BLOOMBERG ANYWHERE FOR MOBILE CUSTOMERS

Software & Connectivity Requirements

11 March 2014
Version: 1.03
BLOOMBERG ANYWHERE users have access to their information on a variety of mobile platforms including BlackBerry, iPhone, iPad and Android-based devices. All software for mobile platforms is available via our mobile software site, [http://m.bloomberg.com](http://m.bloomberg.com).

NOTE: The volume of data transferred by Bloomberg mobile applications varies according to how the applications are used. Bloomberg suggests customers concerned about data costs distribute the application to a representative set of users and monitor data usage in a variety of scenarios.

**BLACKBERRY REQUIREMENTS**

- Find Blackberry OS minimum requirement on [http://m.bloomberg.com/bba/blackberry](http://m.bloomberg.com/bba/blackberry).

- Connectivity via one of the following communication methods:

  NOTE: The order here corresponds to the order tried by the Bloomberg for BlackBerry application. Not all connectivity options may be appropriate in your environment. If you would like to discuss the best choice for your environment, please contact Global Technical Support.

1) **BLOOMBERG BLACKBERRY GATEWAY**

- In this configuration, a local Bloomberg BlackBerry Gateway (previously known as the “MDS” server is deployed within the customer network, alongside a BlackBerry Enterprise Server environment.

- The BES MDS Connection Service (“MDS-CS”) will make connections on behalf of BlackBerry handhelds to the Bloomberg BlackBerry Gateway installation.

- The server running the Bloomberg BlackBerry Gateway must be able to resolve and connect to the addresses listed under the section *BlackBerry Gateway Connectivity Requirements.*

- For certain additional functionality, the MDS-CS must be able to resolve and connect to the addresses listed under the section *Device Connectivity Requirements.*
TCP Port 4545 and 4444 for communication between device, BES and MDS Gateway

Web listen port needs to be specified properly during MDS Gateway Setup. (The Web Listen Port for BES is typically set to 8080, but in rare cases may be 8300 or different.)

2) BES MDS-CS (Blackberry Mobile Data Service)

In this configuration, BlackBerry handhelds connect through a BlackBerry Enterprise Server environment.

The MDS-CS will make connections on behalf of BlackBerry handhelds directly to Bloomberg’s network.

The MDS-CS must be able to resolve and connect to the addresses listed under the section Device Connectivity Requirements.

In order to traverse corporate firewalls, an HTTP proxy can be specified using an IT Policy as part of the corporate BlackBerry configuration. Please see the document Maintenance of Device Software for more details. This proxy must support the CONNECT method for the hosts outlined in Device Connectivity Requirements.
3) BIS (Blackberry Internet Service)

- Users subscribing to a BlackBerry service plan are able to connect to Bloomberg via this route. It does not require a BlackBerry Enterprise Server.
- The following two service books are required on the device in order to connect to Bloomberg via BIS:
  - ‘IPPP for BIBS’
  - ‘BlackBerry Internet Browsing Service’

4) Wi-Fi (802.11x)

- Requires that the handheld has established connectivity to a Wi-Fi hotspot.
- The Wi-Fi network must be able to resolve and connect to the addresses listed under the section Device Connectivity Requirements.
- HTTP proxies are not supported at this time.
- Please contact the Wi-Fi network operator for more details.

5) TCP

- Handhelds configured for mobile internet access directly via the mobile carrier can connect to Bloomberg via this route.
- APN (Access Point Name) Settings provided by the mobile carrier should be correctly entered in the device to enable connection to the Internet via TCP.
- Your mobile carrier must be able to resolve and connect to the addresses listed under the section Device Connectivity Requirements.
- Please contact your mobile carrier for more details.

6) WAP (Wireless Application Protocol)

- WAP service must be enabled for the handheld.
- Your mobile carrier must be able to resolve and connect to the addresses listed under the section Device Connectivity Requirements.
- Please contact your mobile carrier for more details.
IPHONE & IPAD REQUIREMENTS

- Please find iPhone, iPad and iPod Touch minimum OS requirements on https://itunes.apple.com/app/bloomberg-anywhere/id407761767.

To use the Terminal mode, your iPad must additionally have access to the Bloomberg Anywhere Non-Configured environment. Please see the sections marked “Terminal View” in the **Device Connectivity Requirements**.

- Bloomberg recommends that devices are updated to the latest OS version.

- Bloomberg software is not supported on “jailbroken” devices for security reasons.

- When connecting via a mobile data connection, your carrier must be able to resolve and connect to the addresses listed under the section **Device Connectivity Requirements**.

- When connecting via Wi-Fi, your Wi-Fi network must be able to resolve and connect to the addresses listed under the section **Device Connectivity Requirements**.

HTTP proxies are not supported at this time.

ANDROID REQUIREMENTS

- Please find Android minimum OS requirements on https://play.google.com/store/apps/details?id=com.bloomberg.android.anywhere&hl=en

- When connecting via a mobile data connection, your carrier must be able to resolve and connect to the addresses listed under the section **Device Connectivity Requirements**.

- When connecting via Wi-Fi, your Wi-Fi network must be able to resolve and connect to the addresses listed under the section **Device Connectivity Requirements**.

