

Dated Tested:	10 April 2007
AmigoPod Version:	Engine $\rightarrow$ 0.99.35, Radius Services $\rightarrow$ 0.6.10
Plugins Required:	Standard build only
Trendnet Version:	2.0 Release 39
Integration:	HTTP Captive Portal

#### **Overview:**

The TEW-453APB is a 108Mbps high speed 802.11g Hot Spot Wireless Access Point that offers advanced wireless security, network management, and Power-over-Ethernet capabilities. Wireless security features include TKIP and AES algorithms for WPA, and also Radius based MAC authentication.



#### Integration:

The key feature of the TEW-453APB is its Hot Spot or Universal Access Manager (UAM) functionality that allows AmigoPod to provide the required RADIUS platform for managed temporary Guest accounts.

UAM is intended for use in Internet cafes, Hot Spots, and other sites where the Access Point is used to provide Internet Access. If enabled, then HTTP (TCP, port 80) connections are checked. (UAM only works on HTTP connections; all other traffic is ignored.) If the user has not been authenticated, Internet access is blocked, and the user is re-directed to another web page – in this case the AmigoPod Web logins facility.

Although the TEW-453APB supports both internal and external authentication, this integration guide will focus on the later as the internal authentication dictates the use of the internal Login Page resident on the AP itself. The Login page is very basic and doesn't allow for significant customization as is possible with the AmigoPod Web Logins feature.



### Step 1:

By default the TEW-453APB has an IP address of 192.168.0.228. Please follow the Trendnet User Guide to gain configuration control of the AP and set the basic IP Addressing to match your networking environment. Given the RADIUS interaction we strongly recommend the use of a Fixed IP address setting that is available through the web interface.

TEW - 453APB Setup	>			
TRENDnet	<	System		
		Identification	Access Point Name:	SCF5CCFA
Access Control			Description:	
Security Profiles			Country or Domain	Australia
System	Ξ		MAC Address	00:C0:02:F5:CC:FA
Status		IP Address	<ul> <li>DHCP Client</li> <li>Fixed IP Address</li> </ul>	
<b>▼</b> Wireless			IP address	192.168.0.228
▼ Management			Subhet Mask Gateway	
Log Out			DNS	
Apply/Restart		WINS	Enable WINS WINS Server Nam	ne/IP Address:
				Save Cancel Help
	~			

Note: Fixed IP Address \_\_\_\_\_\_ This will be required for a later step.



### Step 2:

Now that a fixed IP Address has been defined the Trendnet AP, this needs to be defined within the AmigoPod configuration. Typically, the AmigoPod software is installed on an appliance or server with a fixed IP Address and potentially a locally defined host name. Referring back to your initial installation of the AmigoPod solution, open a web browser and enter either the IP Address or host name defined during the installation. You should be presented with a login screen similar to the one below:

Sur	
76	login
amigopod	
e Home	Dansk 🚟 English 💶 Español
	Login Required
	The amigopod demo site requires a username and password.
	contact amigopod to obtain one.
	User Login * Username:
	* Password:
	* required field

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Enter your username and password. The default AmigoPod username is *admin* and the password is *amigopod*.



#### Step 3:

Once successfully logged into the AmigoPod administration interface, you will be presented with the AmigoPod Home Page where the RADIUS Services section can be accessed. Click on RADIUS Services on the screen shown below:



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### Step 4:

From the Radius Services menu, select Network Access Servers:



# radius services

#### Home

- 📫 Start Here
- ➡ Language
- Manage Plugins
   Add New Plugin
- Add New Plugin
   Update Plugins
- ➡ User Logins
- Time Zone
- Application Log

#### GuestManager

- 🔿 Start Here
- ➡ Create Account
- 🗭 Create Multiple
- 🔿 List Accounts
- 🜩 Edit Accounts
- Import Accounts
   Export Accounts
- Print Templates

#### RADIUS Services

- 🜩 Start Here
- Server Control
   Database List
- Database I
   Dictionary
- NAS List
- ➡ User Roles
- ➡ Web Logins
- 🔿 Usage Report

Logout



■▶ Restart RADIUS Server

### **RADIUS Server Management**

Use the commands below to manage your network's RADIUS server.



