AZOTEL S03-03 v201 (2017-11)

S03 – Quick Start Guides
SIMPLer Quick Start Tutorials

Azotel Technologies Ltd,
3rd Floor, River House,
Blackpool Park,
Cork,
Ireland.

Azotel Canada Inc.
325 Vulcan Avenue
NS B1P 5X1
Sydney
Canada

Azotel Poland
PLAC Powstancow
Slaskich 17A/222
53-329
Wroclaw
Poland

Phone (EMEA): +353-21-234-8100
Phone (North America): +1-902-539-2665 / +1-312-239-0680
Phone (Poland): +48-71-710-1530
Phone (UK): +44-20-719-3417
Phone (South Africa): +27-11-083-6900
Fax: +353-21-467-1699

info@azotel.com

www.azotel.com

CONTENTS

1 Introduction 3
2 WIB-C setup 4
3 Tutorials 5
3.1 Basic Network Setup 5
3.2 Basic Customer Setup 12
3.3 Manual Customer Setup 19
3.4 Adding a User to SIMPLer 26
Annex A: References 38
A.1 Document References 38
A.2 Link References 38
Annex B: Definitions and Abbreviations 38
B.1 Definitions 38
B.2 Abbreviations 38
Annex C: Change History 39

1 INTRODUCTION

This manual explains the steps needed in order to setup a basic network and connect your first customer. In these tutorials WIB-C 137 was used as the example WIB-C. When following these steps replace **137** with the appropriate WIB-C number that was provided to you. This guide uses a Motorola Canopy 900 MHz AP and Motorola Canopy 900 MHz SM, both running firmware 9.5 (Oct 2009). Hence, the look of the equipment configuration pages may differ from the equipment used in your organization, but the settings remain the same.

The process consists of many steps but they can be divided into two groups:

- SIMPLer "server" configuration (e.g. adding sites, base stations, APs and customers)
- Core and Access Network equipment configuration (e.g. WIB-C, Access Points and Customer Premises Equipment / Subscriber Modules)

The objective is to cover all the steps in the customer setup process. These tutorials are meant as a quick start guide only. More detailed network configuration instructions are described in the Azotel SIMPLer General Manual.

2 WIB-C SETUP

Please refer to Azotel doc 07074 "WIB-C/S-WIB Quick Start Guide" for details on hooking up the WIB.

http://www.azotel.com/00_Az_Docs/Operator_Manuals/S03-01_WIB_C_SWIB_Quick_Start_Guides.pdf

3 Tutorials

3.1 Basic Network Setup

1) Add new gateway (WIB-C) to SIMPLer.
   a) Go to ***network*** → ***Gateways details*** → ***Add*** (fig 3.1-1)

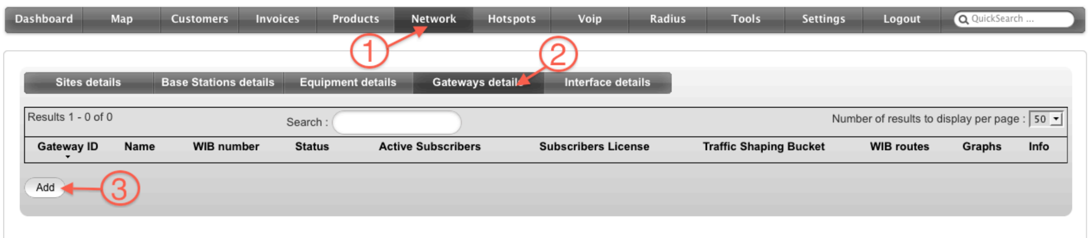

Fig 3.1-1. SIMPLer Gateway List

   b) Next fill in all the appropriate details for your WIB-C installation and click ***Add*** (fig 3.1-2). Make sure to set the Status to "active".

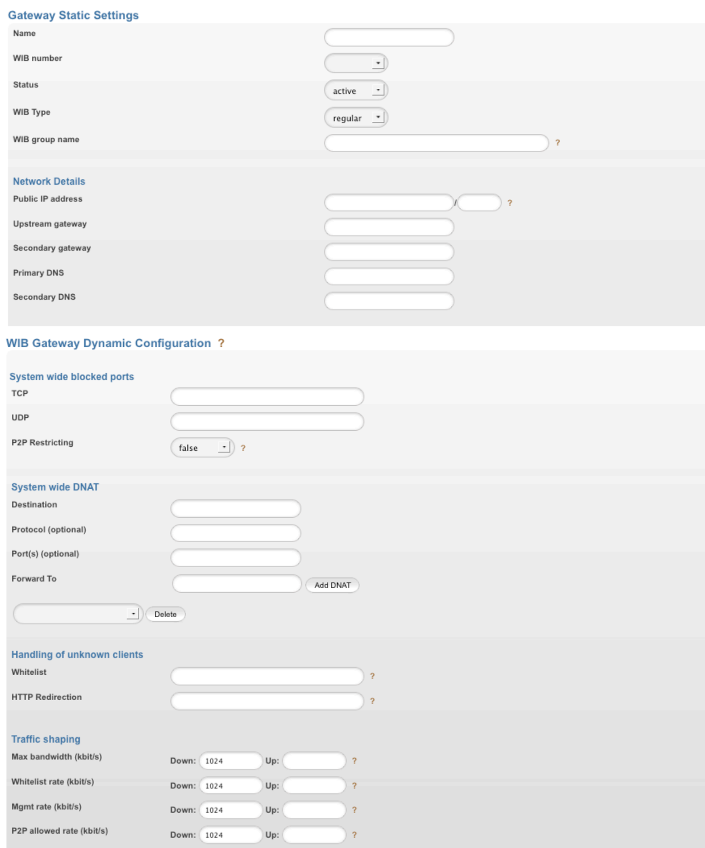

Fig 3.1-2. Gateway Details

2) Next, you'll want to setup traffic shaping buckets (see "06043 SIMPLer Operators Manual" for more details on traffic shaping buckets)

a. Go to ***network → Gateways details → Table view*** (or click the ***"B"*** *under* ***"Info"***)(fig 3.1-3)

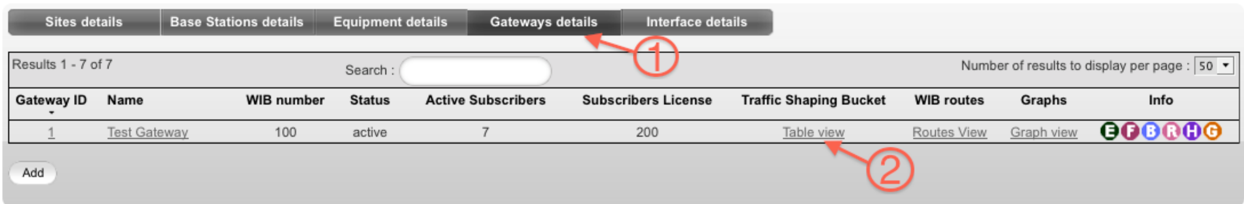

FIG 3.1-3 SIMPLER GATEWAY DETAILS

b. A default bucket should already be listed but you may want to setup your own bucket rules to suit your WISP's needs (fig 3.1-4).

c. Click ***Add*** to save your new bucket to the list.

d. When you are finished adding contention buckets please click ***Update Buckets Table*** to ensure that all bucket changes are applied.

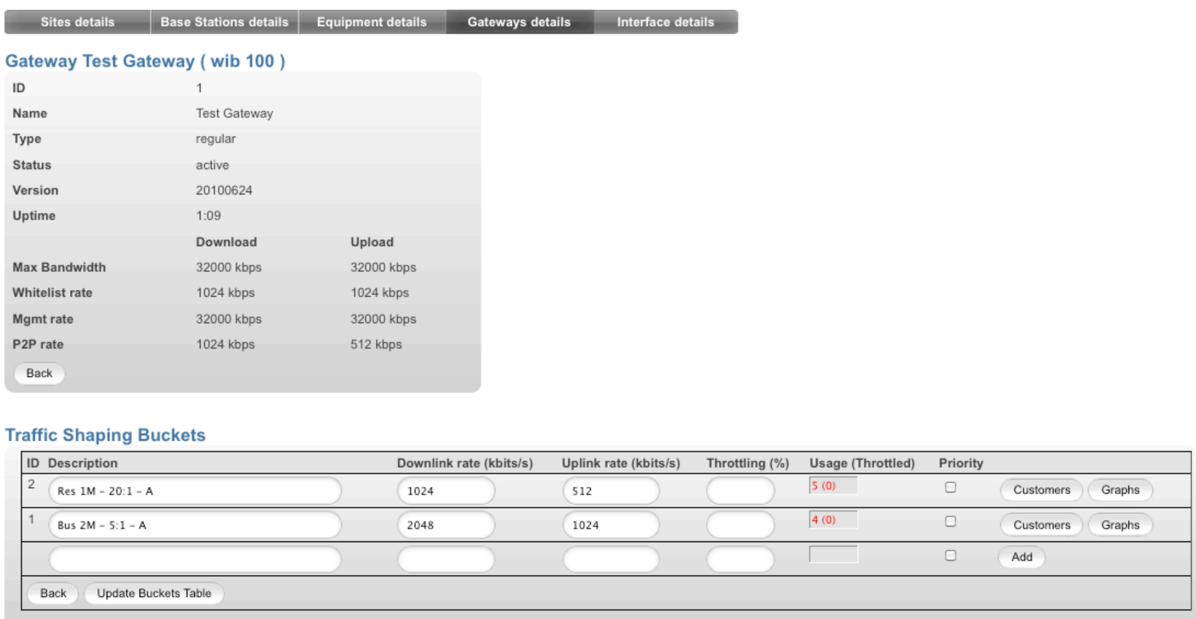

FIG 3.1-4. SIMPLER BUCKET MAINTENANCE

e. At this point your bucket definitions are saved to SIMPLer but <u>have not</u> been pushed to the WIB-C yet. Click ***Update WIB-137 files*** to push the changes to the WIB-C (fig 3.1-5).

FIG 3.1-5. SIMPLER BUCKET UPDATE

   f. You will be redirected to a page that warns that these updates may affect service. Click the ***Update WIB files*** link to confirm you want to continue with the update.
   g. A final page will inform you that the WIB-C has been update successfully.

3) Add new interface details as programmed into your WIB-C
   a. Go to ***network*** → ***Interface details*** → ***Add***
   b. Choose the appropriate ***Gateway name*** from the dropdown list. The ***Interface*** field is almost always going to be "LAN2" for normal WIB-C installations. It is used for organizational/informational purposes only. The ***Role*** is used for determining where SIMPLer should use the IPs (i.e. for assigning to equipment or customers). The ***Label*** field is also used for informational purposes only. Keep in mind that all the interfaces that you setup have to correspond to the ***WIB Private Networks*** that were setup during WIB-C configuration (fig 3.1-6).

FIG 3.1-6. SIMPLER INTERFACE DETAILS

Azotel recommends the following interface IP scheme.

10.156.<WIB>.1/24	Management (e.g. APs, SMs, BHs, etc.)
10.157.<WIB>.1/24	Customer

Azotel also advises that the IP addresses above 10.156.<WIB>.199 be used for equipment that is part of the core network. For example access points and backhauls should be assigned IP addresses from this pool. For the purposes of this tutorial, 10.156.137.200 is used.

Depending on the size of your WISP this IP scheme may not be suitable for your needs. Please contact support@azotel.com to discuss other setup options.

