

BuzzCity Advertising Network
Publisher - Technical Integration Document

Table of Contents

1. Objectives.....	2
2. Before You Start.....	2
2.1. Choosing to serve Graphical Ads or Text Ads.....	2
2.2. Choosing Publisher Channel for Your Site.....	2
2.3. Your Partner ID.....	2
3. Basic Ad Integration	3
3.1. Basic Graphical Ads.....	3
3.2. Basic Text Ads.....	4
4. Advanced (Batch) Ads Integration	6
4.1. Batch Graphical Ads	6
4.2. Batch Text Ads	8
5. Integration for Application Providers	11
5.1. Serving Graphical Ads through Application Server.....	11
5.2. Serving Text Ads through Application Server.....	11



Connecting the Unwired

1. Objectives

This document provides information to publishers (owners of mobile Internet sites) who wish implement BuzzCity's advertising codes. By participating in BuzzCity Network, you will be able to serve graphics or text banner ads on your mobile internet sites, and be paid on a per click (CPC) or per impression (CPM) basis.

2. Before You Start

You need to register as an associate through <http://www.buzzcity.com/>. Once you sign in, choose the "Publisher" tab where all operations relevant to publishers will be conducted.

2.1. Choosing to serve Graphical Ads or Text Ads

You will notice that you can choose either to serve graphical or text ads:

- Graphical ads are image banners starting at the size of 120x20 pixels. Bigger-sized banners may be served on handsets with bigger screen. All banner sizes on BuzzCity Network conform to specifications by the Mobile Marketing Association.
- Text ads consist of text strings no longer than 35 characters.

If you wish to serve both types of ads, you will need to register for two separate accounts. You can obtain consolidated earning reports of all your accounts by logging into the "master" account, which you can designate through the "My Account Details" tab.

2.2. Choosing Publisher Channel for Your Site

You need to suggest the channel (eg. entertainment, news, etc.) that best describes your site. Choose the most appropriate channel as this will help our ad server to supply the most relevant ads. With the most relevant ads, your site is likely to generate higher click-through rate and therefore, higher earnings. Please note that our administrator may re-classify your site to another channel that we deem more suitable.

2.3. Your Partner ID

Your Partner ID is clearly shown on the upper right hand corner after you sign in. Note that we use "8404" as the Partner ID throughout this documentation. Please substitute the right ID for your case.

3. Basic Ad Integration

3.1. Basic Graphical Ads

Installing the graphical code is very simple. Just cut and paste the following WML codes into your site:

```
<p>
<a href="http://click.buzzcity.net/click.php?partnerid=8404">
  
</a>
</p>
```

Our ad matching program will serve the ads that will most likely to maximize your income to your visitors.

Please remember to specify your **partnerid**, so that we can record your earnings correctly.

Showing More than 1 Graphical Ads per Page

You can show more than 1 banner in the same page by using the **bn** variable, and setting the values to 1, 2, 3, ... For example, to place 3 banners, use the following WML codes:

```
<p>
<a href="http://click.buzzcity.net/click.php?partnerid=8404&bn=1">
  
</a>
</p>
```

```
<p>
<a href="http://click.buzzcity.net/click.php?partnerid=8404&bn=2">
  
</a>
</p>
```

```
<p>
<a href="http://click.buzzcity.net/click.php?partnerid=8404&bn=3">
  
</a>
</p>
```

Please use the same **bn** values for both **click.php** and **show.php**, to ensure that your earnings are recorded accurately.

3.2. Basic Text Ads

To serve text banners, you paste a piece of code into your site's source. When the code is executed, it makes a request to our ads server to fetch an ad.

To retrieve a text ad, you issue an HTTP call to

```
http://ads.buzzcity.net/show.php?get=1&partnerid=8404&a=[user agent]&i=[user ip]
```

where **a** and **i** are, respectively, user agent and the IP address of your visitor. You will then receive 2 lines of text as follows:

```
text ad  
campaign id (cid)
```

For example, you may receive the following 2 lines:

```
Coollest Site  
234
```

You will then print the ad on your site as follows:

```
<a  
href="http://click.buzzcity.net/click.php?partnerid=8404&cid=234">Co  
olest Site</a>
```

