



Location Feed Format & File Exchange Standard (WRIX-L)

17 July, 2009

by
Wireless Broadband Alliance

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ABOUT THIS DOCUMENT

This document defines the format and data the Wireless Broadband Alliance (“WBA”) member operators (“Operators”) shall exchange for feeds of partner service locations. This document includes both the file format and file exchange method.

This document replaces the Location Feed Document (Version1.0) originally issued by the Service Delivery Working Group in July 2005.

DOCUMENT CHANGE HISTORY

Version	Revision Date	Revised By	Description of Change
0.1	12 March 2009	Mark Carter	Draft
0.2	29 April 2009	Mark Carter	Second Draft including feedback
0.3	30 April 2009	Mark Carter	Third Draft including feedback and corrections Changes contained in this version: <ul style="list-style-type: none"> • Document designation added; (WRIX-L) to allow inclusion in the WRIX standard family. • Sections rearranged to fit format logic. • Section 1.1 Postings Details. This section has been updated to include details of the new Hotspot Directory Service operated by Connection Services on behalf of the WBA. • Section 1.3 Hosting of the WBA location database. This section has been updated to include details of the new Hotspot Directory Service operated by Connection Services on behalf of the WBA. • Section 1.4 Start date of the location feed and hotspot locator. This section has been updated to include details of the new Hotspot Directory Service operated by Connection Services on behalf of the WBA. • Section 2.2 Definition of a Hotspot location added for clarification. • Section 2.3 Restricted SSIDs section added. • Section 2.4 Location Type. New Type No.11 Area Coverage added. • Section 2.6 WBA ID List section added for reference. • Section 3 Location List. Field 6, Location_Name, field length changed to 256 characters. • Section 3 Location List. Field 8, Location_Address2, changed to allow the inclusion of Village, District or WAD (in Japan) as a subset of City, remains optional. • Section 3 Location List. Field 10, Location_Zip_Postal_Code, changed from optional to 'required'. • Section 3 Location List. Fields 33 & 34, Latitude & Longitude, changed from optional to 'required'. • Section 3 Location List. Field 36. New field for MAC Address added as optional.
1.0	11 May 2009	Mark Carter	First release

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Version	Revision Date	Revised By	Description of Change
1.1	17 July 2009	Lay Kian Koay	Second Release Changes contained in this version: <ul style="list-style-type: none">Section 2.6 WBA ID List. Remove Maxis and T-Mobile Austria as they have resigned from being WBA Members respectively on 10/Jul '09 and 1/Apr '09.

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1 Using the Location Feed

1.1 Posting Details

- (a) Post an updated locations file at a minimum monthly by 12:00:00 GMT the 25th day of each month.
- (b) Mail to support.wba@connectionservices.com or post to the WBA extranet server <http://wballiance.webexone.com/> where a copy of all received files are hosted and the required interfaces for up- and downloads are available.
- (c) The locations list file shall be called: <Partner_Name>_<IANA code origin country of operator>_<YYYYMMDD>.txt, where YYYYMMDD represents the date of the file generation.
- (d) The locations list shall contain all active partner service locations to which WBA roaming partners have access. Non-active locations will not be displayed.

1.2 Display Details

- (a) Retrieve the location files and update location lists for your customers at a minimum monthly.
- (b) Include only locations of roaming partners that are available to your customers.
- (c) Replace any previously provided list with the new list even if there are no changes to the footprint. This will provide a timestamp to reassure users that this is latest information.

1.3 Hosting of the WBA location database

There is the demand to set up a central WBA location database to ensure:

- (a) Efficient distribution of location database information (for senders and receivers, which can select the download by roaming partner and countries)
- (b) Identical up-to-date-information on active roaming locations for all WBA members
- (c) Ensure high level of quality of the database information (plausibility checks for mandatory fields to accept or refuse the files)
- (d) Central tracking of hotspot location growth within the WBA (e.g. for communication)
- (e) Offer an up-to-date WBA location finder on the WBA web site

Connection Services have been appointed by the WBA as the service provider to operate a hotspot directory and central DB solution to upload own location files and download required files of roaming partners.

This solution will be available 24x7 and offers assistance by email (support.wba@connectionservices.com) to support members in case of problems.

1.4 Start date for the WBA location feed and hotspot locator

The first location uploads started 25 July 2005. The hotspot locator for the WBA website finished production acceptance and was launched 06 March 2009. All members should provide up to date feeds as soon as possible.