4) Add new site (used for organizing physical locations where equipment is stored)
   a. Go to ***network*** → ***Sites details*** → ***Add***
   b. Fill in the appropriate details for your site and click ***Add*** (fig 3.1-7)

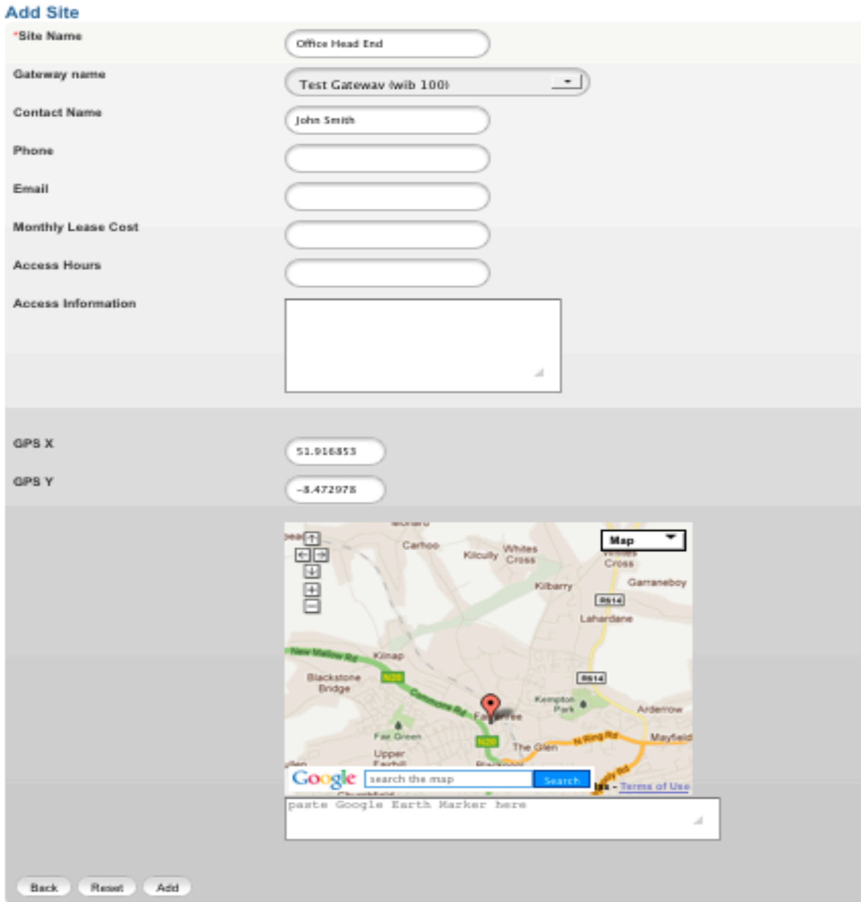

FIG 3.1-7. SIMPLER SITE DETAILS

5) Add new equipment – Access Point
   a. Go to ***network*** → ***Equipments details*** → ***Add*** (fig 3.1-8)

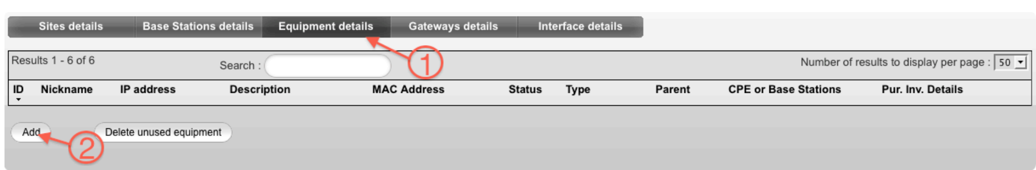

FIG 3.1-8. SIMPLER EQUIPMENT LIST

   b. There are two buttons that can help you keep your equipment organized: ***Generate Equipment Nickname*** and ***Generate Equipment IP Address*** (fig 3.1-9). The equipment nickname can be built using a prefix of your choosing. For example if the first piece of equipment you add is an access point you could enter “AP” into the ***Equipment Nickname*** field and click ***Generate Equipment Nickname*** and the system will change the nickname to “AP1”. When you add your second access point, if you once again enter “AP” for the nickname and click generate, the system will change it to “AP2”, and so on. Another example is adding cluster management modules with a prefix of “CMM”. Following a set naming convention is very useful for keeping your equipment database consistent and organized.

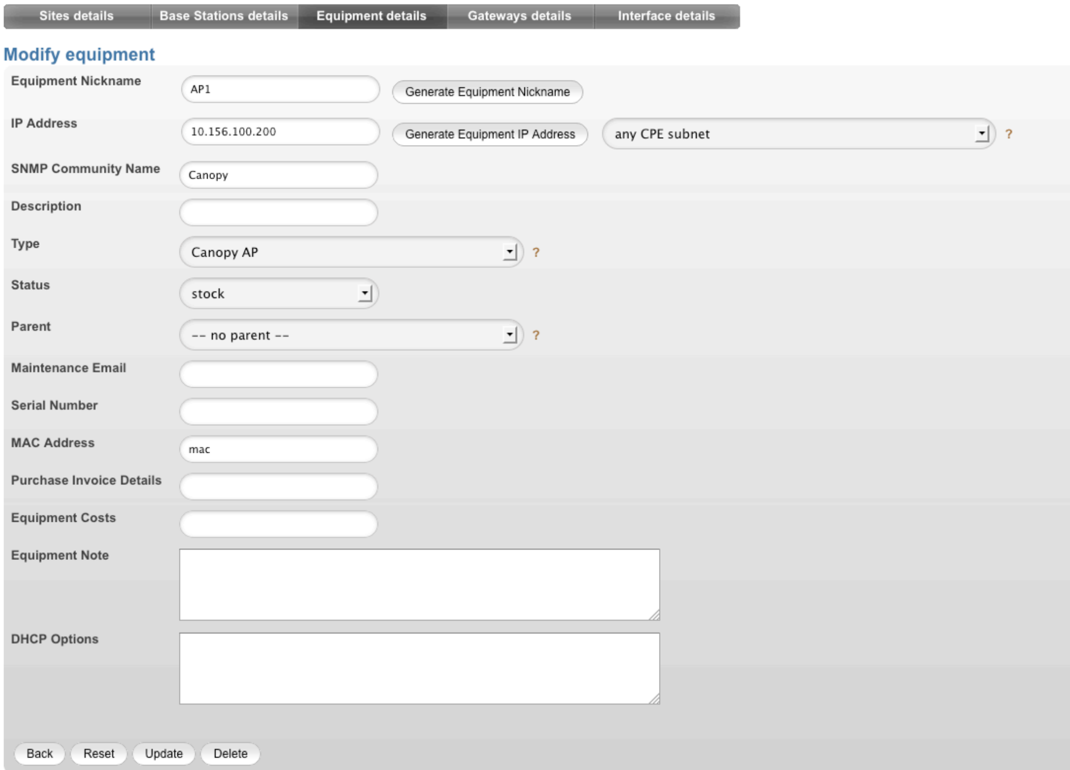

FIG 3.1-9. SIMPLER EQUIPMENT DETAILS

The ***Generate Equipment IP Address*** can be used to have SIMPLer automatically select the next available IP from the Canopy IP block. However, for some equipment you may want to manually assign IPs which is also possible by just typing in the IP you want to use. When adding core equipment you should manually assign an IP.

Depending on the ***Type*** setting that you use for the equipment some features may not be available. Make sure you select the appropriate type to avoid any unexpected behavior later on.

During the initial setup the equipment ***Status*** should be set to "stock" so that you can assign it to a base station (discussed later). Even if the equipment is already deployed in the field, leave the status as "stock". Once the equipment is assigned to a base station it will be automatically set to "use".

c. Click ***Add*** to complete the addition of the new equipment.

6) Add new base station – Access Point

a. Go to ***network*** → ***Base Stations details*** → ***Add***

b. You are now able to use the equipment added in the previous step (step 4) and add it as a base station. The names of all "stock" equipment will be listed under ***Equipment nickname***. The details of the selected equipment will be populated automatically once the base station is added. (fig 3.1-10)

c. Next, you will have to select the appropriate ***Site name*** (added in step 3) from the list. Your selection will then automatically set the ***Monitoring Gateway*** to the appropriate WIB-C. However, if for some reason you want to change the WIB-C that is monitoring this base station you may select an alternative WIB-C.

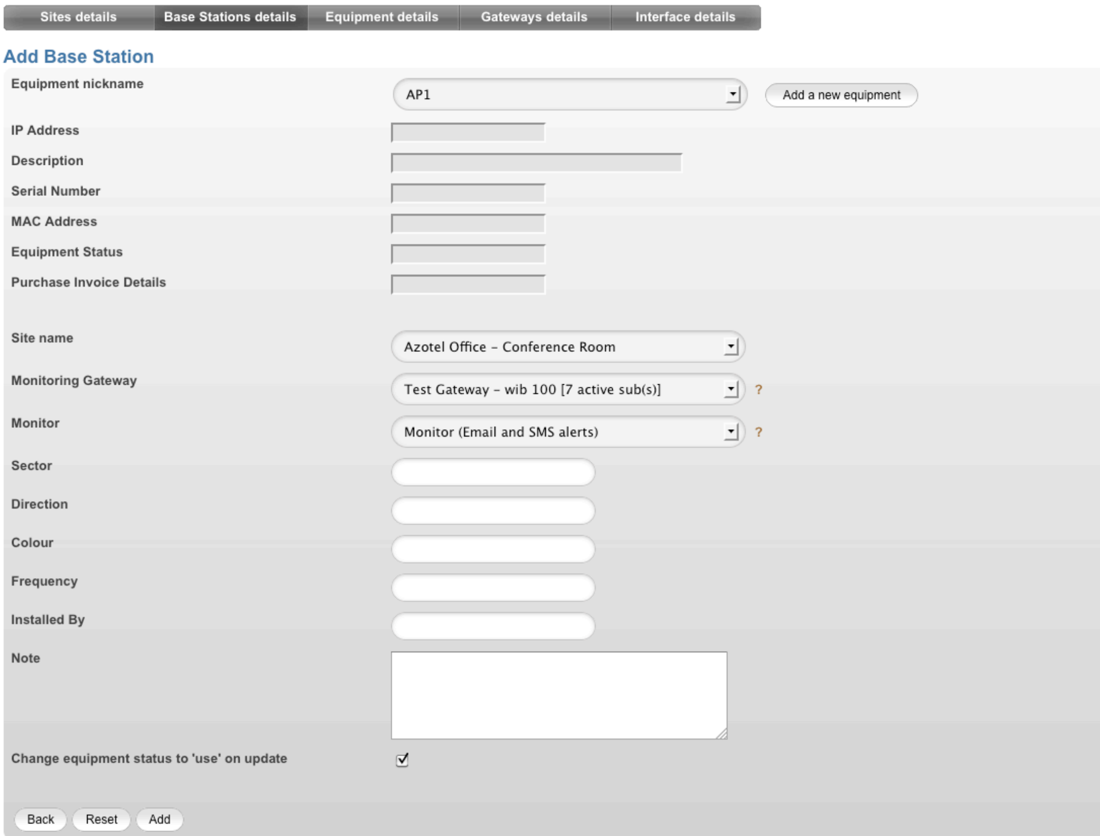

FIG 3.1-10. SIMPLER BASE STATION DETAILS

d. The ***Monitor*** option is used to select how you want to be notified in the event that communication with the equipment is lost. SMS alerts will be sent to the phone numbers listed under ***Mobiles List*** under ***Contact details*** in the setup for your WISP.

e. The remaining fields can be used for organizational and troubleshooting purposes, but are not used by the SIMPLer system.

f. If you want to make sure that the equipment assigned to this base station is not available for other base stations leave ***Change equipment status to "use" on update*** checked.

g. Click ***Add*** to complete the addition of the new base station.

7) Setting up the Access Point

The next step will be to change the default configuration of an AP to match with the settings entered in SIMPLer. However, if you already have an existing wireless network the previous steps should have been setup to match your operations existing setup.

a. Connect your laptop to the AP using a straight through Ethernet cable and a Motorola power injector.

b. Change your laptop IP settings to:

IP Address: ***169.254.1.5***
Subnet Mask: ***255.255.255.0***

Gateway: 169.254.1.1

c. Open your web browser and connect to http://169.254.1.1; the default IP for Motorola Canopy APs.

d. First, change the IP settings for the AP: ***Configuration → IP*** (fig 3.1-11). Save your changes but do not reboot at this time.