The following is an example code snippet in PHP:

```
<?  
    /* customization area */  
    if (!$bz_partnerid) $bz_partnerid = 8404;    // replace your  
partnerID here  
    $alternate_link =  
'http://click.buzzcity.net/click.php?partnerid=8404';    // replace this  
to set a default link if no ad is returned  
    /* end customization area */  
  
    $bz_ads_domain = 'ads.buzzcity.net';  
    $bz_click_domain = 'click.buzzcity.net';  
  
    // Used for Ads targeting...  
  
    // extract IP info  
    $ip = '';  
    if (isset($_SERVER['HTTP_X_OPERAMINI_PHONE']))  
&& !empty($_SERVER['HTTP_X_FORWARDED_FOR'])) {  
        // Opera mini client  
        $ip_str = $_SERVER['HTTP_X_FORWARDED_FOR'];  
        if (preg_match('%(\d{1,3})(?:[.]\d{1,3}){3})%', $ip_str, $matches))  
        {  
            $iptest = ip2long($matches[1]);  
            $ip = urlencode(long2ip($iptest));  
        }  
    }  
  
    if (empty($ip)) {  
        $keyname_ip_arr = array('HTTP_REMOTE_ADDR_REAL', 'REMOTE_ADDR');
```

```

        foreach ($keyname_ip_arr as $keyname_ip) {
            if (!empty($_SERVER[$keyname_ip])) {
                $ip = urlencode($_SERVER[$keyname_ip]);
                break;
            }
        }

        // extract UA info
        $keyname_ua_arr =
array('HTTP_X_DEVICE_USER_AGENT', 'HTTP_X_OPERAMINI_PHONE_UA',
'HTTP_USER_AGENT');
        foreach ($keyname_ua_arr as $keyname_ua) {
            if (!empty($_SERVER[$keyname_ua])) {
                $ua = urlencode($_SERVER[$keyname_ua]);
                break;
            }
        }

        $url = 'http://' . $bz_ads_domain . '/show.php?get=1&partnerid=' .
            $bz_partnerid . '&a=' . $ua . '&i=' . $ip;

        @$ad_serve = fopen($url, 'r');
        $contents = '';
        if ($ad_serve) {
            while (!feof($ad_serve))
                $contents .= fread($ad_serve, 1024);
            fclose($ad_serve);
        }
        $link = explode("\n", $contents);

        $text = $link[0];
        $cid = $link[1];

        if (isset($link) && !empty($link)) {
            // display BuzzCity TextAd
            echo '<a href="http://' . $bz_click_domain .
'/click.php?partnerid=' .
                $bz_partnerid . '&amp;cid=' . $cid . '>' . $text . '</a>';
        }
        else {
            // no BuzzCity ad, display alternate
            echo $alternate_link;
        }
    }
?>

```

Showing More than 1 Text Ad Per Page

Due to possible network latency, we do not recommend that you serve more than 1 text ad per page using this basic method. Please refer to the next section on Advanced (Batch) Ads Integration method.

4. Advanced (Batch) Ads Integration

The advanced (batch) integration allows you to pre-fetch all the ads and serve them quickly to your visitors. It has the following advantages:

- Your page rendering will not be affected by potential network latency between your servers and ours, and
- You can serve more than 1 ads per page to maximize your earnings

As the name suggests, this level of integration requires higher level of technical expertise. You are also expected to maintain up-to-date IP database which will allow you to accurately determine the country of origin of your visitors.

4.1. Batch Graphical Ads

Step 1: Requesting List of Graphical Ads Periodically

Issue a HTTP call as follows:

```
http://ads.buzzcity.net/getads.php?partnerid=8404
```

The program will return one or more lines, separated by carriage return, as follows:

```
country,cid\ncountry,cid\n...
```

Example:

```
au,43\nuk,271\nuk,431\naa,342\n...
```

Notes:

- You should issue the call once every 15 minutes, and use the results until the next query. Ads satisfying your requirements are scheduled every 30 to 60 minutes. Hence, there are no advantages for more frequent requests.
- The country code **aa** denotes the default ads that you can use for all other countries not returned in the list
- When more than one **cid** is returned per country, you can rotate the ads or randomly select one for your visitors
- *This method does not return any ads that are targeted on specific carriers, regions and specific handset capabilities. To request for such ads, please refer to the section : [Batch Request for Targeted Graphical Ads : IP & User Agent Caching](#)*

Step 2: Displaying Graphical Ads

For every visitor to your site, detect its country and then display the appropriate ads denoted by the **cid**. In the above example, supposed that your visitor arrives from Australia (au), you should display your ads as follows:

```
<p>
<a href="http://click.buzzcity.net/click.php?cid=43&partnerid=8404">
  
</a>
</p>
```

In the same example, if your visitor arrives from Nigeria (ng), which was not in the list returned, you can use the values for **aa**, i.e.

```
<p>
<a
href="http://click.buzzcity.net/click.php?cid=342&partnerid=8404">
  
</a>
</p>
```

Getting CPC/CPM price of Ads

You can use an additional parameter **price** in your call to get the CPC or CPM (per 1,000 impressions) of the ads. Example:

```
http://ads.buzzcity.net/getads.php?partnerid=8404&price=1
```

The program will return the ads like the example below:

```
au, 43, cpc=1.2
uk, 271, cpc=3.4
uk, 431, cpm=1.3
aa, 342, cpc=2.4
...
```

The price is returned in **USD cents**.