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2 The Location Feed Format Notes

The file transferred shall adhere to the following rules to assure compliance with this format:

- (a) The locations list shall be tab delimited.
- (b) Information shall be represented using only UTF8 (ISO 8859-1) characters.
- (c) All locations shall be provided in Mixed Case.
- (d) The first row in the file SHALL contain the version number of this requirements document as well as the date the file was sent.
- (e) The second row in the file SHALL be a header row containing each of the "Field Name(s)" from the table below separated by tabs.
 - The order of the fields is fixed as defined in the table below.
- (f) The information for each Location shall be separated from that for the following location by appropriate carriage control (either CR/LF or LF).
- (g) The Location List record shall not contain embedded carriage control characters (for example, <CR> or <LF>) except as described in the previous item.
- (h) Each row in the file shall contain a location identifier. If a *location identifier* value is changed, the old value **SHALL NEVER** be re-used for a different location.
- (i) Within the information record for a single Location, each information field shall be separated from the next field by a tab.
- (j) When no information is supplied for a field, the tab following the NULL (empty) field shall immediately follow the tab preceding the empty field (in other words, there **shall be no** intervening white space between the commas for an empty field).
- (k) Fields whose content includes tabs or double-quote characters (, or ") shall be enclosed in double quotes.
- (l) When a field contains a double quote character, the double quote character shall be preceded by another double quote character.
- (m) All data within the Locations List shall be single-spaced.

2.1 Required vs. Optional fields

"Required" means that a field needs to be filled, in order these fields are all available across the WBA partners. If these fields are not filled accordingly, the location file should not be accepted. In some cases (e.g. Operator_Identifier, Location_Type, UTC_Timezone) a value needs to be selected from a closed list.

"Optional" means a fixed field in the table, which should be filled if information is available. If the field is left empty (Null), the locations list can still be accepted.

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2.2 Definition of a Service Location (Hotspot)

As previously stated, this document defines the format and data the WBA member operators shall exchange for feeds of partner service locations. Customers should be able to use the service locations shown within the terms and conditions of the service definition.

For the avoidance of doubt, a Service Location or 'hotspot' is defined for the purposes of this location feed as the following:

'A Publically Accessible Service Location with Roaming enabled for at least one WBA Member'

- Limited access sites such as Airport lounge are allowed. This must be identified in field 23 and a description should be added in field 25 (Coverage Area) explaining the restriction. Example: Access Restricted to Club card holders and Guests only.
- In the case of larger venues with multiple locations within them where partial coverage only is offered, such as Airports and Shopping Malls, the operator should provide more information on the coverage offered, for example floor 6 conference rooms or Gates 2-10 in field 25 (Coverage Area).
- Where Multiple Access Points owned by the same operator are used for complete coverage of a single business location, these will be counted as a single Location. Example: On different floors of the same Hotel. A description should be added in field 25 (Coverage Area) explaining the coverage.
- For 'Wireless City' or 'Outdoor Area Coverage' each Access Point maybe listed as a separate location with the same name but have a separate address including the Latitude and Longitude.
- Private Residences are not allowed.

2.3 Restricted SSIDs.

While SSIDs may be different at each supplier location, they should at least be unique to suppliers Network.

Below is a list of SSIDs that should not be used. Most are default (unconfigured) access point SSID settings, 'any' and 'public' are generally acknowledged as problematic, although some providers, airport authorities currently use these.

- 101, comcomcom, guest, Toshiba, 2wire, Compaq, tsunami, 3com, home, mello, wireless, any, default, intel, netgear, wlan, Arabica, dlink, Internet, public,xlan, belkin, free, Linksys, test, zyxel.

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2.4 Location Types

2.4.1 Location Type

Nr.	Location Type
1.	Airport_Airlounge
2.	Cafe_Bar
3.	Convention-Center_Fair
4.	Corporate_office
5.	PetrolStation_ServiceArea
6.	Hotel
7.	Rail
8.	Restaurant
9.	Stores_Shops
10.	Other
11.	Area Coverage

The Location Type is mandatory. The internally used location type names can be translated at locator level. Categories can also be merged at locator level (e.g. merge "Airport_Airlounge" and "Rail" to Travel)

2.4.2 Sub_Location Type

Additional sub venue types are optional. They depend from the different markets, the strategy of the operators and the size of hotspots of the same partner brand. They can be created by the operator and are mostly useful only for own presentation. These venue types enable location tools to search by common types and sub types.

