP Tutorial Part I, <http://dev.mobi/node/858>
  - PHP Tutorial Part II, <http://dev.mobi/node/890>
  - .NET Tutorial coming shortly
- Standards
  - <http://www.w3.org/TR/mobile-bp/>
  - <http://www.w3.org/TR/ddr-core-vocabulary>
  - <http://www.w3.org/TR/DDR-Simple-API>

the mobile web has a name



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