HTTP proxies are not supported at this time.
BLACKBERRY GATEWAY CONNECTIVITY REQUIREMENTS

Servers with the Bloomberg BlackBerry Gateway (previously known as Bloomberg MDS Gateway) software installed must be able to resolve & connect to the following.

<table>
<thead>
<tr>
<th>DNS Name</th>
<th>Address</th>
<th>Port</th>
</tr>
</thead>
<tbody>
<tr>
<td>mmts1.bloomberg.net</td>
<td>160.43.251.122</td>
<td>443</td>
</tr>
<tr>
<td>mmts2.bloomberg.net</td>
<td>69.191.247.30</td>
<td>443</td>
</tr>
<tr>
<td>mmts1.blpprofessional.com</td>
<td>160.43.251.187</td>
<td>443</td>
</tr>
<tr>
<td>mmts2.blpprofessional.com</td>
<td>69.191.247.43</td>
<td>443</td>
</tr>
</tbody>
</table>

For maximum service availability, we strongly recommend that clients ensure both addresses are accessible at all times – even if the application appears to function correctly with only one.

In order to reduce the impact of future changes, we recommend allowing access to the following Bloomberg subnets for port 443:

<table>
<thead>
<tr>
<th>Address</th>
<th>Subnet Mask</th>
</tr>
</thead>
<tbody>
<tr>
<td>160.43.251.0</td>
<td>255.255.255.0</td>
</tr>
<tr>
<td>69.191.247.0</td>
<td>255.255.255.0</td>
</tr>
</tbody>
</table>
DEVICE CONNECTIVITY REQUIREMENTS

Handset devices will make connections to the following locations. In many situations, devices will be connecting to Bloomberg directly via mobile data networks, and no further configuration will be required.

Configuration may be necessary in the following circumstances:

- When connecting from BlackBerry handsets via a BlackBerry Enterprise Server environment.
- When connecting from other handsets via a Wi-Fi network, particularly within restricted corporate environments.

Access to the following services may be necessary:

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Platform</th>
<th>DNS Name</th>
<th>IP Addresses</th>
<th>Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>General (Bloomberg Professional)</td>
<td>All</td>
<td>mmgwy.bloomberg.net</td>
<td>160.43.251.60</td>
<td>69.191.247.60</td>
</tr>
<tr>
<td>General (Bloomberg Professional)</td>
<td>All</td>
<td>mmgwy.blpprofessional.com</td>
<td>160.43.251.179</td>
<td>69.191.247.103</td>
</tr>
<tr>
<td>Terminal View</td>
<td>iPad</td>
<td>bba.bloomberg.net</td>
<td>69.191.250.10</td>
<td>69.191.250.13</td>
</tr>
<tr>
<td>Terminal View</td>
<td>iPad</td>
<td>nybba1csg.bloomberg.net</td>
<td>206.156.53.28</td>
<td>206.156.53.29</td>
</tr>
<tr>
<td>Terminal View</td>
<td>iPad</td>
<td>njbba1csg.bloomberg.net</td>
<td>69.191.250.15</td>
<td>69.191.250.16</td>
</tr>
<tr>
<td>General (Consumer applications)</td>
<td>All</td>
<td>m.bloomberg.com</td>
<td>160.43.251.61</td>
<td>69.191.247.57</td>
</tr>
<tr>
<td>Attachment Downloads</td>
<td>iPad</td>
<td>mobatt.bloomberg.com</td>
<td>160.43.251.148</td>
<td>69.191.247.89</td>
</tr>
<tr>
<td>Podcasts</td>
<td>iPhone, BlackBerry</td>
<td>media.bloomberg.com</td>
<td>204.179.240.179</td>
<td>69.191.242.17</td>
</tr>
</tbody>
</table>
* These services primarily support the free Bloomberg applications, but are also used on iOS and Android for some non-critical functionality such as update notification.

For maximum service availability, we strongly recommend that clients ensure both addresses are accessible at all times – even if the application appears to function correctly with only one.

In order to limit the impact of future changes and new functionality, we strongly recommend allowing access to the following Bloomberg subnets:

<table>
<thead>
<tr>
<th>Address</th>
<th>Subnet Mask</th>
<th>Ports Required</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>160.43.251.0</td>
<td>255.255.255.0</td>
<td>80, 443</td>
<td>General Mobile Access</td>
</tr>
<tr>
<td>69.191.247.0</td>
<td>255.255.255.0</td>
<td>80, 443</td>
<td>General Mobile Access</td>
</tr>
<tr>
<td>204.179.240.0</td>
<td>255.255.255.0</td>
<td>80</td>
<td>Podcast Content</td>
</tr>
<tr>
<td>69.191.242.0</td>
<td>255.255.255.0</td>
<td>80</td>
<td>Podcast Content</td>
</tr>
<tr>
<td>69.191.250.0</td>
<td>255.255.255.0</td>
<td>80, 443</td>
<td>Terminal View</td>
</tr>
<tr>
<td>206.156.53.0</td>
<td>255.255.255.0</td>
<td>80, 443</td>
<td>Terminal View</td>
</tr>
</tbody>
</table>