🙀 Back to main



#### Step 5:

Being a new install, there are currently no NAS entries defined. Click on the Create icon at the top of the page shown below:

radius	network access servers
od	
ert Here Each network acce	ss server that will use this RADIUS server for authentication or accounting purposes should be de
nguage nage Plugins ① Quick Help d New Plugin	Create Edit
date Plugins er Logins	Create Network Access Server
ne Zone plication Log * Name: Manager art Here	A descriptive name for the network access server (NAS). This name is used to identify each NAS.
eate Account eate Multiple * IP Address: t Accounts	The IP address or hostname of the network access server.
t Accounts * NAS Type: port Accounts * NAS Type:	Other NAS Select the type of NAS.
US Services * Shared Secret:	The shared secret used by this network access server.
rver Control tabase List tionary S List er Roles Description: b Logins age Report	
ıt	Enter notes or descriptive text here.
	Create NAS Device
* required field	
Name	Hostname Type Comment <u>s</u>
0.11-11-1	10 rows per page



#### Step 6:

Fill out the details of the Create NAS form based on the IP Addressing details defined for the Trendnet AP in Step 1. Leave the default Other NAS entry for the NAS Type and define a shared secret that will be configured both here in the AmigoPod and also in the Trendnet in future steps. Once complete click on the Create NAS Device button.

Here Each n	etwork acces	server that will use this RADIUS serv	er for authentication or	accounting purposes sho	uld be defined her
age ge Plugins lew Plugin	Quick Help	🔊 Create	🕑 Edit		
e Plugins		Create Network Ac	cess Server		]
Zone sation Log anager	* Name:	TEW-453APB A descriptive name for the network acces	ss server (NAS). This nam	e is used to identify each	
Here e Account e Multiple counts	IP Address:	192.168.0.228 The IP address or hostname of the netwo	irk access server,		
ccounts t Accounts t Accounts	<sup>K</sup> NAS Type:	Other NAS 💌 Select the type of NAS.			
Templates Services Here	* Shared Secret:	wwwww The shared secret used by this network a	access server.		
r Control Iase List Nary List Coles Logins Report	Description:	Trendnet TEW-453APB			
		Enter notes or descriptive text here.			
		Create NAS Device	C Reset Form		
* req	uired field				
	Name	Hostname T	уре	Comments	
0 ite	ms			10 rows per page 🛛 💌	
1990 D.	ADTHE Corvier	-			

Note: NAS Shared Secret \_\_\_\_\_\_ This will be required at a later step.



#### Step 7:

Once the NAS has been created, the RADIUS Server needs to be restarted for the changes to take affect. This can be seen from the warning message shown at the top of the screen and the button below should be clicked to initiate a restart of the RADIUS services.

	radius r	network a	acces	s servers	
Iome Start Here Language Manage Plugins Add New Plugins Update Plugins User Logins Time Zone	The local RADIUS se Restart RADIUS S Each network access s	erver needs to be restarted erver server that will use this R/	to complete the ch ADIUS server for	authentication or accounting	) purposes sho
Application Log CuestManager		🦣 Creat	R.	Ealt	
GuestManager Start Here Create Account Create Multiple List Accounts Edit Accounts Export Accounts Print Templates	TEW-453APB	Hostname 192.168.0.228	Type other	Comment: Trendnet TEW-453APB	s erpage 🗸
	RADIUS Services				
RADIUS Services Start Here Server Control Database List Dictionary NAS List User Roles With Diction	👷 Back to main				
<ul> <li>Web Logins</li> <li>Usage Report</li> </ul>					

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Once the RADIUS services have restarted the next step is to create the customized Web Login pages that the wireless users will be presented with when they attempt to login to the network. Under the RADIUS Services menu of the left, select the Web Logins menu option to continue onto the next step.