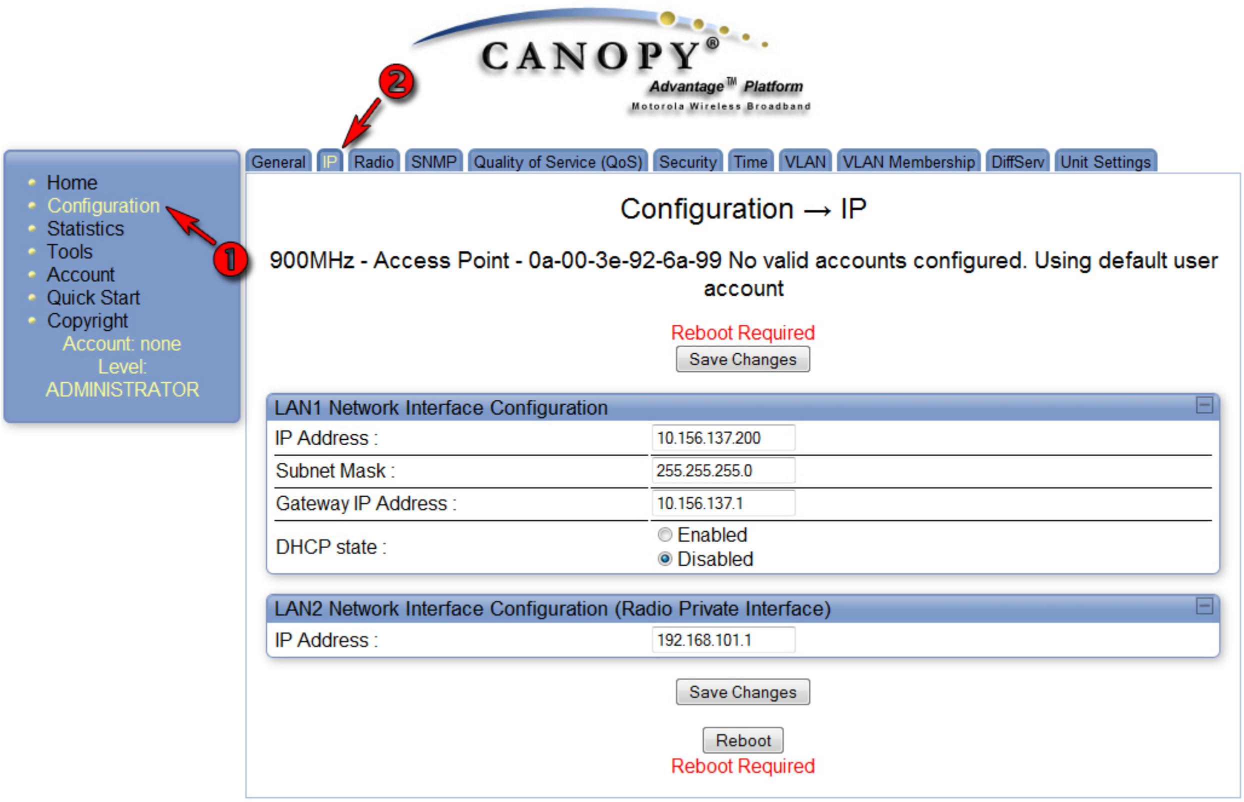

FIG 3.1-11. MOTOROLA CANOPY AP IP SETTINGS

e. Click on the ***Radio*** tab to access the section for setting your radio specific settings (fig 3.1-12). Recall, when setting up the base station in SIMPLer, you were able to enter a color code and frequency. If information was set at that time you should match it in the setup of your access point. Consult your Motorola Canopy documentation if you need further details on the different radio settings.

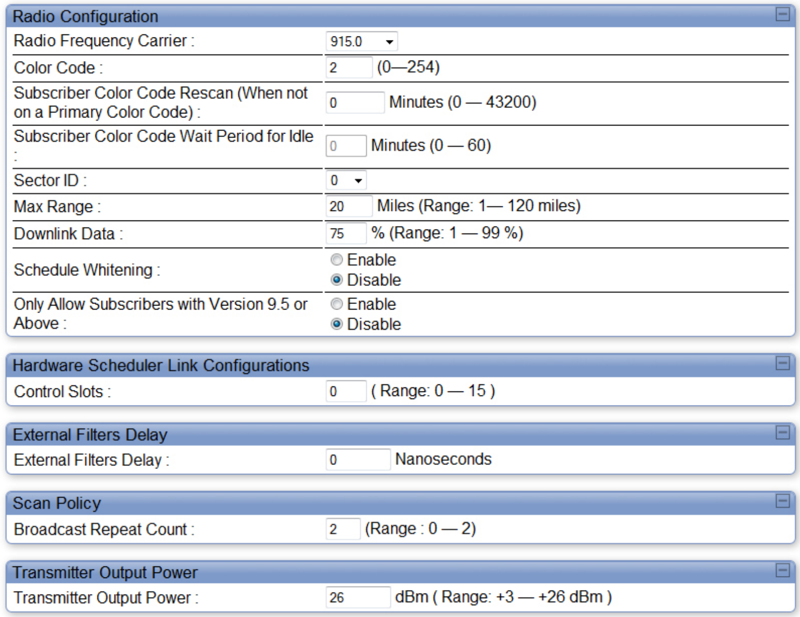

FIG 3.1-12. MOTOROLA CANOPY AP RADIO SETTINGS

f. Next, move to the SNMP tab (fig 3.1-13) and change ***SNMP Community String 1 Permissions*** to “Read/Write”. Then move to the bottom of the page and fill in ***Site Information***. It is recommended that you set ***Site Name*** to something useful to help keep your APs organized (e.g. “Office Head End – AP1”).

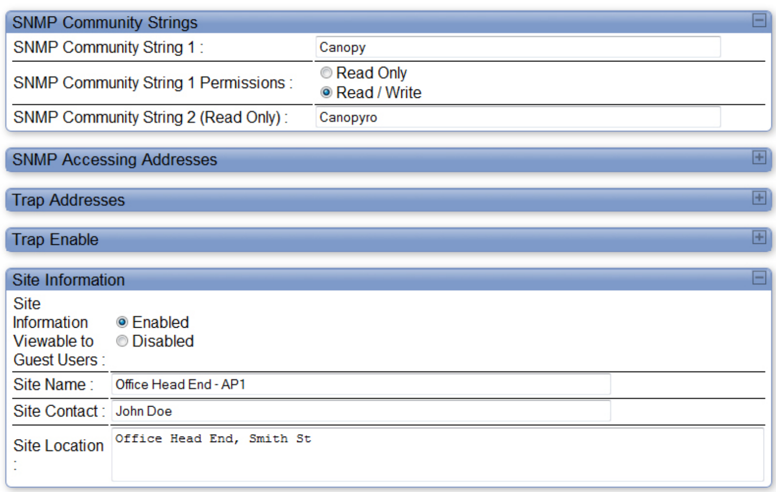

FIG 3.1-13. MOTOROLA CANOPY AP SNMP SETTINGS

8) After all settings have been saved you can then reboot the AP to apply the changes. To verify all changes have been saved you can log back into the AP through the new interface IP (e.g. 10.156.137.200). Just remember to set your laptop’s IP to something in the same subnet.

3.2 BASIC CUSTOMER SETUP

Now that your basic network is setup you can start adding customers to SIMPLer. As with the network setup there are two stages to hooking up a customer; the SIMPLer setup and the equipment setup.

1) Adding a customer account to SIMPLer
   a. In SIMPLer click ***customers → Add a new customer*** (fig 3.2-1)

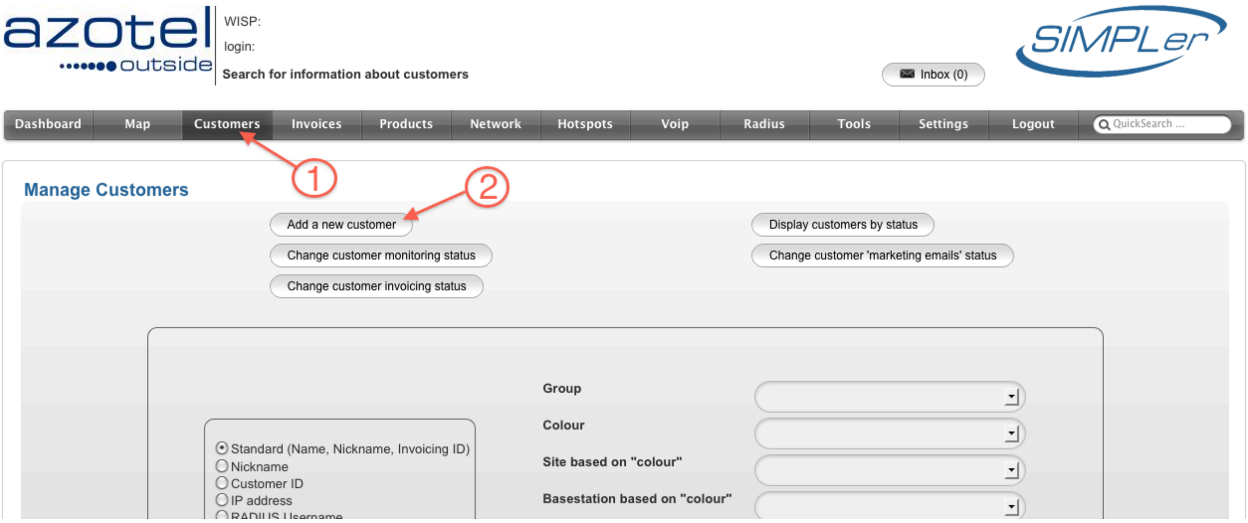

FIG 3.2-1. SIMPLER CUSTOMERS PAGE

   b. There are a lot of fields for detailed information to be stored during customer setup but not all of the data is required. However, it is recommended that you add as much detail as you can (fig 3.2-2). Make sure ***Status*** is set to "waiting for install".

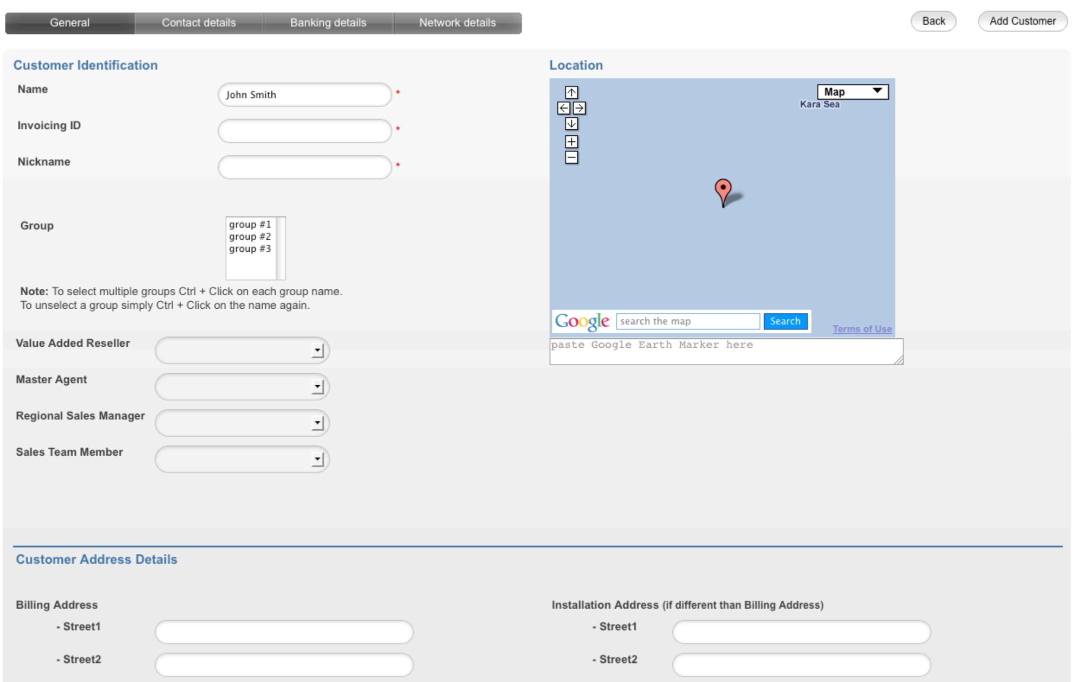

FIG 3.2-2. SIMPLER CUSTOMER GENERAL DETAILS

   c. For simplicity sake you can skip directly to setting up network information for the new customer by clicking on the ***Network details*** tab near the top of the page (fig 3.2-3).