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2.5 UTC Timezone table

Abbreviation (ID)	Full name	Location Time zone (without daylight saving time)
NFT	Norfolk (Island) Time Australia	UTC + 11:30 hours
AEST	Australian Eastern Standard Time Australia	UTC + 10 hours
ACST	Australian Central Standard Time Australia	UTC + 9:30 hours
AWST	Australian Western Standard Time Australia	UTC + 8 hours
CXT	Christmas Island Time Australia	UTC + 7 hours
IST	Indian Standard Time	UTC + 5:30 hours
MSK	Moscow Time	UTC + 3 hours
EET	Eastern European Time Europe	UTC + 2 hours
CET	Central European Time Europe	UTC + 1 hour
WET	Western European Time Europe	UTC
NST	Newfoundland Standard Time North America	UTC - 3:30 hours
AST	Atlantic Standard Time North America	UTC - 4 hours
EST	Eastern Standard Time North America	UTC - 5 hours
CST	Central Standard Time North America	UTC - 6 hours
MST	Mountain Standard Time North America	UTC - 7 hours
PST	Pacific Standard Time North America	UTC - 8 hours
AKST	Alaska Standard Time North America	UTC - 9 hours
HAST	Hawaii-Aleutian Standard Time North America	UTC - 10 hours

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2.6 WBA ID List (Provider Identifiers)

The IDs in this list contains the WBA Operator Member WRIX ID. This id is also used for RADIUS accounting, and mediated into the UDR records under the WRIX standard.

WBA Operator member	Member ID
Boingo Wireless	BOINGO:US
BT	BT:UK
CSL	CSL:HK
du	TBA
FON	TBA
FREEDOM4	TBA
Indosat M2	INDOSATNET:ID
NTTCom	NTTCOM:JP
Orange France	ORANGE:FR
PT WiFi	PTWIFI:PT
StarHub	STARHUB:SG
Swisscom	SCM:CH
Tata Communications Internet Service (TCISL)	TIWIFI:IN
Telecom Italia	TelecomItalia:IT
Telefonica de España	Telefonica:ES
True Thailand	TBA
Deutsche Telekom (T-Com)	TCOM:DE
T-Mobile USA	TMOBILE:US
T-Mobile Hungary (TMH)	TMOBILE:HU
T-Mobile Czech Republic (TMCR)	TMOBILE:CZ
T-Mobile Germany (TMDE)	TMOBILE:DE
T-Mobile Netherlands (TMNL)	TMOBILE:NL
T-Mobile UK (TMUK)	TMOBILE:UK
Unwired Australia	TBA
VEX	TBA
Wayport	TBA
YTL	TBA

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3 Location List Data

The table below defines the specific information for each Location and the order of appearance in the Location List record.

Field #	Column Name	Required Yes / Optional	Comments	Data Sample	Format	Select / Display / Internal use
1	Provider_Identifier	Y	A unique value identifying the partner (WBA standardized field OPERATOR_NAME of RADIUS VSA Location-Name) as defined in the WBA ID List.	Valid IDs are as listed in Section 2.6	Varchar 20	Internal
2	Location_Identifier	Y	Per partner unique identifier for a given location. May be included in RADIUS Location-ID VSA in the network field.	10022AAA	Varchar 20	Internal
3	Service_Provider_Brand	Y	The Brand name used in the market related to this product	T-Mobile HotSpot BT Openzone	Varchar 30	Search / Display
4	Location_Type	Y	WBA category of Location (see closed list Section 2.4.1)	Valid types are as listed in Section 2.4.1	Varchar 30	Search / Display
5	Sub_Location Type	Optional	Subcategory (no standardization)		Varchar 30	Search / Display
6	English_Location_Name	Y	This field shall ensure the name of the location is easily recognized in English. DO not include characters that may be misunderstood as formatting, namely; at@, Ampersand &, colon or semi-colon ;, or parentheses ()	Starbucks at Legacy	Varchar 256	Free text search / Display
7	Location_Address1	Y	building #,street address (line 1) in national format in English	3333 Coit Rd.	Varchar 80	Free text search / Display
8	Location_Address2	Optional	Village, District or WAD in English	Smithfield	Varchar 60	Display
9	English_Location_City	Y	Name of the Location City in English, if different from Location City above	Plano	Varchar 60	Free text search / Display
10	Location_Zip_Postal_Code	Y	Location zip code/postal code. Required where available, in particular US	75025	Varchar 10	Search / Display

