

Qantas Flash Development Requirements and Recommendations

1.1 Support Versions

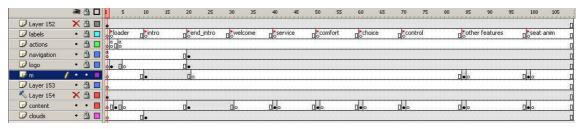
- Actionscript 3 or 2
- Flash Player 10 or below

1.2 Site Structure

For ease of coding and usability, we strongly recommend to use as few animations as possible. We would favour an application that uses Actionscript, calls to add and remove elements to the stage rather than frame tweens.

An example of this would be instead of having long frame tweens on the main timeline and jumping to frame labels (as seen in example eg1), just have a couple of layers that include elements by attachMovie() allowing this way some animations to be used, but maintaining a clean and shallow site structure (see EG2).

EG1: This is an example of what we would like to try and avoid:



EG2: We would recommend a structure more like:



We are not opposed to the use of scenes although it usually is simpler and lighter not to do so.

Clear labelling of layers and objects as well as an organised library, will be required.

Due to more and more browsers blocking pop-ups, we would recommend keeping as much of the information inside flash. If a pop-up is required, we would prefer a pop-up window within flash to avoid it being blocked.

1.3 Use of External data

Where possible, most of the data (Images, sounds, video, text etc...) should be stored externally. We would recommend an XML structure to hold all this as it is the industry standard.

In the case where we would have a number of pages/sections of similar type, we would store all the page information in the XML and, with Actionscript, create these pages dynamically by iterating through the XML nodes. Amongst other obvious benefits, this implementation will significantly improve the manageability of future content redeployments for the Flash.



Important Information regarding imported data:

If the application built is required to be within a generic Qantas page (that is; not a stand-alone app that might be displayed in a pop-up) then you will need to do implement a variable called 'pathVar' in front of every path of all imported media.

Below is an example:

You would set up two variables called the same: pathVar.

- The first one is the production path to the media.
- The second is the path to the media on your development machine allowing you to test from within the Flash authoring environment.

Sample:

```
//var pathVar = "/flash/routemaps/";
var pathVar = "";
myXML.load(pathVar+"Codes.xml");
```

The reason we need this is that the Flash files and the host HTML files don't sit in the same directory on the Qantas webservers. The path to load data into flash is relative to the HTML page's location and not to the Flash application's location.

Linking to .zip (compressed files):

Due to an IE bug with compressed files, if you are linking to a .zip file – to download a screensaver for example – you will need to append the following parameter at the end of the file path: **QF_Compression=false**

Eg: downloads/screensaver.zip?QF Compression=false

IMPORTANT NOTE: External Libraries

Although external libraries are a good way to keep all assets in one central location, we have not found a way to enable the above **pathVar** – so we recommend not using them

1.4 Actionscript placement and structure

All Actionscript code should be contained in an external .as file.

One way to ensure that you do use Actionscript within the actual Flash movie is by using event listeners; Example of a button event listener in an external .as file:

```
goBtn.onRelease = function() : Void {
    // do something here
}
```

Where possible, we would also favour object-oriented style Actionscript rather than procedural coding as it allows for greater flexibility.



1.5 File sizes

The file size should be kept to a minimum to avoid lengthy download times for our customers who don't have broadband. We would like to have a target size of initial download of 50k. There are two ways we would recommend in order to achieve this.

- Pre-loading only the first 50k of the movie, then stream any other sections as they are requested
- Keeping most of the sections in external swf's and loading them in as they are required.

A combination of both these methods might be preferable.

1.6 Tracking

Please refer to the document:

http://www.gantas.com.au/styleguide redesign/img/Adding tracking Flash apps.pdf

1.7 Requesting live pricing from Qantas.com

If your app need to retrieve flight or hotels pricing from Qantas.com and is NOT going to be hosted on Qantas.com, here are the steps you need to take:

- 1. Find out what is the name of the server on which your app will be hosted (please note that in the case of online ads we need the name of the adservers and not the publishers)
- 2. Check that your server is not already on the crossdomain file: http://www.gantas.com.au/deals/PMFlashPolicy.xml
- 3. Advise Qantas.com or, whoever is the project owner, if your domain is not listed telling them to get it added. This is usually done by Onlinesales Content team.

Below are the queries you will need to request the pricing:

Australia Domestic: Sydney - Melbourne - Perth back to Sydney:

http://www.qantas.com.au/deals/do/dyn/specials/querycurrentdeals.xml?&cheapestDealPerDistinctAirportPair=true&departureAirportCodes=**SYD,MEL,PER**&arrivalAirportCodes=**MEL,PER,SY D**&dealTypeCode=**R**&marketingRegionCode=**au**&quantity=**1**

Australia International: Sydney - Singapore - back to Sydney:

http://www.qantas.com.au/deals/do/dyn/specials/querycurrentdeals.xml?&cheapestDealPerDistinctAirportPair=true&departureAirportCodes=**SYD,SIN**&arrivalAirportCodes=**SIN**, **SYD**&dealTypeCode=**G**&marketingRegionCode=**au**&quantity=**1**

Feel free to change the values in Bold above.



1.8 Supplying Graphics/Mockups for Flash apps

In the case where you have to supply graphics/mockups to be integrated as a Flash app, please follow the following:

- Always use Fireworks (.PNG) as importing into Flash is significantly easier avoiding the developer to have to recreate the whole layout.
- Always put things on exact pixels ensure each element and any child elements (or grouped elements) are all on exact pixels; that is, no decimal placement, example 3.2 should be 3

This will considerably reduce the time the developer will need to spend laying things out.

1.9 RTMP OnDemand Streaming via Akamai (Video Streaming)

On Qantas.com we use **OnDemand Streaming via RTMP** and not **Progressive Download**. If your project requires video streaming of any sort please ensure that you refer to the following:

Ensure that all videos are exported as **f4v** files using **H264** compression, if necessary you may also use **f1v** files.

Once you have your **f4v** files or **flv** files prepared, send them or send a path to download them to Emmanuel Jaquet (<u>eja09@qantas.com.au</u>) or Paul Tea (<u>pte21@qantas.com.au</u>)

We will arrange the files to be served via Akamai's RTMP server and will inform you of the protocol and path to make the request from, generally, they fall under:

rtmp://cp80119.edgefcs.net/ondemand/flash/*.*

We recommend that you use **OVP** (Open Video Player) for your player.

Important Note: If you choose to build your own player, please ensure that it caters for:

- 1. OnDemand Streaming via RTMP
- 2. Provides a backup mechanism to attempt various protocols and ports if the initial request fails. Those protocols and ports are as follows:
 - Protocol: RTMP Ports: 1935/443/80
 - Protocol: RTMPT Ports: 1935/443/80

This is to assist with getting around corporate proxies and firewalls, this it not 100% but should cover 90% of the scenarios.

If you require any assistance or have any questions with this document please contact Emmanual Jaquet (eja09@qantas.com.au).