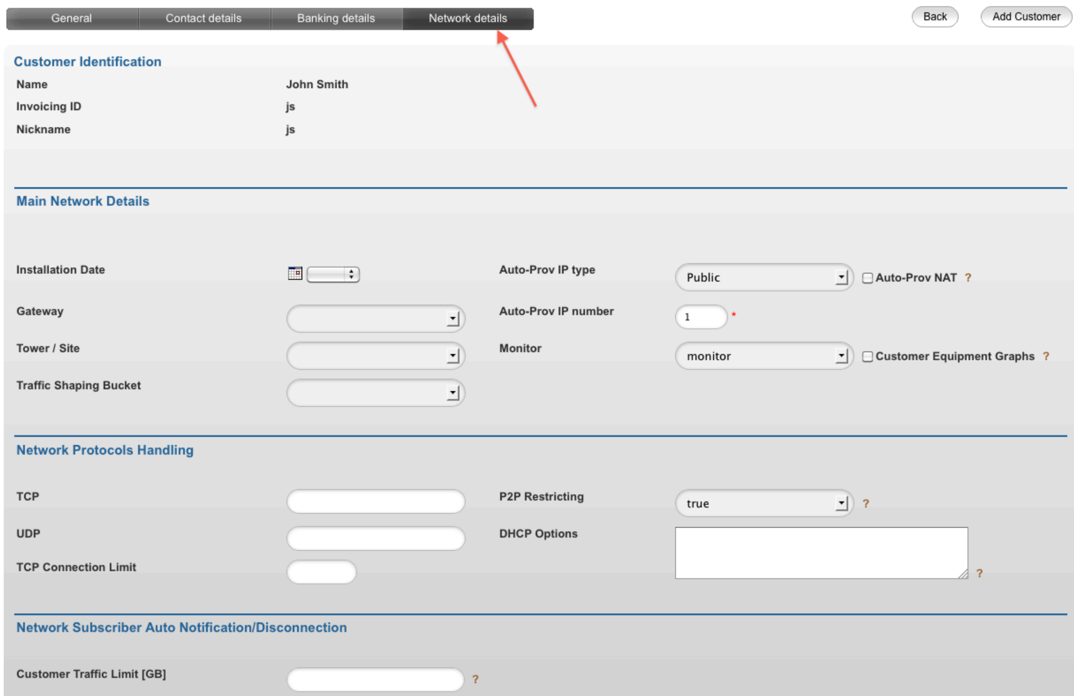

FIG 3.2-3 SIMPLER CUSTOMER NETWORK DETAILS

d. Under Network details set the following settings:
   - ***Installation date***
   - ***Gateway***: choose the WIB-C that will be serving this customer
   - ***Traffic Shaping Bucket***: as decided by their level of service
   - ***Auto-Prov IP type***: for the sake of this tutorial select "Private"
   - ***Auto-Prov NAT***: will turn on the NAT feature of the Canopy equipment automatically when provisioning the SM
   - ***Monitor***: choose "no monitor" for this tutorial
   - ***Customer Equipment Graphs***: check

e. Click ***Add Customer*** to automatically create an installation ticket and add the new customer to the system.

f. You will be taken to a confirmation page letting you know the customer was added successfully.

g. Click ***Customer 654321 Details*** to go to the customer page. 654321 will be replaced with the invoicing id you choose for your customer.

2) Configure customer subscriber module for auto-provisioning

   Configuring the SM is very similar to configuring an AP but there are some important settings that have to be set in order for the auto-provisioning process to work.

   a. Connect your laptop to the SM using a straight through Ethernet cable and a Motorola power injector.

   b. Change your laptop IP settings to:

```
IP Address:     169.254.1.5
Subnet Mask:    255.255.255.0
Gateway:        169.254.1.1
```

c. Open your web browser and connect to http://169.254.1.1; the default IP for Motorola Canopy SMs.

d. First, set the appropriate region code for your area by going to ***Configuration → General***. Save your changes but do not reboot at this time.

e. VERY IMPORTANT STEP!!!! – PLEASE READ CAREFULLY Next, change the IP settings for the SM under ***Configuration → IP*** (fig 3.2-4). Assign an IP from the **Canopy interface** (not the Customer interface!) that was setup previously in SIMPLer. It is Azotel's recommendation, that you set aside a block of IPs (in the Canopy interface) for installers to use for the auto-provisioning process. An installer can set the SM's IP to an address from this block. Doing this will allow the auto-provisioning process to complete the configuration of the SM automatically. For this tutorial we will use 10.156.137.250 as our installer IP. Make sure to select "Public" for ***Network Accessibility***. Save changes.

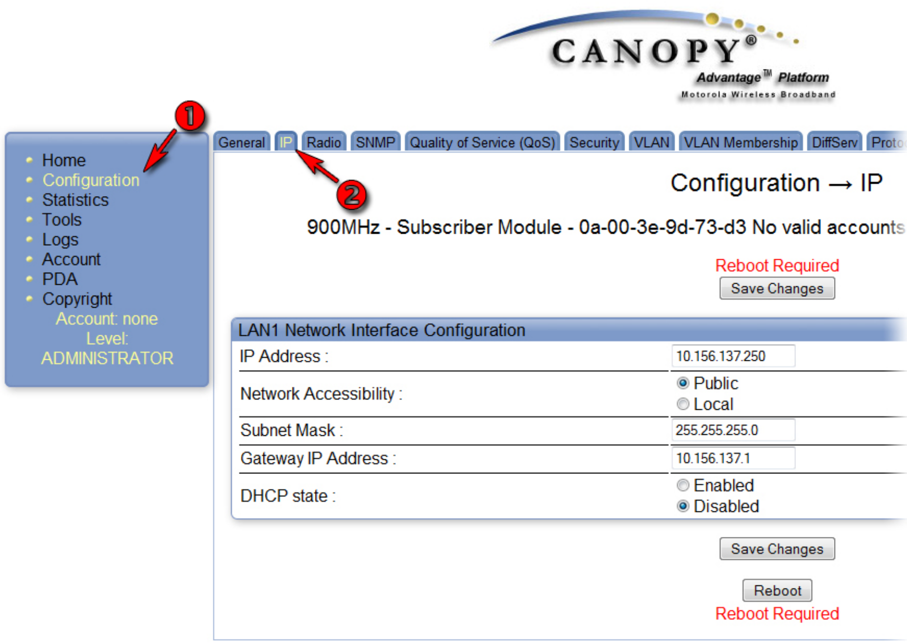

FIG 3.2-4. MOTOROLA CANOPY SM IP CONFIGURATION

f. Next, click on the ***Radio*** tab. Set ***Color Code 1*** to match that set on the AP (**2** for this tutorial).

g. Click on the SNMP tab next. Change ***SNMP Community String 1 Permissions*** to "Read/Write" to allow for auto provisioning. To allow the auto-provisioning process to link the SM to the customer record, we must set the ***Site Name*** in the SM to match the customer's nickname set in SIMPLer (step 1-b) (fig 3.2-5). Save your changes.

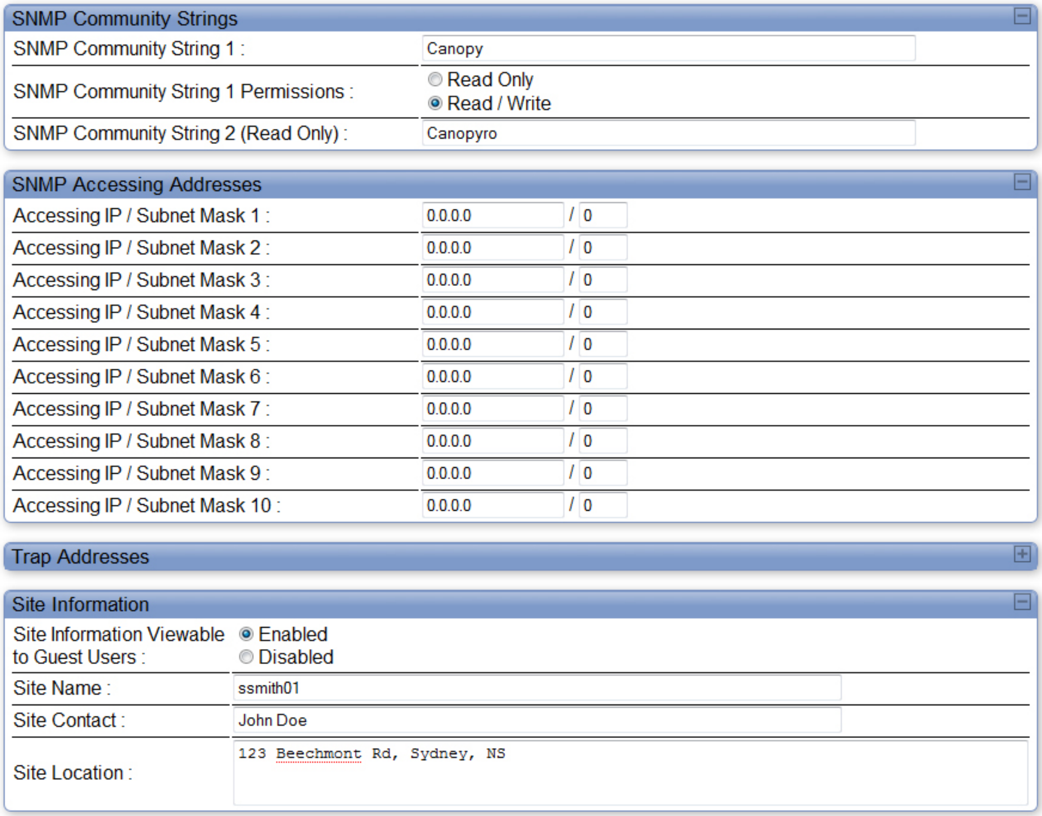

FIG 3.2-5. MOTOROLA CANOPY SM SNMP CONFIGURATION

h. Reboot the SM. Once the reboot process is complete the SM will be functioning with the new configuration.

i. You can verify that your configuration changes have been set correctly by changing your laptop's IP settings to:

```
IP Address:      10.156.137.251
Subnet Mask:     255.255.255.0
Gateway:         10.156.137.1
```

j. If you wish you can log back into the SM with the URL http://10.156.137.250 to verify your settings.

3) Auto-Provisioning from SIMPLer

At this point you have two options available for provisioning. You can wait up to two hours for SIMPLer to automatically go out and find SMs that are ready for provisioning, at which point they will automatically be provisioned and assigned to the appropriate customer, or you can provision immediately. The steps here will outline how to provision immediately.

a. Log into SIMPLer and go to ***tools***.

b. Set ***Select an action*** to "Provision Now!"

c. Select the appropriate interface for ***IP address of SM*** and enter the last octet of the current SM IP (**250** for this tutorial) (fig 3.2-6). Please note that this is the installer IP, the temporary IP address, specifically used for the auto-provisioning process.

