Copyright

© 2020 ZIH Corp. and/or its affiliates. All rights reserved. ZEBRA and the stylized Zebra head are trademarks of ZIH Corp., registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners.

COPYRIGHTS & TRADEMARKS: For complete copyright and trademark information, go to www.zebra.com/copyright.

WARRANTY: For complete warranty information, go to www.zebra.com/warranty.

END USER LICENSE AGREEMENT: For complete EULA information, go to www.zebra.com/eula.

Terms of Use

- Proprietary Statement
  This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries (“Zebra Technologies”). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.

- Product Improvements
  Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.

- Liability Disclaimer
  Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.

- Limitation of Liability
  In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Publication Date

September 8, 2020

Revision History

Changes to the original guide are listed below:

<table>
<thead>
<tr>
<th>Change</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN-004028-01 Rev A</td>
<td>8 September 2020</td>
<td>Initial release</td>
</tr>
</tbody>
</table>
Introduction

This guide provides information about using the Workforce Connect Location Area Service (WFC Location Area Service).

NOTE Screens and windows pictured in this guide are samples and can differ from actual screens.

Chapter Descriptions

Topics covered in this guide are as follows:

• About this Guide provides an explanation of document conventions and related documentation.
• Getting Started provides information about accessing and logging in to WFC Location Area Service.
• WFC Location Area Service Administration provides information about administering WFC Location Area Service.
• New Imports or API-Initiated Changes provides information about updating information in WFC Location Area Service.

Notational Conventions

The following conventions are used in this document:

• Bold text identifies
  • Dialog box, window, and screen names
  • Drop-down list and list box names
  • Check box and radio button names
  • Icons on a screen
  • Key names on a keypad
  • Button names on a screen
• Bullets (•) indicate
  • Action items
  • Lists of alternatives
  • Lists of required steps that are not necessarily sequential
• Numbered lists indicate sequential lists (e.g., those that describe step-by-step procedures).

Related Documents

For the latest version of this guide and all guides, go to: zebra.com/support.

Service Information

If you have a problem with your equipment, contact Zebra Global Customer Support for your region. Contact information is available at: zebra.com/support.

When contacting support, please have the following information available:

• Serial number of the unit
• Model number or product name
• Software type and version number.

Zebra responds to calls by email, telephone, or fax within the time limits set forth in support agreements.

If your problem cannot be solved by Zebra Customer Support, you may need to return your equipment for servicing and will be given specific directions. Zebra is not responsible for any damages incurred during shipment if the approved shipping container is not used. Shipping the units improperly can possibly void the warranty.

If you purchased your Zebra business product from a Zebra business partner, contact that business partner for support.

Provide Documentation Feedback

If you have comments, questions, or suggestions about this guide, send an email to EVM-Techdocs@zebra.com.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copyright</td>
<td>2</td>
</tr>
<tr>
<td>Terms of Use</td>
<td>2</td>
</tr>
<tr>
<td>Revision History</td>
<td>2</td>
</tr>
</tbody>
</table>

### About this Guide
- **Introduction** ............................................................................. 3
- **Chapter Descriptions** .................................................................. 3
- **Notational Conventions** .............................................................. 3
- **Related Documents** ....................................................................... 4
- **Service Information** ..................................................................... 4

### Getting Started
- **Intended Audience** ...................................................................... 6
- **About this Chapter** ...................................................................... 6
- **Introduction to WFC Location Area Service (LAS)** .......................... 6
- **Prerequisites** ............................................................................. 7
- **Location Area Service Administration URLs** .................................. 7
  - **Web Portal** .............................................................................. 8
  - **Swagger / APIs** ..................................................................... 8

### WFC Location Area Service Administration
- **About this Chapter** ...................................................................... 9
- **Import File Format** ...................................................................... 9
- **PTTPro Sample JSON File** ............................................................. 10
- **Location Area Service – Administration Steps** ............................. 10
- **Sample PTT Pro Client Screenshots** ............................................. 12

### New Imports or API-Initiated Changes
- **About this Chapter** ...................................................................... 13
- **Administration – New Imports (or API-Initiated Changes)** ............... 13
Getting Started

Intended Audience
This guide is intended for Zebra LAS Administrators, Zebra Technical Support, Customer LAS Administrators and Zebra Partners.