### Step 8:

Being a new install, there are currently no web logins defined. Click on the Create a new web login page option listed below the table:

X	radius web logins
migopod	
Home	Many NAS devices support Web-based authentication for visitors.
<ul> <li>Start Here</li> <li>Language</li> <li>Manage Plugins</li> <li>Add New Plugin</li> </ul>	By defining a web login page on the amigopod you are able to provide a customised graphi network through these NAS devices.
<ul> <li>➡ Update Plugins</li> <li>➡ User Logins</li> <li>➡ Time Zone</li> </ul>	Use this list view to define new web login pages, and to make changes to existing web logi
Application Log	Name • Paye nue • Paye skin
Start Here	There are no web login pages to display.
<ul> <li>Create Account</li> <li>Create Multiple</li> <li>List Accounts</li> </ul>	0 web logins 🚫 Reload 10 rows per page
<ul> <li>Edit Accounts</li> <li>Import Accounts</li> <li>Export Accounts</li> </ul>	Create a new web login page
Print Templates	1 RADIUS Services
Start Here     Server Control     Database List     Dictionary     NAS List     User Roles     Web Logins	Reck to main
Usage Report	



#### Step 9:

Complete the following Web Login form based on your local deployment to ensure the correct descriptions and HTML customization is configured in both the Header and Footer section to match the brand and messaging of the wireless service being offered. Particular attention needs to be paid to the following fields to ensure a clean integration with the Trendnet AP:

**Submit URL**  $\rightarrow$  The IP Address here must match the one defined in step 1 followed by the /uamlogon.htm suffix.

Submit Method→This must be set to POST Username Field→This needs to be set as hs\_username Password Field→ This needs to be set as hs\_password



Home

➡ Start Here \Rightarrow Language 🗭 Manage Plugins 🔿 Add New Plugin ➡ Update Plugins 👄 User Logins ➡ Time Zone ➡ Application Log GuestManager ➡ Start Here Create Account ➡ Create Multiple ➡ List Accounts ➡ Edit Accounts ➡ Import Accounts ➡ Export Accounts ➡ Print Templates RADIUS Services ➡ Start Here Server Control ➡ Database List Dictionary ➡ NAS List ➡ User Roles ➡ Web Logins ➡ Usage Report Logout

# radius web login

Use this form to create a new RADIUS Web Login.

	RADIUS Web Login Editor				
* Dane Name	Guest Login				
r age Name.	Enter a name for this web login page.				
	Web Login Page for Guest Wireless Access				
Description:					
	Comments or descriptive text about the web login.				
Login Form					
Options for specifyin	g the behaviour and content of the login form.				
* Cubmit UPL	http://192.168.0.228/uamlogon.htm				
Submit ORL:	The URL of the NAS device's login form.				
* Submit Mathad	POST 💌				
Submit Methou.	Choose the method to use when submitting the login form to the NAS.				
* Usaraama Fieldu	hs_username				
Osername rielu.	The name of the username field for the login form. This will be passed to the NAS device when the form is su				
* Doceword Field:	hs_password				
Password Field.	The name of the password field for the login form. This will be passed to the NAS device when the form is sul				
Extra Fields:					
	Specify any additional field names and values to send to the NAS device as name=value pairs, one per line.				
Login Page					
Options for controllin	g the look and feel of the login page.				
* chiev	amigopod Skin 🗸				
SKIN:	Choose the skin to use when this web login page is displayed.				
Titler	amigopod Login				
nue.	The title to display on the web login page.				
	Please login to the network using your amigopod				
Header UTML					



### Step 9:

Once the Web Login page has been created and saved, it should be tested to ensure it has the correct look and feel for your wireless clients. This can be done by clicking on the newly created Web Login page once and selected the Test option that is displayed below the entry:

AK	radius web logins					
amiaopod	rundo neb logino					
and about						
Home Start Here	Many NAS devices support Web-based authentication fo	visitors.				
Language     Manage Plugins     Add Now Plugins	By defining a web login page on the amigopod you are able to provide a customised graphical login page for visitors accessing th network through these NAS devices.					
<ul> <li>Update Plugins</li> <li>User Logins</li> </ul>	Use this list view to define new web login pages, and to	make changes to existing web login pages.				
<ul> <li>Time Zone</li> <li>Application Log</li> </ul>	1 Created new RADIUS Web Login: Guest Login					
GuestManager	Name 🔻	Page Title Page Skin				
<ul> <li>➡ Start Here</li> <li>➡ Create Account</li> </ul>	Guest Login Web Login Page for Guest Wireless Access amigopo	l Login amigopod Skin				
<ul> <li>Create Multiple</li> <li>List Accounts</li> </ul>	🕞 Copy 📑 Edit 🔇 Delete 🛶 Test					
<ul> <li>Edit Accounts</li> <li>Import Accounts</li> <li>Export Accounts</li> </ul>	1 web logins 🚫 Reload	10 rows per page				
RADIUS Services	🂫 Create a new web login page					
<ul> <li>➡ Start Here</li> <li>➡ Server Control</li> </ul>	19 RADIUS Services					
second and the second sec	AND A LAND A					
<ul> <li>➡ Database List</li> <li>➡ Dictionary</li> <li>➡ NAS List</li> <li>➡ User Roles</li> </ul>	Reference Back to main					
<ul> <li>➡ Database List</li> <li>➡ Dictionary</li> <li>➡ NAS List</li> <li>➡ User Roles</li> <li>➡ Web Logins</li> <li>➡ Usage Report</li> </ul>	Sack to main					