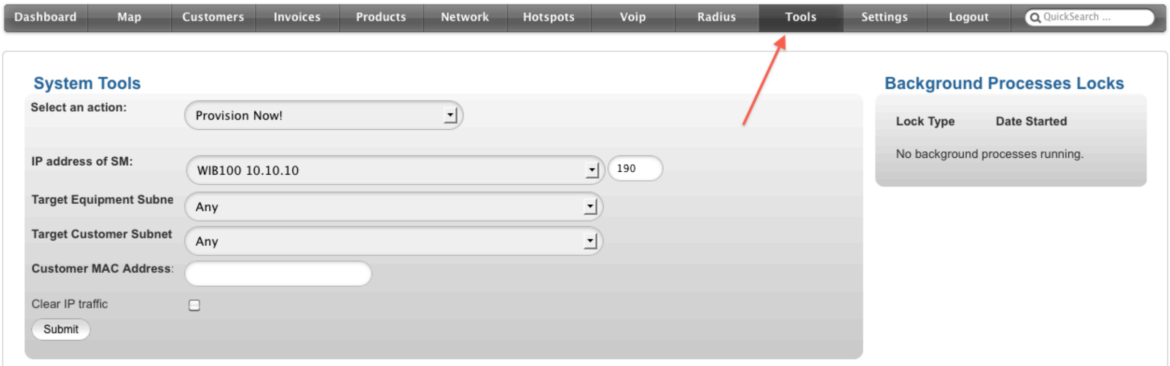

FIG 3.2-6. SIMPLER PROVISIONING TOOL

d. Click ***Submit***.

e. You will be presented with a confirmation screen showing the changes that have been made (fig 3.2-7). Since NAT was enabled make sure the computer hooked up to the SM is set to obtain and IP automatically. The customer should now be online with the SM.

Subscriber Module Settings:
IP address: 10.156.137.250
MAC address: 0a-00-3e-9d-73-d3
Description: CANOPY 9.5 SM-DES
Distance: 0.00
Site Name: ssmith01
Colour Code: 2
Type: canopysm
New Equipment Nickname: S3
New Equipment IP address: 10.156.137.2
1 Private address
Generated IP: 10.157.137.2 255.255.255.0 10.157.137.1
NAT feature is enabled.
The equipment IP address has been changed to '10.156.137.2'.
Site Name has been changed to 'S3 - ssmith01'.
Reboot has been initiated on 10.156.137.250.
wib.SUBS configuration file has been updated.

WIB files have been updated (wibnumber = 137)
10.157.137.2 255.255.255.0 10.157.137.1

Back to tools >>

FIG 3.2-7. PROVISIONING CONFIRMATION

f. You can now view the customer's updated information by clicking on the ***customers*** tab at the top of the page and use the **Search** box to find "Smith".

g. The main changes to note are that the customer's status will have changed from "waiting for install" to "current", a usage graph will be visible, equipment details are added, and an IP table is present showing the customer's assigned IP (fig 3.2-8). However, since NAT was enabled on the SM the customer won't need to know this IP to get online.

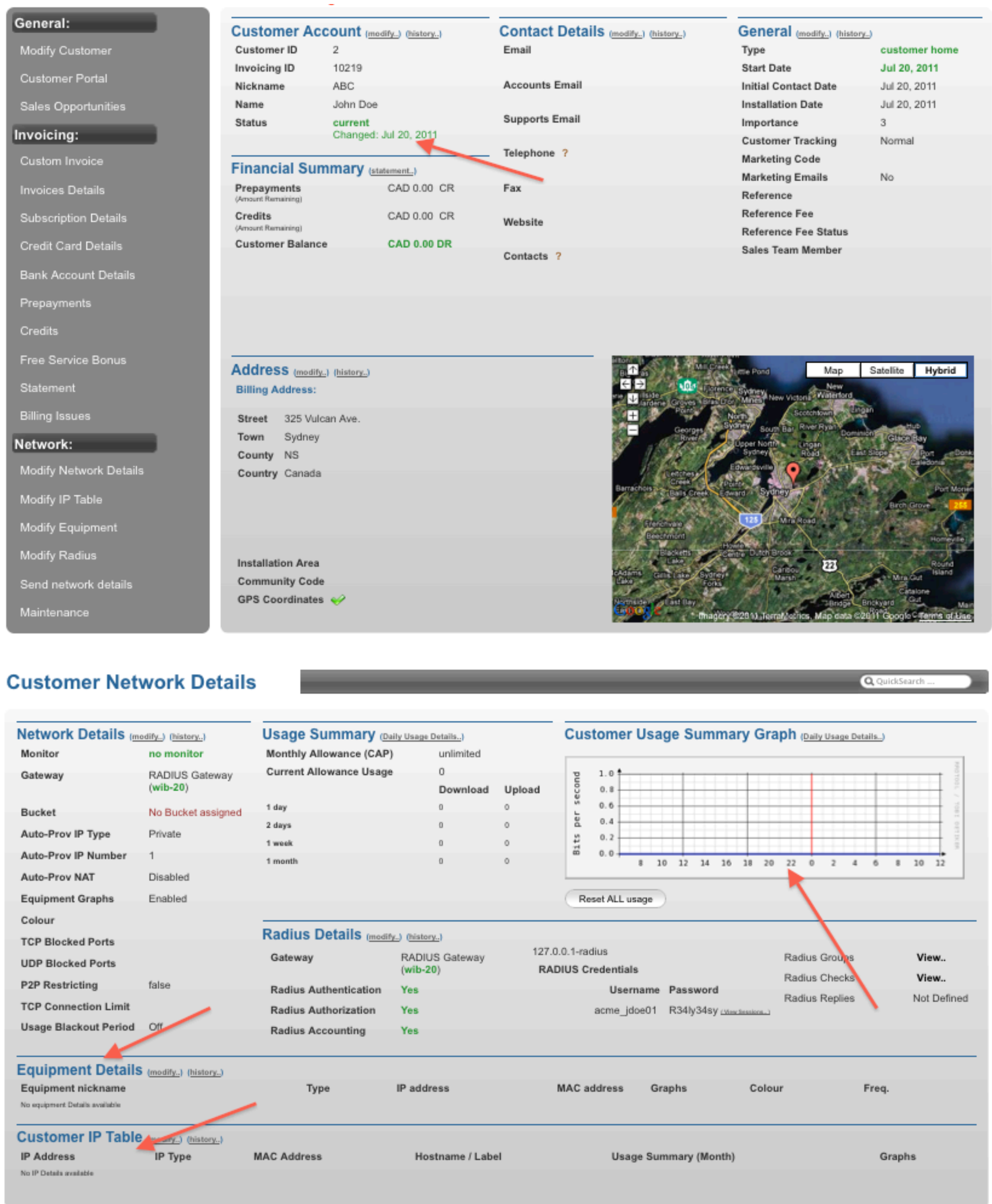

FIG 3.2-8. SIMPLER CUSTOMER INFORMATION PAGE

4) The customer should now be online, but at this point they aren't being billed. In order to start billing the customer you will need to add ***Subscription details*** to their account (details on creating different subscription packages can be found in the SIMPLer Operators Manual).
   a. On the customer details page click ***modify*** beside ***Subscription details*** (fig 3.2-9).

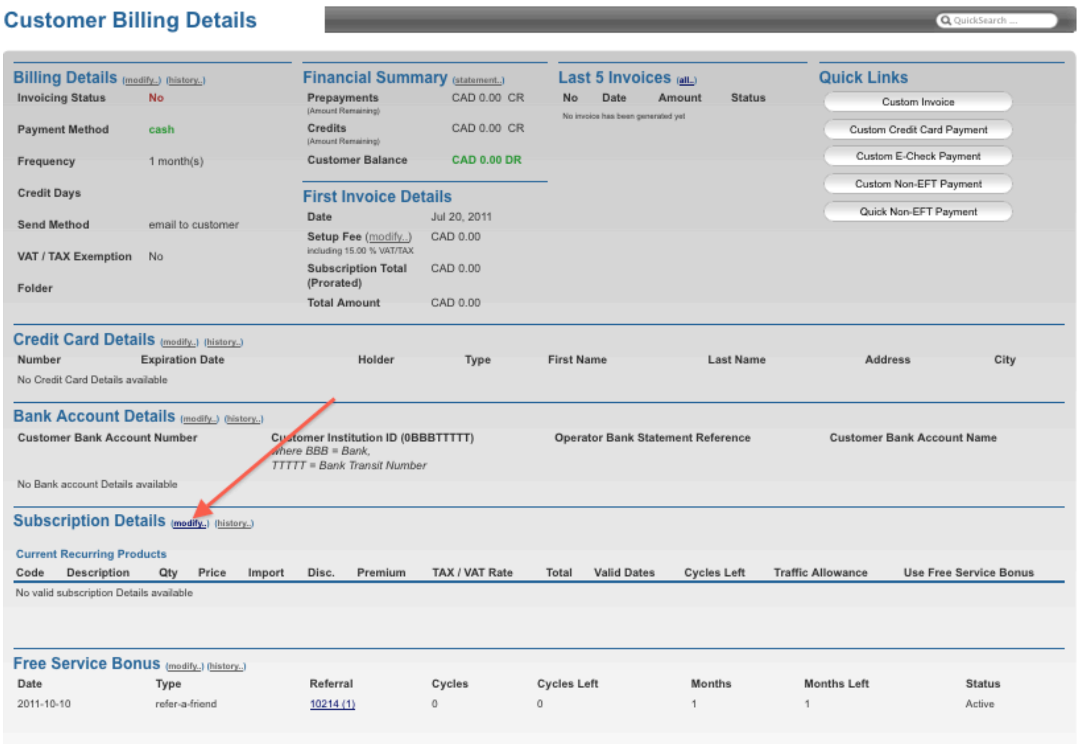

FIG 3.2-9. SIMPLER CUSTOMER BILLING

b. You will be taken to a page that will allow you to add products to the customer (fig 3.2-10). This is also where you would specify such things as setup fees, discounts, or premiums. Select a Code (Price) and click Add Product.

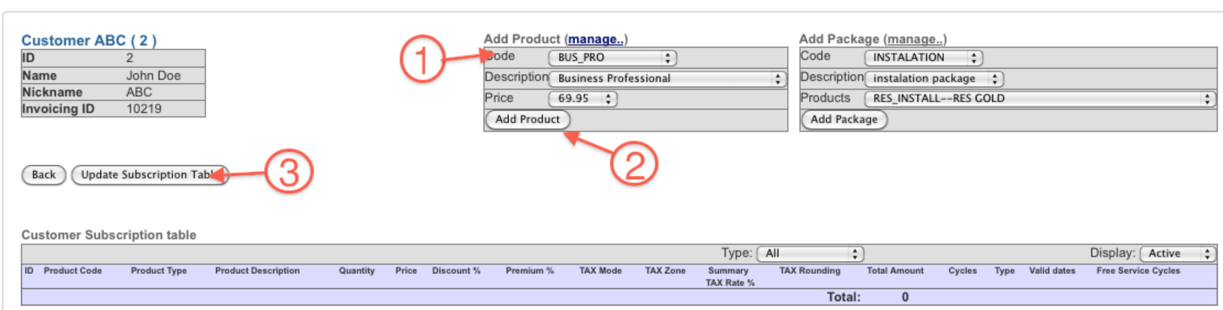

FIG 3.2-10. SIMPLER MODIFY SUBSCRIPTION DETAILS

c. Click Update ***Subscription Details*** to complete the process. The customer will then be invoiced during the next billing cycle.

3.3 MANUAL CUSTOMER SETUP

In the previous section you saw how to add a customer to SIMPLer and then have the system automatically setup the customer's equipment to work on your network. The system also automatically added the equipment into SIMPLer and assigned it to the customer's account.

The automatic method may not be suitable for all WISPs. Some WISPs may wish to setup the equipment manually or may need to do manual installations in some special circumstances. Many of the steps for setting up a customer manually are the same as when setting them up for auto-provisioning (section 3.2) but there are some key steps where the two differ. For this tutorial we will assume that you want to give the IP information to the customer so that they can configure it on their router (or computer) while leaving the SM in bridging mode.

