Fendix Media Ltd

Segmented Advertising System

New System Installation and Configuration Guide

System Version 4.0.0

Revision History

1. 29 January 2016: *Initial Draft*
2. 3 Feb 2016: *New System Installation Draft*
3. 9 Mar 2016: *Released*
4. 28 Aug 2017: General update

Introduction

This document describes the installation and configuration process for the Network Partner hosted components of the Fendix Media segmented advertising system.

This document is intended for those Network Partners who are installing the segmentation system onto a server for the first time. Network partners who are upgrading an existing system should refer to the 'Upgrade Guide'.

If you have any questions regarding the implementation or testing procedure, please contact support@fendixmedia.net or contact your Network Account Manager

Overview of System Behaviour and the

Segmentation Process

The purpose of the segmentation system is to enable Fendix Media to deliver

relevant advert impressions to Intranet users. To do this the segmentation page (ADSegmentation.ashx) performs the following operations:

1. A query is made to the Trust's Active Directory (AD) server to obtain a list of AD groups for which the current user is a member.

2. The group list is then encoded, and sent to the Fendix segmentation server.

3. On the segmentation server, AD group names are cross referenced to a list of keywords that advertisers use to target their advertising to (for example an AD group "Geriatric Nurses" might be mapped to the keywords 'Eldery Care' and 'nurses'). Along with the list of AD groups, an MD5 hash of the username may also be sent to the segmentation server. A hash is a non-reversible encoding of the username, this allows statistical data to be gathered about the number of unique people who have matched to ad keywords, without allowing the identification of individuals.

4. Once the complete list of groups has been cross referenced, an ad request script containing the keywords is returned to the users browser, this is then executed to request a relevant advert from our ad servers.

With this mechanism, no trust information is ever released from the Fendix Media infrastructure or passed to advertisers. Only keyword lists and request statistics are available to advertisers.

Minimum System Requirements

Windows Server 2003 running Internet Information Server 6 as part of a Windows domain.

.Net Framework v2.0

Recommended system Requirements

Windows Server 2008R2 or higher running Internet Information Server 7 or higher as part of a Windows domain.

.Net Framework v2.0

New System Installation

The purpose of the segmented ad system is to display adverts on your intranet that are relevant to individual users. To do this, a small IIS web application is used to query the domain Active Directory server to obtain a list of groups of which an intranet user is a member. These groups are used to deduce keywords for advert targeting, allowing a request to be made to the Fendix Media advertising servers for a targeted advert.

The segmentation service should be installed on a separate IIS web site to your

main intranet site. If your intranet site is hosted on an IIS server, it is possible to install the service on a new site on the same server, listening on an unused port.

> The decision as to whether to install on the same server as your intranet should be based on the performance of your server, volume of intranet traffic and internal IT policy. The segmentation service should however be installed on a server on the same domain.

Once the new web site is created in IIS, the web components, as supplied in the zip file accompanying this document should be copied into the root folder of the newly created website

> If you have received the zip file as an e-mail attachment, it is likely that Windows will have marked the file (and its file contents) as 'blocked'. Files in this state may be prevented from executing in IIS, dependant on security configuration. Prior to unzipping, remove any block by right-clicking on the zip file and clicking the 'Unblock' button if it is present.

Authentication

In order for segmentation to function correctly, the website authentication mode should be set to 'Windows Authentication - Enabled'. All other authentication methods should be disabled.

Server Configuration Options

Within the web.config file in the server application, the following settings may be set within the appSettings section:

- **Serve**: Instructs the system whether or not to deliver ad code to the intranet page, this allows ad serving to be stopped without needing to remove html tags from intranet pages (e.g. when scheduled maintenance of the Fendix infrastructure is taking place, or when internet connectivity is lost). Valid values are: **true** - ads are served. **false** - ads are not delivered to the browser

- **SegmentationServer**: The location of the Fendix key wording service. This should not be modified unless advised directly by Fendix Media to do so.

- **TrustURN**: The unique identification code for your organisation. This will be supplied by Fendix Media.

- **ADServer**: Location of your Active Directory server. This can normally be left blank and the segmentation service will use auto discovery to identify

the AD server. If it is necessary to specify the server, ensure that the server location is prefixed with 'LDAP://' followed by the fully qualified URL of the domain controller.

- **AdOrientation**:Specifies the default type of advert to deliver. If your ads are normally horizontal banners, specify **leaderboard**. If your ads are vertical banners, specify **skyscraper**

- **LstOU**: Specifies whether to use organisational unit to segment users rather than security groups (this is a less precise mechanism than security groups so is not recommended unless your organisation does not use security groups). Valid values are: **true** - use OU, **false** (default)- use security groups

- **FullOU**: Specifies whether to return full OU path (**true**) or just the parent OU unit name (**false**). This setting is only relevant if LstOU is true. Default value for this setting is true.

Testing the Server Installation

Once the server components have been installed, either from scratch or in addition to a previous version, the installation should be tested before intranet pages are configured to serve ads.

To perform an initial test, on the local server, open a web browser and point to the ADSegmentation.ashx file. This file supports a number of options that can be specified in the querystring of the URL; setting the option 'debug=true' will instruct the server to output debugging information:

`http://localhost:25500/ADsegmentation.ashx?debug=true`

If you have installed the segmentation service on a different port, you should modify the url accordingly.

If the server components are installed and functioning correctly, you will be presented with a variety of information including the current username and list of AD groups for which the user is a member.

If you currently have active house campaigns (or other non-targeted campaigns) running at your trust You should also see an advert banner image at the bottom of the page.

Once debug information is displaying successfully, proceed to the next section 'Intranet Configuration'

In the event of problems occurring during testing, please contact us at support@fendixmedia.co.uk.

Intranet Configuration

In order to display ads, a simple tag needs to be inserted into your intranet pages. This takes the form of an inline `<script>` tag which calls the ADsegmentation.ashx page on the web site configured in the previous section.

This tag should be placed at the location at which you wish the ad to display (normally at the top of the page in the case of Leaderboard ads). We recommend wrapping the script tag inside a `<div>`, `<span>` or other tag as appropriate.

The form of the script tag is as follows:

```
<div><script
src="http://servername.domain.nhs.uk:25500/ADsegmentation.ashx">
</script></div>
```

servername.domain.nhs.uk should be replaced by the fully qualified path of the IIS server where you have installed the segmentation website.

If you have installed the segmentation website on a port other than 25500, this should be edited as appropriate

The standard tag will display an ad in the default orientation as specified in the *AdOrientation* parameter (see Server configuration). To specify an orientation, add a querystring parameter 'AOr' to the end of the URL:

```
<div><script
src="http://servername.domain.nhs.uk:25500/ADsegmentation.ashx?
AOr=leaderboard"></script></div>
```

The above tag specifies a horizontal 'leaderboard' banner.

```
<div><script
src="http://servername.domain.nhs.uk:25500/ADsegmentation.ashx?
AOr=skyscraper"></script></div>
```

The above tag specifies a vertical 'skyscraper' banner.

Asynchronous Ad Loading

The default loading behaviour for ads is to load synchronously at the point that the script tag is executed. In most circumstances this does not impact page load adversely (typically the whole ad loading process should take less that 0.2 seconds)

In some circumstances page load times may be affected by slow network connections or other access issues. If this is found to be the case, it is possible to use the open source 'Post Scribe' javascript library to asynchronously load ads in the background while the rest of the page loads.

If you require assistance with the implementation of the Post Scribe library, please contact support@fendixmedia.co.uk