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#### Step 10:

Once the Test button has been clicked, the new Web Login page will be displayed so it can be verified for layout and content purposes. The URL displayed in the web browser should be recorded for a later step in the integration.

🕲 amigopod :: amigopod Login - Mozilla Firefox	×
Eile Edit View Go Bookmarks Iools Help	$\langle \rangle$
🖕 • 🚽 - 🌌 🔇 🕎 🗋 http://demo.amigopod.com/demo/amigopod/weblogin.php/1	
🗋 Customize Links 🗋 Free Hotmail 🗋 Windows Marketplace 🗋 Windows Media 🗋 Windows 🛷 Contact IProvide 🗋 Access Point 🗋 Optus Zoo 🔣 enKoo: Close Browser 💪 Mozilla Firefox Start	»
Image: Second Secon	
copyright as 2007 amigopou pty itch.	
Done	1.1

Note: Web Login URL \_\_\_\_\_\_ This will be required at a later step.

#### Step 11 (Optional):

The Trendnet AP allows for the definition of a separate URL that failed login attempts can be sent to. Typically this page would include tips on how to login or who to contact in the events of login issues. If the deployment requires this level of information to be provided to the wireless clients, a second web login page can be created using the procedure above with more specific HTML customization around what to do in the event of a login failure. Again the URL displayed in the final testing step will need to be recorded for a future step.

Note: Web Login URL \_\_\_\_\_ This will be required at a later step.



### Step 12:

Returning the web administration interface of the TrendNet AP, the next step is to setup the wireless network for the guest users. From the Security Profiles screen shown below, select the default Profile named wireless and click on the Configure button.

TEW - 453APB Setu	р		
TRENDnet TRENDware, USA	<	Security I	Profiles
		Profiles	Profile Name [SSID] Security [Band]
Access Control			*wireless [wireless] None [2.4 GHz]
Security Profiles			Profile04 [wireless] None [2.4 GHz] Profile05 [wireless] None [2.4 GHz] Profile05 [wireless] None [2.4 GHz]
System			Profile06 [wireless] None [2.4 GHz]
Status			* Indicates profile is currently enabled.
▲ Wireless		Primary Profile	802 11b/a AP Mode: wireless [wireless]
▶ Basic ▶ Advanced			802.11b/g Bridge Mode: wireless [wireless]
▼ Management			These settings have no effect unless the appropriate mode is enabled. If enabled, the selected Profile/SSID is used for the beacon.
Log Out		Isolation	Profile (SSID) Isolation:
Apply/Restart			<ul> <li>No isolation</li> </ul>
			<ul> <li>Isolate all Profiles (SSIDs) from each other</li> </ul>
			O Use VLAN (802.1Q) standard
	~		Configure VLAN



### Step 13:

At this point you have the opportunity to rename the Profile to a name that is significant to your deployment and also define the SSID that is going to be used by your wireless client. Given we are creating a Hot Spot style service you can chose to leave the Wireless Security System as None to make the association process as easy as possible for the wireless users. (Alternatively, you may wish to set a static WPA PreShared Key for a level of encryption over the air – AmigoPod can then be customized to include this PreShared Key on the print receipts detailing the user's login credentials). For the example below, the simple approach of No Wireless Security has been chosen. Once complete, click on the Configure button listed to the right of the UAM section.