About this Chapter
This chapter covers the following topics.

- Introduction to WFC Location Area Service (LAS)
- Prerequisites
- Location Area Service Administration URLs

Introduction to WFC Location Area Service (LAS)
WFC Location Area Service (LAS) provides a capability to associate PTTPro users to Wireless Access Points (APs) that provide wireless coverage areas within a facility. As users move throughout the facility, the Wireless APs continually report to the system a user-friendly location name indicating the location of each user.

The following is an example of the concept of wireless access points within a facility.
The WFC Location Area Service Portal allows administration view of BSSID/Location Name along with other information fields to assist with administration tasks. The LAS portal also provides an import APs function, which allows addition/changing of BSSID/Location Names.

When LAS is configured correctly, the “Location” information displayed represents the user association to an Access Point. Depending on the user's connection to the access point, this association of the user to an AP might be an AP different from the nearest AP.

---

**Prerequisites**

The following prerequisites are mandatory for WFC Location Area Service to be enabled.

**Table 1  Prerequisites**

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your customer ID is created in LAS</td>
<td>Contact Zebra GMSS or Professional Services for creation of a customer ID.</td>
</tr>
<tr>
<td>WFC Location Area Service instance available</td>
<td>—</td>
</tr>
<tr>
<td>WFC PTT Pro Client</td>
<td>3.2.10087 or later</td>
</tr>
<tr>
<td>WFC PTT Pro JSON file</td>
<td>Make sure that wfclas objects are set</td>
</tr>
<tr>
<td>Device location MUST be enabled</td>
<td>This is REQUIRED to access the associated BSSID information and to pass it to the WFC Location Area Service server.</td>
</tr>
<tr>
<td>LAS configured/provisioned Access Points for Tenant</td>
<td>Must have the following minimum fields: SiteName, BSSID, AssetName, LocationFriendlyName</td>
</tr>
<tr>
<td>WFC Profile Manager Client</td>
<td>latest version available</td>
</tr>
</tbody>
</table>

---

**Location Area Service Administration URLs**

The following URLs point to the WFC Essentials Multi-tenant Production Location Area Service server. Make sure you are using the correct URLs for the server(s) in which your access and tenant are provisioned.
Web Portal
https://prod1-essentials.pttpro.zebra.com/

Swagger / APIs
About this Chapter

This chapter covers the following topics.

- Import File Format
- PTTPro Sample JSON File
- Location Area Service – Administration Steps
- Sample PTT Pro Client Screenshots

Import File Format

Importing Access Point information requires a named CSV file containing minimum fields. The content management of this CSV is important as the content represents the Location Friendly Name that is displayed in relation to the associated BSSID.

**NOTE** The CSV file format must be without “UTF-8”.

<table>
<thead>
<tr>
<th>CSV File FIELD</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SiteName</td>
<td>Admin Selected identifier Used with JSON file and import to associate BSSID and facility “site” name</td>
</tr>
<tr>
<td>BSSID</td>
<td>Access Point WLAN BSSID</td>
</tr>
<tr>
<td>AssetName</td>
<td>Given Name of physical AP (e.g. AP101-Backroom)</td>
</tr>
<tr>
<td>LocationFriendlyName</td>
<td>Textual information of BSSID to be displayed within PTT Pro Client (e.g. Backroom)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tenant UI Field Name¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site ID</td>
</tr>
<tr>
<td>BSSID</td>
</tr>
<tr>
<td>AP Name</td>
</tr>
<tr>
<td>AP Created Name</td>
</tr>
</tbody>
</table>

¹ Tenant Portal currently display the field names as listed in table. Future changes to field name will be made on the portal to align to the CSV file field headings.