1) Adding a customer to SIMPLer
    a. Follow the steps in section 3.2-1 up to the customer's ***Network details*** setup (step 1c.). For this tutorial we will uncheck ***Auto-Prov NAT*** (fig 3.3-1) to make sure that NAT isn't enabled on the SM.

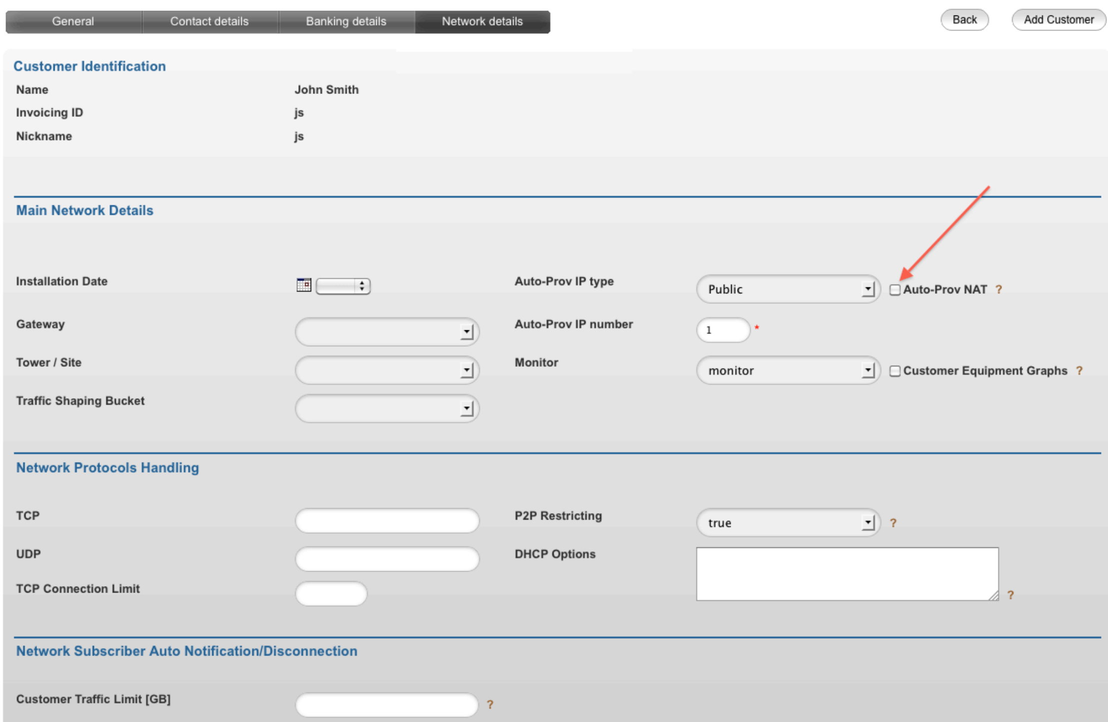

Fig 3.3-1. SIMPLer Customer Network Details (NAT Not Enabled)

    b. The rest of the settings will remain as they were previously stated in section 3.2 step 1d.
    c. Click ***Add Customer*** and then ***Customer 654321 Details*** (where 654321 will be replaced by the invoicing ID of the customer that you setup).

2) Add a subscriber module to the equipment list under ***network***

   At this point in section 3.2-2 you would have configured the SM to prepare it for provisioning by the SIMPLer platform. But in order to manually setup the SM you will need to go a different route.
    a. Add the SM to your network (***network*** → ***Equipment details*** → ***Add***)
    b. This time enter "SM" as the base ***Equipment Nickname*** and click ***Generate Equipment Nickname***.
    c. Then, click ***Generate Equipment IP address*** to assign an available IP (make note of this IP for future use in SM configuration).
    d. Set the ***Type*** to "Canopy SM" and leave the ***Status*** as "stock".
    e. The remaining fields should be filled in to match your equipment details.

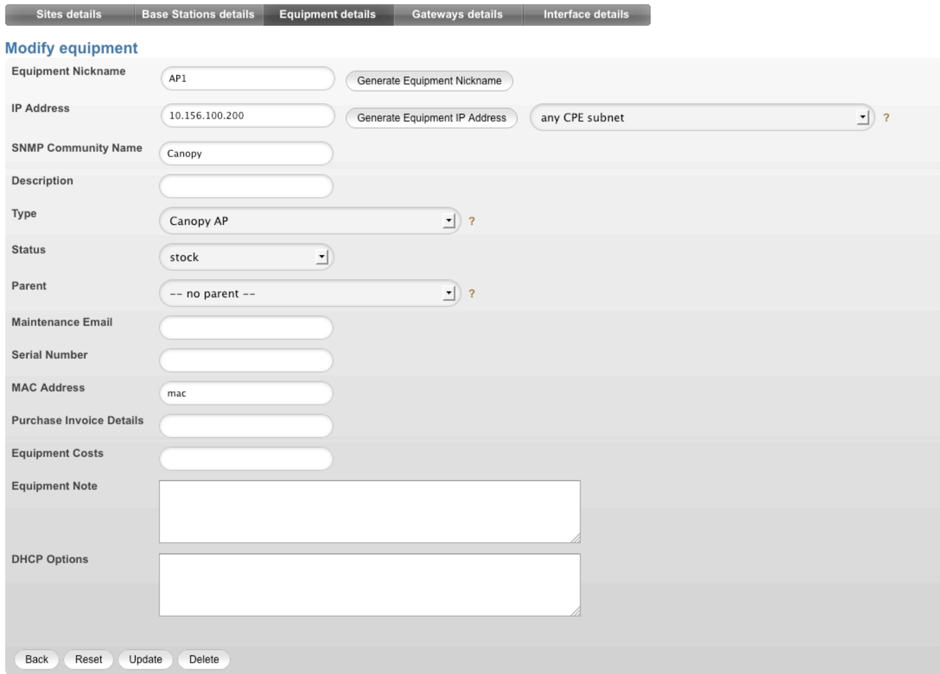

FIG 3.3-2. SIMPLER ADDING EQUIPMENT

f. Note that ***Description*** does not need the customer's nickname. This is only for informational purposes.

g. Click ***Add*** to finish the installation.

3) Assign an SM to the customer's account

The next thing to do is to add the new equipment to the customer waiting for install in SIMPLer.

a. Got to the ***customers*** tab and search for "ssmith01".

b. Go to Steve Smith's account and click on Modify Equipment in the left hand menu (fig 3.3-3). Note you can also access the customer's equipment page by clicking on ***modify*** beside ***Equipment details*** toward the bottom of the customer information page.

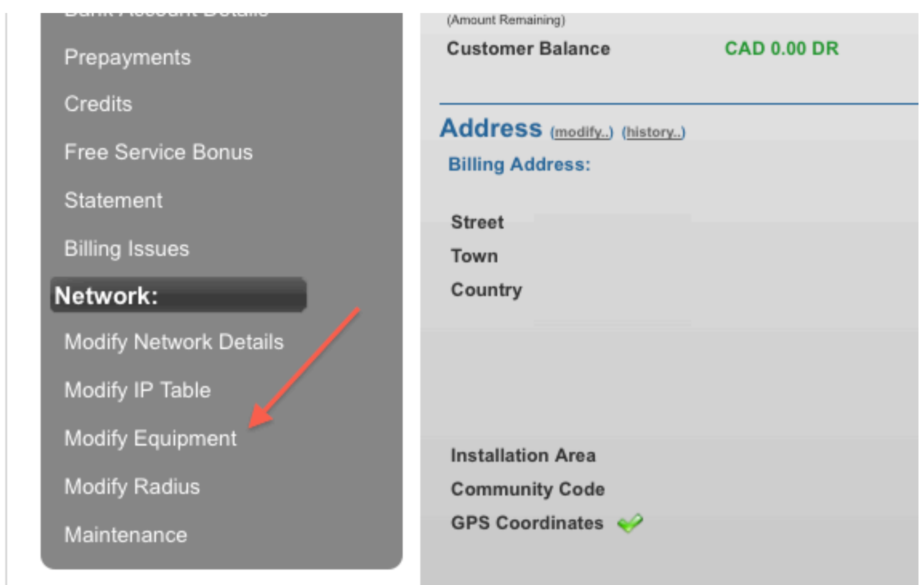

FIG 3.3-3. SIMPLER MODIFY CUSTOMER EQUIPMENT MENU

c. On the customer equipment page you will see a list of "stock" equipment on the lower portion of the page. Click on the ***Add*** button beside the equipment that you want to assign to this customer (fig 3.3-4).

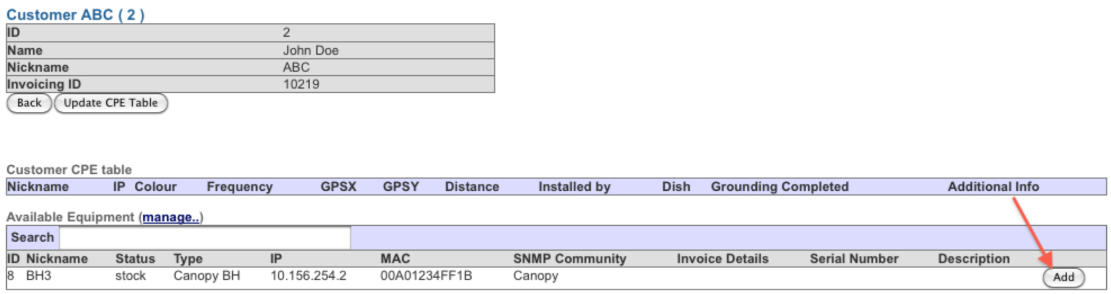

FIG 3.3-4. SIMPLER ADD CUSTOMER EQUIPMENT

d. Once the equipment is assigned you will be able specify other details for the equipment which are specific to this customer (e.g. ***Colour***, ***Frequency***, etc.).

e. When you finish entering the additional details click on ***Update CPE Table*** (fig 3.3-5) to finalize the equipment assignment.

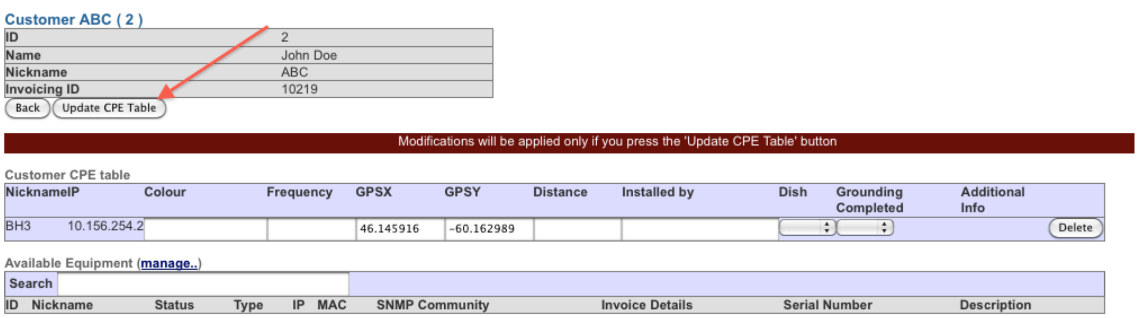

FIG 3.3-5. SIMPLER UPDATE CPE TABLE

4) Assign an IP to the customer

Now that the equipment is assigned you will need to generate an IP for your customer.

a. On the customer information page click on ***Modify IP table*** in the left hand menu (right above ***Modify Equipment***).

b. Enter the ***Quantity*** of IPs you want to assign to the customer and click ***Generate IP addresses*** (fig 3.3-6).

c.