TEW - 453APB Setup	Click the "Apply/Restart" button on the menu to have your changes take effect.				
TRENDnet	Security I	Profile			
	Profile	Profile Name: amigopod			
Access Control		SSID: amigopod			
Security Profiles		Wireless Band: 2.4 GHz 💌			
System	Security System	Wireless Security System: None			
Status	Security Settings				
▲ Wireless	Radius MAC Authentication	Current Status: Disabled			
<ul> <li>Basic</li> <li>Advanced</li> </ul>	UAM	Current Status: Disabled			
<b>▼</b> Management		Configure			
Log Out		Back Save Cancel Help			
Apply/Restart					
~					



#### Step 14:

Enable the UAM feature by selecting the first Check Box at the top of the page. This example is based on using the External Authentication option and therefore the Login URL and Login Failure URL fields need to be completed with the URLs collected during Step 10 whilst configuring the AmigoPod. Additionally, the RADIUS details for the AmigoPod install must also be entered in the subsequent fields as shown in the example below.

The RADIUS Server Address will be the AmigoPod IP Address used in Step 2 or a Fully Qualified Domain Name as shown below if your DNS Administrator has added an entry from the AmigoPod.

By default AmigoPod use port 1812 for RADUIS authentication requests.

The Shared Key is the NAS Shared Secret that was configured and recorded during Step 6.

😻 http://10.0.20.228 - UAM - Moz	illa Firefox	
UAM (Univers	al Access Method)	<u>^</u>
<ul> <li>✓ UAM (Universal Access M</li> <li>○ Internal Web-based Au</li> <li>○ External Web-based A Login URL: 2/a</li> </ul>	lethod) uthentication uthentication umigopod/weblogin.php/1 umigopod/weblogin.php/2	
Radius Server Address: Radius Port: Client Login Name: Shared Key:	demo.amigopod.com 1812 SCF5CCFA	III
Save	e Cancel Help Close	
Done		

Press Save and Close buttons to exit the UAM Configuration screen.



### Step 15:

Returning to the Security Profiles screen, click on the Apply/Restart button for the changes to take affect. The reboot of the Trendnet AP may take a couple of minutes but at this point the configuration of the AP is complete and the next step is to test the solution.

TEW - 453APB Setup	Click the "Apply/Res	tart" button on the menu to have your changes take effect.
TRENDnet	Security Prof	ile
Thenuware, USA	Profile	Profile Name: amigopod
Access Control		SSID: amigopod
		Wireless Band: 2.4 GHz 💌
Security Profiles	Security System	Wireless Security System: None
System	Security Settings	
Status	Radius MAC Authentication	Current Status: Disabled
▼ Wireless		Configure
<b>▼</b> Management	UAM	Current Status: Enabled
_		Configure
Log Out		
Apply/Restart		Back Save Cancel Help



### Step 16:

Using the Wireless Driver software that comes with the wireless adaptor in your laptop or the default Windows Zero Configuration Utility as shown below connect to the AmigoPod SSID (or local alternative) that was configured in Step 13.

Wireless Network Connection
The following wireless network(s) are available. To access a wireless network, select it from the list, and then click Connect.
Available wheless networks.
i amigopod
BHome
👗 Husty 💌
This wireless network is not secure. Because a network key (WEP) is not used for authentication or for data encryption, data sent over this network might be subject to unauthorized access.
Allow me to connect to the selected wireless network, even though it is not secure
If you are having difficulty connecting to a network, click Advanced.
Advanced Connect Cancel



A successful connection to the AmigoPod Wireless network can be confirmed by double clicking on the network icon in the System Tray of the Windows Task bar to reveal the following status window. The connection duration, speed and signal strength can all be verified from this screen.

	ı Status 🛛 🛛 🔀	🕆 Wireless Network Connection Status 🛛 🕐 🔀
General Support		General Support
Connection		Internet Protocol (TCP/IP)
Status:	Connected	Address Type: Assigned by DHCP
Duration: Speed: Signal Strength:	23:05:13 11.0 Mbps இ	IP Address:         10.0.20.50           Subnet Mask:         255.255.255.0
Activity Sent —	C Received	Details
Packets: 439	70	Repair
Properties Disable		

Clicking on the Support tab of the same window will confirm that an IP Address has been successfully configured via DHCP.