Setting **price=2** will return the effective CPM rate (eCPM) of the ads, in addition to the CPC price. Example:

```
http://ads.buzzcity.net/getads.php?partnerid=8404&price=2
```

The program will return (example):

```
au, 43, cpc=1.2, cpm=0.21
uk, 271, cpc=3.4, cpm=0.12
uk, 431, cpm=1.3
...
```

Batch Request for Targeted Graphical Ads: IP & User Agent Caching

BuzzCity's system allows ads to be targeted based on mobile carriers, device features and user location. To serve these ads, we maintain up-to-date database on IP addresses and user device information. To request for targeted ads (which are usually higher paying), you need to use the advanced feature of IP and User Agent Caching.

To proceed, call **getads.php** by setting **ipagent=1**:

```
http://ads.buzzcity.net/getads.php?partnerid=8404&ipagent=1
```

The program will return (example):

```
125.18.235.215,Nokia2600c-2/2.0,11277,cpc=2.06,cpm=7.76
125.18.235.215,Nokia2600c/2.0,11277,cpc=2.06,cpm=7.76
196.11.241.97,* ,11223,cpc=5.9,cpm=0.5959
196.11.241.97,SAMSUNG-SGH-D500,12459,cpc=5.9,cpm=0.5959
...
```

where the first parameter is the IP address, and second parameter is the user agent (truncated by the first space).

If '*' is returned as the user agent, this ad can be served to all user agents from this IP address.

The following algorithm is suggested:

- Continue scheduling calls as in Step (1) above regularly (without **ipagent**). Ads fetched in these calls will be used as default ads when no targeted ads are available.
- Also schedule calls with **ipagent=1** at regular intervals.
- With every visitor to your site, obtain the IP and User Agent.
- If there is an ad that satisfies the IP & User Agent condition, use it. Otherwise, use the default ads.

4.2. Batch Text Ads

Step 1: Requesting List of Text Ads Periodically

Issue a HTTP call as follows:

```
http://ads.buzzcity.net/getads.php?partnerid=8404
```

The program will return one or more lines, separated by carriage return, as follows:

```
country,cid,ads text 1\n
country,cid,ads text 2\n
...
```

Example:

```
au,43,Cool Service!
uk,271,Free tones
uk,431,Nice games
```

aa,342,Exciting games for your phone
...

Notes:

- You should issue the call once every 15 minutes, and use the results until the next query. Ads satisfying your requirements are scheduled every 30 to 60 minutes. Hence, there are no advantages for more frequent requests.
- The country code **aa** denotes the default ads that you can use for all other countries not returned in the list
- When more than one **cid** is returned per country, you can rotate the ads or randomly select one for your visitors
- The ads text are **urlencoded** (or **escaped**), and you should **urldecode** them.
- *This method does not return any ads that are targeted on specific carriers, regions and specific handset capabilities. To request for such ads, please refer to the section : [Batch Request for Targeted Text Ads : IP & User Agent Caching](#)*

Step 2: Displaying Text Ads

For every visitor to your site, detect its country and then display the appropriate ads denoted by the **cid**. In the above example, supposed that your visitor arrives from Australia (au), you should display your ads as follows:

```
<p>
<a
href="http://click.buzzcity.net/click.php?cid=43&partnerid=8404">Cool Service</a>

</p>
```

In the same example, if your visitor arrives from Nigeria (ng), which was not in the list returned, you can use the values for **aa**, i.e.

```
<p>
<a
href="http://click.buzzcity.net/click.php?cid=342&partnerid=8404">Exciting games for your phone</a>

</p>
```

The image denoted by

```
<img src...show.php?txt=1...>
```

is a 1x1 gif image counter (transparent, 43 byte). This counter **must be included** with the corresponding **cid** to ensure that your earnings are appropriately accounted for.

