

Portal and NMF Integration

The following document goes through how NMF integrates with Weblogic Portal.

The approach taken is to utilise the multichannel feature of Weblogic Portal. Please refer to this link for more details: [Creating Portals for Multiple Device Types](#).

client-classification.xml & web.xml setup

The **client-classification.xml** is used for device classification. With respect to the Qantas Mobile Sales Portal, the client classification is used to determine whether a device should view the “**standard**” or “**webkit**” mobile site. The format is as follows:

```
<classification name="webkit" description="For advance devices">
  <useragent-regex value=".*NMF-Identified-Advanced.*" priority="1"/>
</classification>
<classification name="standard" description="For standard device">
  <useragent-regex value=".*NMF-Identified-Standard.*" priority="2"/>
</classification>
```

As you can see, the user agent string regular expressions are:

- NMF-Identified-Advanced.
- NMF-Identified-Standard.

These extensions are added to the user agent string by the NMF Portal Mobility Filter. Based on a set of NMF attributes, the NMF Portal Mobility Filter determines whether an accessing device is a standard or advanced device.

The reference to the NMF Portal Mobility Filter is in the **web.xml**:

```
<!-- NMF Portal Mobility Filter -->
<filter>
  <description>NMF Portal Mobility Filter</description>
  <filter-name>PortalMobilityFilter</filter-name>
  <filter-class>com.nminnovation.wlp.mobile.servlets.PortalMobilityFilter</filter-class>
</filter>
```

This filter is maintained by NMI as it is tightly coupled with the NMF.

WURFLDeviceFixes.xml

The **WURFLDeviceFixes.xml** (under content\classifications\wurfl\fixes) is an NMI maintained file. This file is used to determine whether a device is “Standard” or “Advanced” (i.e. a webkit device). If a device is listed in the following **DeviceFixCategories**:

```
<DeviceFixCategories>
  <Name><![CDATA[UseUILibrary]]></Name>
  <Description><![CDATA[Use UI Library such as iWebKit or CiUI]]></Description>
```

If a device’s WURFL identifier is listed in this category, it is considered an “Advanced” device; else it is considered a “Standard” device.

Please contact NMI if you require devices to be added or removed.

Difference between “standard” and “webkit”

There are two sets of JSP's that are maintained – “standard” and “webkit”. This is to ensure the Qantas mobile site can cater for a wide range of mobile devices.

“webkit” devices

- Advanced, high end mobiles.
- These devices can support javascript and advanced CSS.
- These devices support webkit/HTML 5.
- The main device in this category is the Apple iPhone and iPod Touch.

“standard” devices

- General definition of the majority of mobile devices on the market.
- Base assumption is javascript is not supported.
- Limited CSS support.
- Basic HTML and table support.
- Limitation in the size of the page that can be displayed.
- Aim is to cater for the lowest common denominator.
- “Progressive enhancements” are used to add extra functionality.

Use of Property Sets to Extract NMF attributes

At present, only a handful of NMF attributes are used for the Qantas Mobile Sales Consumer Portal. A portal property set is used to hold the NMF attributes. This decouples NMF from the portal and allows for the NMF attributes to be utilised within the consumer as well as the producer portals.

The NMF attributes used are:

- **Metadata strings** – Any specific metadata a device requires to be added into the head of the page.
- **Usable Screen Width** – The usable screen width in pixels of the accessing device. This is set as a string value.
- **Screen Width** – A general term for whether the screen is “WIDE” or “NARROW”. “WIDE” devices are device’s where the usable width pixel is greater than 310 pixels.
- **Image Size** – The image size to use. Whether it is “SHOT”, “TALL”, “GRANDE” or “VENTI”.

DeviceDetectionServiceImpl.java

The Java class that handles the setting up of the property set is:

com.qantas.framework.device.services.impl.DeviceDetectionServiceImpl.java.

The package and class resides in:

qantas_appserv_i18n\components\qf_i18n_device_lib.

The actual method where this is done is:

```
private Map<String, String> createDeviceContext(HttpServletRequest request)
```

Use within a JSP

The property sets are used in the following JSP’s:

- **header.jsp** – under: **qf_mobile_sales_portal_war\WebContent\resources\jsp\mobile.**
- **securityquestions.jsp** – under:
qf_airport_portal_war\WebContent\portlets\checkin\flights\mobile\standard.
- **booking.mobile.jsp** – under:
qf_booking_portal_war\WebContent\struts\mobileviewyourbooking\jsp\mobile\standard.

To use the property set, the appropriate lines of code needs to be added into the JSP. For instance:

```
<%@ taglib uri="http://www.bea.com/servers/pl3n/tags/profilemanagement" prefix="profile"%>
<profile:getPropertyAsString propertySet="devicecontext" id="screenWidth"
propertyName="screenWidth" />

<c:choose>
    <c:when test="${screenWidth eq 'narrow'}">
        <i18n:getMessage messageName="image.src.dangerous.goods.narrow" id="dgImage"/>
    </c:when>
    <c:otherwise>
        <i18n:getMessage messageName="image.src.dangerous.goods.wide" id="dgImage"/>
    </c:otherwise>
</c:choose>
```