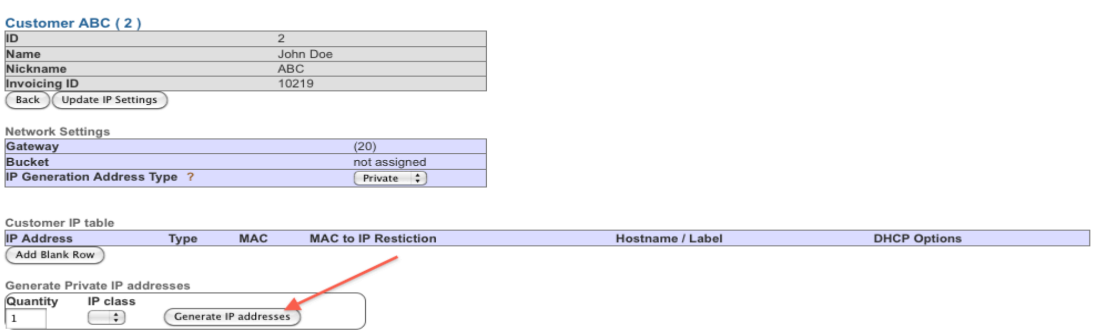

FIG 3.3-6. SIMPLER GENERATE CUSTOMER IP

d. At this point you can also specify a ***MAC*** address for the customer and lock the IP to that MAC. For this demo we will leave those options open so that any computer/router can use this IP.

e. To finalize the IP assignment click on ***Update IP Settings.***

5) Configure customer subscriber module

The customer now has equipment and an IP assigned manually. With this information an installer would be able to go to the customer's house to complete the installation. The configuration of the SM takes place in the same way as auto provisioning setup but in this instance the installer would enter the assigned IP information instead of their installer IP (fig 3.3-7). Since this SM will be used in bridging mode no other settings need to be changed.

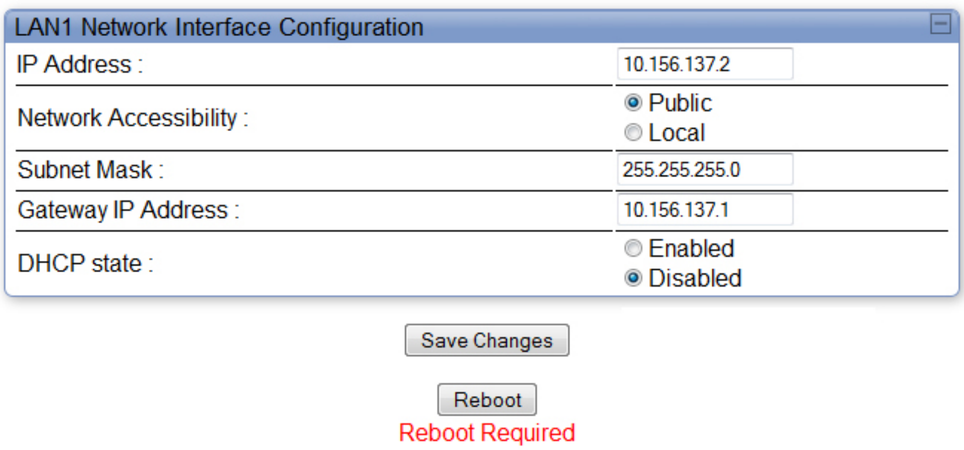

FIG 3.3-7. MOTOROLA CANOPY SM NETWORK CONFIGURATION

6) Configuration of the customer's computer/router

a. After configuring the SM your installer's work should be just about finished. The last step would be to setup the assigned customer IP on their computer/router. There are too many equipment possibilities so it isn't feasible to try and outline them all here. At this point an assumption will be made that the installer (or a person on site) will be able to enter the IP settings into the customer's equipment. The IP setting for this example are as follows.

IP Address: ***10.157.137.2***
Subnet Mask: ***255.255.255.0***
Gateway: ***10.157.137.1***

7) Closing the installation maintenance ticket

Now that your customer is installed and working there are a few more steps that need to take place in SIMPLer to finish activating their account. During auto-provisioning the installation ticket is automatically closed. However, when following the manual process you will have to manually close the customer's installation ticket.

a. Go to the customer's account and click on ***Maintenance*** in the left hand menu (fig 3.3-8)

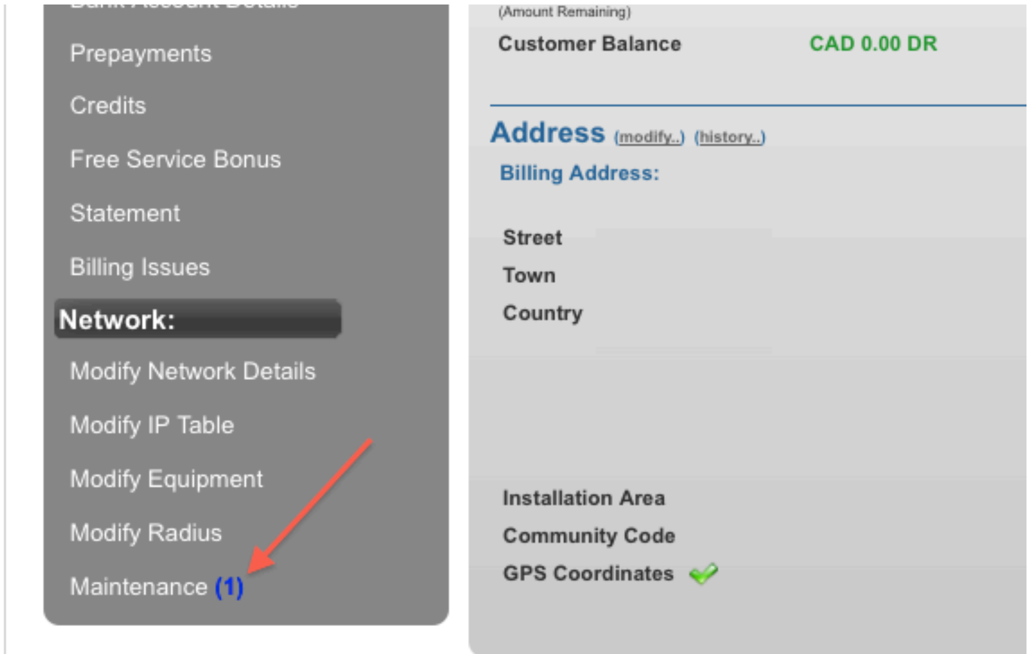

FIG 3.3-8. SIMPLER CUSTOMER MAINTENANCE

b. Click on the customer installation ticket to view/modify the details.

c. You can use the ***Resolution*** text area to enter any details that you would like about the installation. For example if there were any issues that occurred during the install.

d. Scroll to the bottom of the page, change the ***Status*** to "closed" and click ***Update*** (fig 3.3-9)

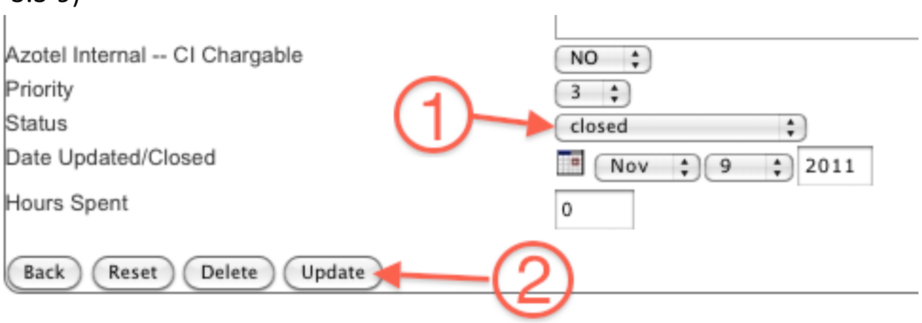

FIG 3.3-9. SIMPLER MAINTENANCE TICKET

8) Adding subscription details to customer
As with the auto provisioning setup this customer is now online but doesn't currently have any subscription details. Subscription details should be added to the customer in the same way as they were in section 3.2-4.

9) Set customer to "current"
The final step in order to get the customer's account setup is to change them from "waiting for install" to "current". Billing will not start for the customer until they become current. As with other processes this switch is automatically completed during auto-provisioning but needs to be manually changed for manual installations.

a. Return to the customer's information page

b. Click on ***Modify customer*** on the left hand menu

c. Change ***Status*** to "current" and set ***Installation date*** and ***Start date*** to the appropriate settings (fig 3.3-10). Please note that ***Start date*** is important because it is used during invoice calculations.

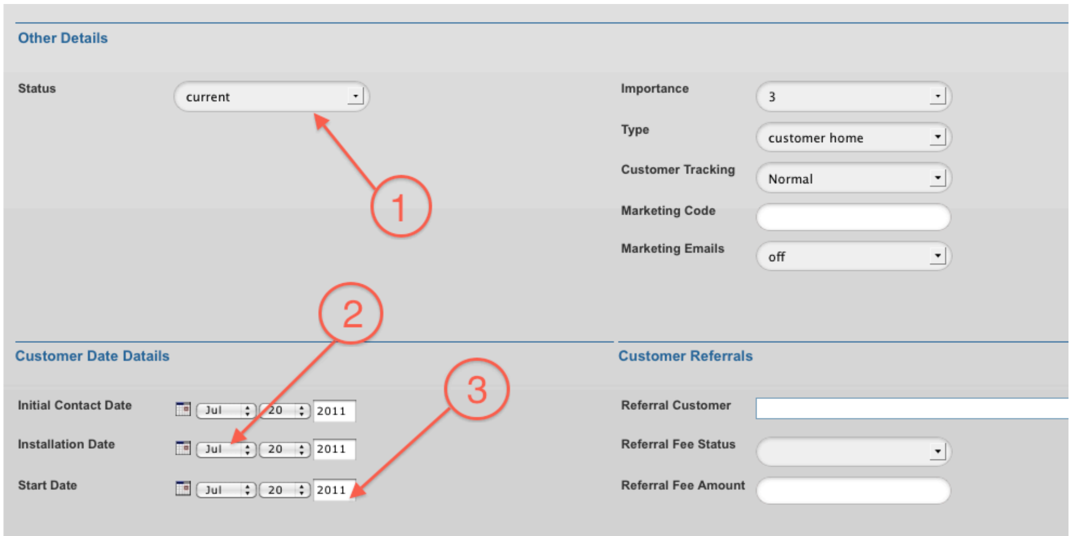

FIG 3.3-10. SIMPLER CUSTOMER MODIFICATIONS

d. Click on ***Update Customer*** to finish with the customer's account setup.

10) Update WIB-C Files

Now that the customer's account is setup you will need to update the WIB-C to make it aware of all the configuration changes. This is necessary for the WIB-C to allow the traffic for the new customer's account. As with many of the step covered in this section, this process is something that is done automatically during the auto-provisioning process.

a. From the page menu click on ***tools***.

b. Change ***Select an action*** to "Update WIB files" and then select the appropriate WIB-C (fig 3.3-11).

FIG 3.3-11 SIMPLER TOOLS

c. Click ***Submit*** to push the updates to the WIB-C and complete the manual installation process. The customer will now be online and will get invoiced during the next billing run.

3.4 ADDING A USER TO SIMPLER

When creating a new instance in SIMPLer, Azotel staff will add the first user to the SIMPLer system. The main contact (owner, manager, etc) is chosen and added to SIMPLer as type "operator" with the maximum rights allocated to any operator. Once this has happened, login details will be sent to the operator's email and they can log in and add other users to the system, adjusting rights on a per user basis or creating user templates to use as a guide.

The **add a new user** function is located on the **settings** tab in SIMPLer. Click on **settings** as demonstrated in fig. 3.4-1.

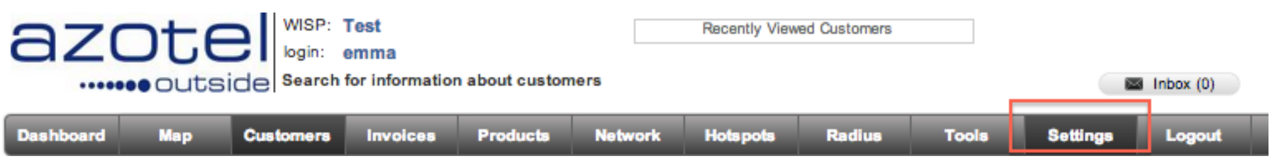

Fig. 3.4-1 Settings Tab

An add a new user option will appear on the left-hand menu. Click on this as per figure 3.4-2.