Getting CPC/CPM price of Ads

You can use an additional parameter **price** in your call to get the CPC or CPM (per 1,000 impressions) of the ads. Example:

`http://ads.buzzcity.net/getads.php?partnerid=8404&price=1`

The program will return the ads like the example below:

```
au,43,Cool Service!,cpc=1.2
uk,271,Free tones,cpc=3.4
uk,431,Nice games,cpm=1.3
aa,342,Exciting games for your phone,cpc=2.4
...
```

The price is returned in **USD cents**.

Setting **price=2** will return the effective CPM rate (eCPM) of the ads, in addition to the CPC price.
Example:

`http://ads.buzzcity.net/getads.php?partnerid=8404&price=2`

The program will return (example):

```
au,43,Cool Service!,cpc=1.2,cpm=0.21
uk,271,Free tones,cpc=3.4,cpm=0.12
uk,431,Nice games,cpm=1.3
...
```

Batch Request for Targeted Text Ads: IP & User Agent Caching

BuzzCity's system allows ads to be targeted based on mobile carriers, device features and user location. To serve these ads, we maintain up-to-date database on IP addresses and user device information. To request for targeted ads (which are usually higher paying), you need to use the advanced feature of IP and User Agent Caching.

To proceed, call **getads.php** by setting **ipagent=1**:

`http://ads.buzzcity.net/getads.php?partnerid=8404&ipagent=1`

The program will return (example):

```
125.18.235.215,Nokia2600c-
2/2.0,11277,Latest+Racing+Game,cpc=2.06,cpm=7.76
125.18.235.215,Nokia2600c/2.0,11277,Latest+Racing+Game,cpc=2.06,cpm=7.76
196.11.241.97,*,12459,Cool+Videos,cpc=5.9,cpm=0.5959
196.11.241.97,SAMSUNG-SGH-D500,12459,Cool+Videos,cpc=5.9,cpm=0.5959
...
```

where the first parameter is the IP address, and second parameter is the user agent (truncated by the first space).

If '*' is returned as the user agent, this ad can be served to all user agents from this IP address.

The following algorithm is suggested:

- Continue scheduling calls as in Step (1) above regularly (without **ipagent**). Ads fetched in these calls will be used as default ads when no targeted ads are available.
- Also schedule calls with **ipagent=1** at regular intervals.
- With every visitor to your site, obtain the IP and User Agent.

- If there is an ad that satisfies the IP & User Agent condition, use it. Otherwise, use the default ads.

5. Integration for Application Providers

This method allows application providers (java games, mobile IM and other downloadable applications) to embed text or graphical ads into the application itself.

We recommend that the application requests for ads from the provider's own application server ("provider's server"). The provider's server, in turn, will request for ads from BuzzCity ad server asynchronously, and cached these ads for a short period of time (i.e. 15 minutes). *We do not recommend the application to request ads directly from BuzzCity ad server.*

5.1. Serving Graphical Ads through Application Server

The provider's server should issue a HTTP call as follows:

```
http://ads.buzzcity.net/show.php?get=2&partnerid=8404&i=[IPAddress]&a=[UserAgent]
```

where **a** and **i** are, respectively, user agent and the IP address of your visitor. You will then receive 2 lines of text as follows:

```
URL of Graphical Banner\nURL of Click Through\n
```

For example, you may receive

```
http://ads.buzzcity.net/showimg.php?cid=1432  
http://click.buzzcity.net/click.php?partnerid=8404&cid=1432
```

You can retrieve and cache the graphical banner from the first URL, and use the second URL to handle the click through to this banner.

Note that an ad impression is registered at the time your application server issue the HTTP call (**show.php**). Therefore, this method will typically only register 1 ad impression per unique visitor, even if this visitor may be seeing the same ad multiple times.

5.2. Serving Text Ads through Application Server

The provider's server should issue a HTTP call as follows:

```
http://ads.buzzcity.net/show.php?get=1&partnerid=8404&i=[IPAddress]&a=[UserAgent]
```

where **a** and **i** are, respectively, user agent and the IP address of your visitor. You will then receive 2 lines of text as follows:

Text Ads\
cid\
n

For example, you may receive

Best Games!
1432

You can cache the text ad for subsequent use to the same visitor. To handle the click-through, you should construct a click-through URL using the **cid** returned. For example:

<http://click.buzzcity.net/click.php?partnerid=8404&cid=1432>

Note that an ad impression is registered at the time your application server issue the HTTP call (**show.php**). Therefore, this method will typically only register 1 ad impression per unique visitor, even if this visitor may be seeing the same ad multiple times.