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Field #	Column Name	Required Yes / Optional	Comments	Data Sample	Format	Select / Display / Internal use
			and Europe.			
11	Location_State_Province_Name	Optional	Standard state or province abbreviation of HotSpot	TX	Varchar 30	Search / Display
12	Location_Country_Name	Y	Country location of HotSpot based on IANA top level domain code Code will be translated to long country name on locator level http://www.iana.org/cctld/cctld-whois.htm	DE UK US	Varchar 2	Search / Display
13	Location_Phone_Number	Optional	Location phone number, must include country dial code and area code based on ITU-T E.164 http://www.itu.int/itudoc/itu-t/ob-lists/icc/e164_763.html	1-972-818-9999	Varchar 25	Display
14	SSID_Open_Auth	Y	SSID for non-802.1x access	tmobile	Varchar 32	Display
15	SSID_Broadcasted	Optional		Y/N	Varchar 1	Display / Internal
16	WEP_Key	Optional	Provide the WEP key to be used for the location, if any		Varchar 60	Internal
17	WEP_Key_Entry_Method	Optional		Hexadecimal or ASCII	Varchar 15	Internal
18	WEP_Key_Size	Optional	Provide the length of the WEP key.	"40" or "128", "256"	Varchar 5	Internal
19	SSID_1X	Optional	SSID for 802.1x access. Null if not applicable.		Varchar 32	Display / Internal
20	SSID_1x_Broadcasted	Optional		Y/N	Varchar 1	Display / Internal
21	Security_Protocol_1X	Optional	Protocol type	WPA-Enterprise, WPA2, EAP-PEAP, EAP-TTLS, EAP_SIM, EAP-AKA, LEAP, NONE (Default value)		
22	Client_Support	Optional	Network support of client	WISPr	Varchar 60	Internal

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Field #	Column Name	Required Yes / Optional	Comments	Data Sample	Format	Select / Display / Internal use
23	Restricted_Access	Optional	Special privileges required to access the physical location (e.g. airline club)? Use field 25 to describe the restriction.	Y = "Restricted access"	Varchar 1	Display
24	Location_URL	Optional	May or may not be specific to the service location.	http://www.starbucks.com	Varchar 60	Display
25	Coverage_Area	Optional	Describes where in the location there is HotSpot coverage.	Coverage is in the Conference rooms on 1 st floor	Varchar 150	Display
26	Open_Monday	Optional	This field contains information about opening hours.	"10.00 – 23.00"	Varchar 13	Display
27	Open_Tuesday	Optional	This field contains information about opening hours.	"10.00 – 23.00"	Varchar 13	Display
28	Open_Wednesday	Optional	This field contains information about opening hours.	"10.00 – 23.00"	Varchar 13	Display
29	Open_Thursday	Optional	This field contains information about opening hours.	"10.00 – 23.00"	Varchar 13	Display
30	Open_Friday	Optional	This field contains information about opening hours.	"10.00 – 23.00"	Varchar 13	Display
31	Open_Saturday	Optional	This field contains information about opening hours.	"10.00 – 23.00"	Varchar 13	Display
32	Open_Sunday	Optional	This field contains information about opening hours.	"10.00 – 23.00"	Varchar 13	Display
33	Longitude	Y	Longitude Geographic Position (WGS84)	"55.153879"	Float (9,6)	Internal
34	Latitude	Y	Latitude Geographic Position (WGS84)	"25.095835"	Float (9,6)	Internal
35	UTC_Timezone	Optional	Local time zone. Required for billing purposes and customer care.	CET (Central Europe) See Section 2.5	Varchar 4	Internal
36	MAC_Address	Optional	The MAC Address of the Access Point	"00:19:a9:cd:9b:20"	Varchar 12	Internal

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4 REVIEW AND APPROVAL

The review and approval history of this document, Location Feed Format & File Exchange Standard (WRIX-L), is recorded as follows:

Version	Type	Date	Reviewed / Approved By	Review / Approval Feedback
1.0	Review by OIG/WG leadership team	12 to 28 May 2009	WiFi OIG: Marjorie Leonidas (Chair) WiMAX OIG: Non Ingkutanon (Chair) AWG: Johann-Georg Gross (Chair) BMWG: Mehul Kapadia (Chair), Manasi Nath (Vice-Chair), RWG: Ampai Pomprasertsakul (Chair), Quentin Birchall (Co- Chair), Jeffery Mabe / Mark Carter / Ramon Castillo (Vice-Chairs)	R&A No.: R&A-2009-001 1. Feedback from Jon Smith of BT: We have an additional field at the end of the table to include 'cautionary availability' text to be displayed for Hutch/OZIABs but other than that I repurpose the OSD to match the WBA format. So it gets my vote! 2. Except for the above comment, the document has been approved by the OIG/WG leadership team with no further comments. 3. Review Notes and Comments are recorded in R&A-2009-001.
1.0	First Release	22 June 2009		
1.1	Second Release	17 July 2009	Changes cleared by Mark Carter, the original author.	

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APPENDIX A – Location Feed Data Template (WB11)

The template WB11 for collecting the list of locations of all active partner services locations is attached below for your reference. The latest copy of this template, last updated on 22 June 2009, can also be found in WBA extranet site <http://wballiance.webexone.com/r.asp?a=5&id=106935> (Located in [Group Documents / Common - All / Template](#)).



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Feed Data template.xls

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