

# AssetWorx Impinj Reader Checkout Configuration Guide

## Table of Contents

Impinj Checkout Introduction.....	2
System Setup.....	3
Configuring the Reader in AssetWorx.....	4
Reader Setup General Tab .....	4
Reader Setup Setting Tab.....	5
Associating Users with Checkouts.....	6
Troubleshooting .....	7

## **Impinj Checkout Introduction**

Impinj fixed readers are able to provide directionality to the AssetWorx software system through the Doppler attribute. AssetWorx is able to intelligently analyze the stream of Read Tag messages as an RFID tag walks by an RFID reader in order to correctly infer the directionality of the tag. Our in-lab testing was done on an Impinj XPortal which uses an Impinj Speedway Revolution 4 port RFID reader.

## **System Setup**

The advanced processing required to provide accurate directionality information to the AssetWorx system was introduced in AssetWorx 3.8.8.1. Both the AssetWorx Web Server and the Alarm Monitoring System should be at version 3.8.8.1 or later in order to use this functionality. In terms of the web server, it doesn't matter if it is a local server or one that is hosted up on the cloud. An Alarm Monitoring Service must be installed locally to connect to the Fixed RFID Reader. For information on how to install the Alarm Monitoring Service, please refer to the AssetWorx Software Installation Instructions guide.

## Configuring the Reader in AssetWorx

In order to properly use the V-TAG Command Center, you will first need to set up data in the AssetWorx web application.

### Reader Setup General Tab

Create a new Reader. Make sure you have chosen the Impinj Octane as the Reader Model. Choose what alerting action you want for the inner direction and outer direction events.

**Edit Reader**

General COM Port Network Settings

Name  
XPortal 10.2.75.42

Reader Model  
Impinj Octane

Connection  
Network

Location  
Garage - Left

Use With Service  
AMS Computer Name

Last Gateway Up Report  
03-13-2020 17:03:36

On Tag Movement

On Security Indication

On Low Battery

On Sensor Over Threshold

On Inner Direction Detected:  
Checkin

On Outer Direction Detected:  
Checkout

**Impinj Octane driver**

**Checkin Location**

**Inner Direction Alerting Action**

**Outer Direction Alerting Action**

*Figure 1*

## Reader Setup Setting Tab

Adjusting the Reader Setting tab is critical to provide the necessary functionality to intelligently track RFID tag directionality. Please review Figure 2 for correct settings.

### Edit Reader

Save

Cancel

General

COM Port

Network

Settings

Tag Timeout(s)

0

← Set to zero to maximize tag reads

Reader Mode

DOPPLER

← Choose Doppler to get directionality

Reader Power(1-100)

100

← Reader Power should be set so only tags moving by the reader are in range

Dir Min RSSI(-20 to -97)

-90

← You can further filter out tag reads by setting min RSSI

Search Mode

Tag Process Mode

Single

← Choose Single mode so that each Reader is treated independent of other Readers

Tag Read Update Location

Yes

← Yes if you want asset locations to get changed to Reader location on tag read

*Figure 2*

## Associating Users with Checkouts

In addition to automatically checking assets in and out using the Impinj Fixed Reader, AssetWorx also has the ability to scan for a User RFID badge to add to the Checkout operation. When a collection of RFID tagged Assets pass by a portal, AssetWorx will also watch for any User RFID badge tags that can be seen with the moving assets. If a user is seen, the checkout operation will indicate the timestamp as well as the user id of the user. Keep in mind that if multiple users are walking together, AssetWorx will simply choose the first user that it sees to associate with the checkout operation. To add User information to the checkout operation, make sure that each of your users has an RFID tag associated with their user record and that they carry their badges with them at all times.

### Edit User

 Save Cancel

Username

 Set Password

First Name

Last Name

Email

Phone Number

Card ID

RFID Tag

← User's RFID badge

## Troubleshooting

- If you don't see the Checkout operations you would be expecting, first make sure that the Alarm Monitoring Server is running and connected to the Reader. You can check this by looking at the Admin->Network Status screen.
- Check that your tag is actually registered. AssetWorx will tell you in the Events tab if you're RFID tag is unassociated.
- Is your tag in range of the reader? AssetWorx will record every tag read in the Events tab.