The following is sample CSV file.
SiteName, BSSID, AssetName, LocationFriendlyName
1202, 00:00:00:00:00:01, AP_001, Grocery
1202, 00:00:00:00:00:02, AP_002, Bakery
2032, 00:00:00:CF:08:B2, AP-Shoes, Shoes
2032, 00:00:00:CF:08:F6, AP-Auto, Aut
2032, 00:00:00:CF:09:33, AP-Pharmacy, Pharmacy

NOTE Content Management of CSV File is outside the scope of this document. The LAS solution provides only a provisioning of the APs with a “Friendly Name” and offers changes management limited to adding new APs, changed Friendly name for existing BSSIDs, and replacing all existing with a new listing.

PTTPro Sample JSON File

PTTPro Client applications require configuration via the JSON file to enable LAS capabilities. Included in the JSON is a URL pointing to the LAS server assigned, a token/api-key, specific site id and a customer id. These parameters are necessary to correctly correlate the Client to a customer and site in order to exchange LocationFriendlyNames based on BSSID associations.

IMPORTANT: In LAS, the Customer ID must be unique for each customer/tenant.

NOTE This sample shows only LAS objects.

Sample JSON File for PTT Pro Client

```JSON
{
    "wfclasShowServerConfig":true,
    "wfclasServerURL":https://prod1-essentials.pttpro.zebra.com:9443/apname/v1,
    "wfclasServerToken":"insert_your_token",
    "wfclasSiteID":"insert_your_site",
    "wfclasCustomerID":"insert_your_customer_id"
}
```

NOTE 1: When LAS is used with WFC Profile Client, the siteID and customerID are not required in the JSON file.

NOTE 2: In LAS, the Customer ID must be unique for each customer/tenant.

Location Area Service – Administration Steps

1. Collect the necessary information as follows.
   a. Tenant
Getting Started

i. apiKey
ii. customerID - alpha-numeric

IMPORTANT: In LAS, the Customer ID must be unique for each customer/tenant.

iii. name
iv. password – Future Use
v. userId – Future Use

b. Customer Wireless Access Point (WAP) Infrastructure
   i. List of APs, with identifiers listed
   ii. BSSID for each AP
   iii. Desired “Friendly Name” for each BSSID

c. JSON file current or proposed for PTT Pro Client

2. Create a Tenant Administrator on the LAS Administrator’s Portal as follows.

   NOTE: Creating a tenant Admin on the LAS Administrator’s portal is a privileged operation for LAS Zebra Administrators. Customer / Tenant Administrator will not perform this operation.

   Who: LAS Zebra Admin
   How: OpenAPI or LAS Portal

   a. Portal Login
      i. LAS Admin User Name and password: as provisioned
      ii. Navigation
         1. Home: Displays all registered users
         2. Register User: mechanism to add admin (LAS or Tenant)

   b. Select “Register User” – Enter following
      i. First Name
      ii. Last Name
      iii. UserName
      iv. Password

   c. Select “User’s Role”
      i. Admin
      ii. User (Tenant Admin)

   d. Enter Customer ID, Site ID (Optional), API Key
   e. Click “Register”

3. Log in as the Tenant Administrator and Manage Access Points

   Who: LAS Admin
   How: OpenAPI or LAS Portal

   a. Portal Login
      i. User Name: as provisioned
      ii. Password: as provisioned

   b. Navigation
      1. Home: Displays current import Access Points
      2. Import APs: Mechanism to import CSV file

   c. Do AP imports as follows.
1. Add entries to the CSV file.
2. Import APs.
3. Choose File.
4. Select Reset – ONLY if you wish to remove all existing records BEFORE the import. If you are adding incremental APs from a file, then DO NOT select (no check).
5. Upload the CSV file.
6. Navigate to “Home” to verify the additions.

Sample PTT Pro Client Screenshots

The following samples are representative display examples showing the “Location” information which is available in the Contacts and Favorites screens for users that are both online AND configured to provide user location to the LAS server.
New Imports or API-Initiated Changes

About this Chapter

This chapter covers the following topics.

- Administration – New Imports (or API-Initiated Changes)

Administration – New Imports (or API-Initiated Changes)

Scenarios for requiring new imports or API-initiated changes include but are not limited to the following.

- Initial Provisioning
- Replacement of existing APs
- Relocation of existing APs
- Relocation of Areas within facility (e.g. switching men’s and women’s clothing, seasonal changes, etc.)