If either the Wireless connection has not been established or a DHCP address been configured then there is an issue with either the setup of the wireless card or potentially support for DHCP on the local LAN. Please refer to the manufacturers instructions for configuration of the wireless card and/or consult the local network administrator for advice on DHCP support.



#### Step 17:

Now that the test laptop is successfully connected to the Wireless LAN, the only step remaining is to login as a guest user. To do this a test user must exist in the AmigoPod database. Returning back to the AmigoPod Web interface, select Guest Manager from the left hand menu:



#### **About Guest Network Access**

Once you have created a guest account, your guest will be able to start using your network immediately.

Your guest should connect to the wireless network named **NoWiresAllowed**. After opening their Web browser, they should log in with their user name (email address) and password.

#### **More Options**

실 Manage print templates

- List guest accounts on a single page
- 🎯 Manage multiple quest accounts i on a single page



#### Step 18:

Selecting the Create New Guest Account option will present the following form that can be completed with the details of your test user. Fill out details of the test user including how long the user should have access to the internet from the Account Expiry drop down box and also the Role that the account should be assigned to (For more information on creating and defining roles, please see the AmigoPod User Guide).

d		gueet account
<b>jo</b> pod		
ome Start Here	New guest account b	eing created by <b>root</b> .
· Language · Manage Plugins		New Guest Account
Add New Plugin Update Plugins User Logins	* Sponsor's Name:	admin Name of the person sponsoring this guest account.
<ul> <li>Time Zone</li> <li>Application Log</li> <li>GuestManager</li> <li>Start Here</li> <li>Create Account</li> <li>Create Multiple</li> <li>List Accounts</li> <li>Edit Accounts</li> <li>Import Accounts</li> <li>Export Accounts</li> <li>Print Templates</li> <li>RADIUS Services</li> </ul>	* Guest's Name:	Test User Name of the guest.
	* Company Name:	amigopod Company name of the guest.
	* Email Address:	test@amigopod.com The guest's email address. This will become their username to log into the network.
	* Account Expiry:	1 hour 💌 Amount of time before this guest account will expire.
Start Here Server Control Database List	* Account Role:	Guest  Role to assign to this guest account.
Dictionary	Guest Password:	96210437
User Roles	* Terms of Use:	I am the sponsor of this guest account and accept the terms of use
Usage Report		Create Account
igout	sk	

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#### Step 19:

After clicking on the Create Account button, the new user account will be written to the AmigoPod database and a confirmation screen will be presented with the login credentials. Be sure to either record the email address and password presented or select the Print Receipt option to print out a copy of the login credentials (For more information on creating and defining Print Receipt Templates please see the AmigoPod User Guide).

nigopod	finished creating guest account	
Home Start Here Language Manage Plugins Add New Plugins Update Plugins User Logins Time Zone Application Log GuestManager Start Here Create Accounts Edit Accounts Edit Accounts Print Templates RADIUS Services Start Here Server Control Database List Dictionary NAS List User Roles Web Logins Usage Report	Image: Substitution of the second	

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Note: Guest Username \_\_\_\_\_\_ This will be required at a later step.

Note: Guest Password \_\_\_\_\_\_ This will be required at a later step.



#### Step 20:

Returning back to the test laptop now, open up a web browser such as Internet Explorer or Firefox and assuming a Home Page is configured the browser will automatically attempt to connect to the Internet. The Trendnet AP will then capture this attempt and redirect the web browser to the AmigoPod Web Login page created in Step 10 as shown below:

amigopod	amigopod login
	Please login to the network using your amigopod username and password.          amigopod Login         * Username:         test@amigopod.com         * Password:         Log In         * required field         Contact a staff member if you are experiencing difficulty logging in.         copyright © 2007 amigopod pty ltd.

Enter the Guest Username and Password recorded at the previous step and click on the Login button to be connected to the Internet. The web browser should now be redirected to the original destination defined as the home page.



For example, if your Home Page was configured to go to google.com, after successful authentication the browser will be redirected straight to the Google home page and also a separate pop-up window will be displayed detailing the amount of time still left on the Test User's account as shown below:



If you have experienced any issues setting up this integration with AmigoPod please step back through the document and verify the configuration. If the problem has not been resolved, please contact AmigoPod on <a href="mailto:support@amigopod.com">support@amigopod.com</a> with the details of the issue. We value your feedback.