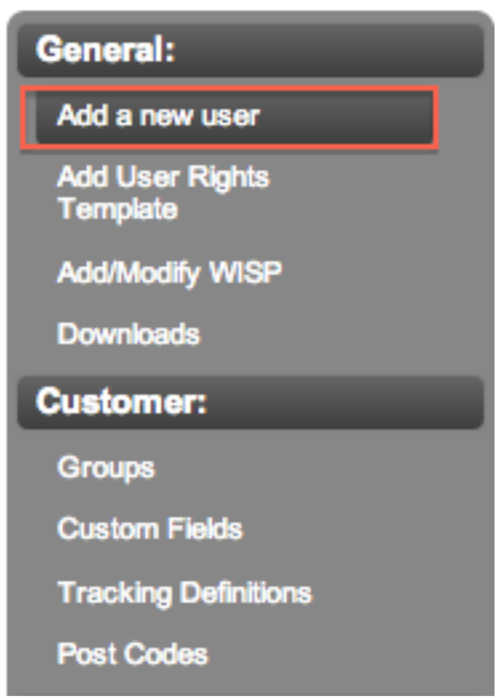

Fig. 3.4-2: Add a new User

There are two sections on this page. The **user details** section is shown in figure 3.4-3 and described below.

1. **Main details**: Must be populated with accurate information on desired userID (e.g smithj), valid email address of user, user's full name, status: "user" for any user in SIMPLer system, if "operator" is chosen, this user will have the rights to add new users. WISP should default to your own instance name. Langauge: choose us_english for users based in the United States. Phone number and skype address should be entered if known.
2. **New password**: Specify a password, if not specified the system will generate one at random.

3. **User Rights template**: You can create a template from the settings applied to this user's account and this template can be used for other users going forward. Example: Sales team, billing team, etc. Alternatively, you can choose to "override user rights with" an existing template, and the user will always have their rights overridden by the template in question.
4. **Other Details**: In this section you can personalise some display options on a per user basis.
5. **Sales Items**: Value Added Reseller, Master Agent and Regional Sales Manager can be assigned here, if previously added in the system.

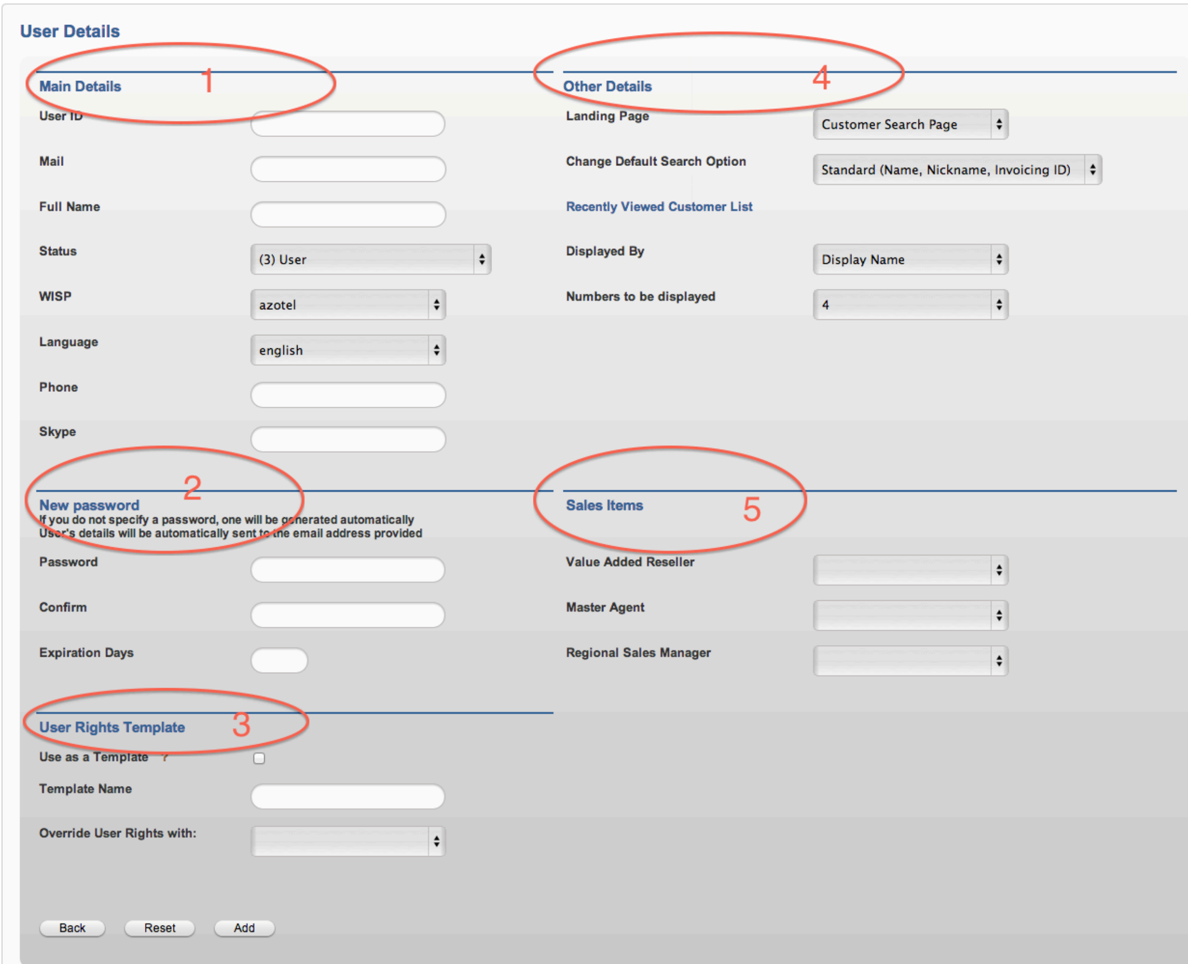

Fig. 3.4-3: User Details

User Rights section is shown in figure 3.4-4 and individual rights are descibed in the table in figure 3.4-5.

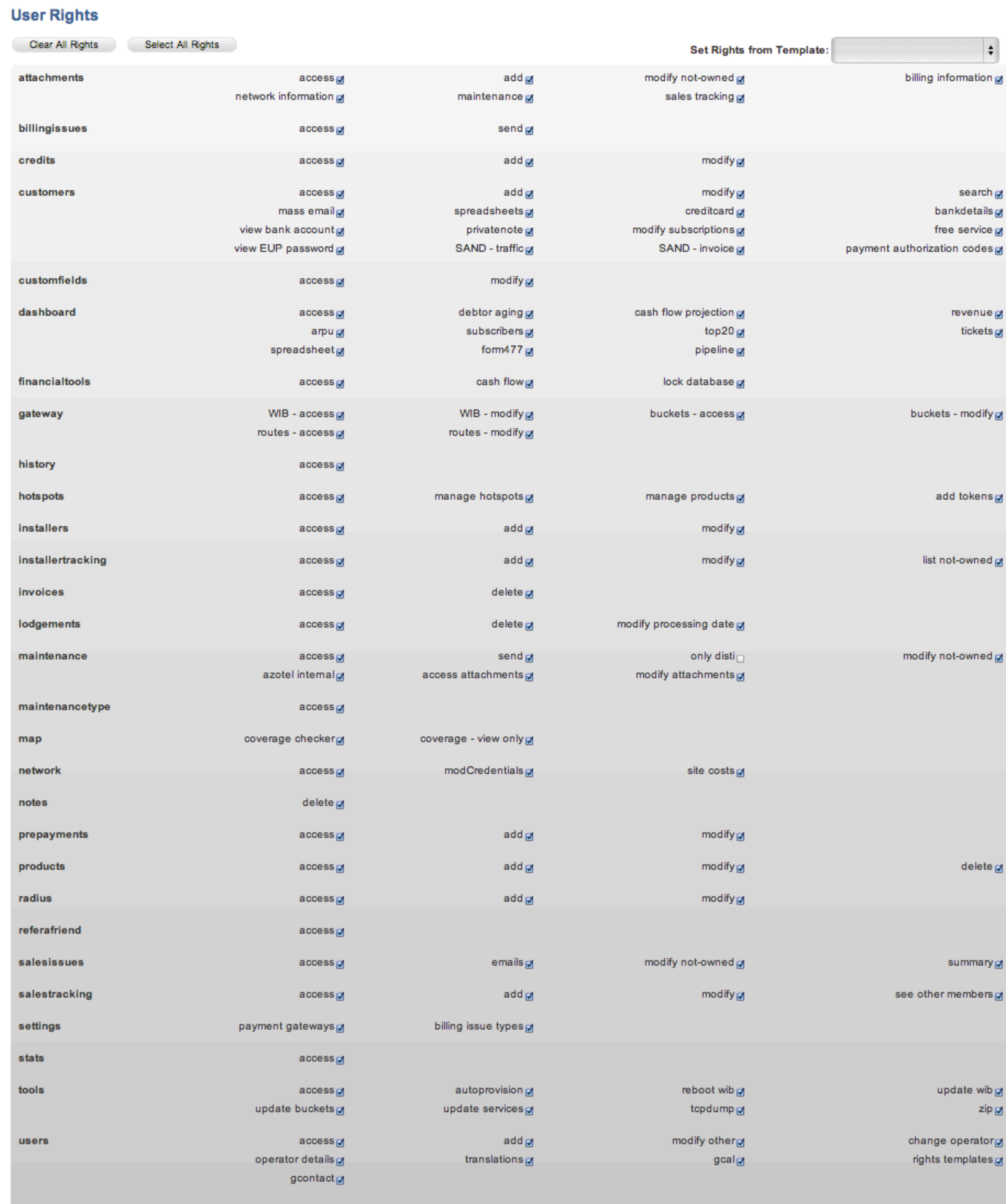

Fig. 3.4-4: User Rights

Attachments	
Access	• Displays "Last 5 Attachments" table on customer details page • Allows access to the "Customer Attachments" page • Allows access to the "Add/Modify Customer Attachments" page • Allows access to the "Site attachments" page • Allows users to download an attachment
Add	• Allows users to add/modify an attachment
Modify not-owned	• Allows users to modify attachments created by other users
Billing Information	• Allows to access & download an attachment with "billing information" required access right set
Network Information	• Allows to access & download an attachment with "network information" required access right set
Maintenance	• Allows to access & download an attachment with "maintenance" required access right set
Sales Tracking	• Allows to access & download an attachment with "sales tracking" required access right set
Electronic documents	• Allows to access & download an attachment from the electronic documents section
Billing Issues	
Access	• Displays "Billing Issues" button on customer landing page • Displays "Billing Issue Types" button under Settings section • Allows access to the "Billing Issues" page • Allows access to the "Billing Issue Types" page • Allows access to the add/modify "Billing Issues" page
Send	• Displays “Send Billing Issues” button on landing customers page
Credits	
Access	• Allows access to the “Customer credits” page
Add	• Allows to add credit to the customer account
Modify	• Allows to modify existing customer credit • Allows to assign credit to the invoice
Customers	
Access	• Allows access map • Allows access to the "Customer Notes" page • Allows access to the "Customer Usage Report" page • Allows access to the "Modify Templates" page • Displays "Progress Bar" • Allows access to the "Customer Portal" section of customer account page • Allows access to the "Customers Status" page • Display links to the customer accounts under "Customers Status" page • Display links to the customer accounts under "Customers Credits" page • Display links to the customer accounts under "Installer Tracking" page • Display links to the customer accounts under "Payment Authorization Codes" page • Display links to the customer accounts under "Salesman Tracking" page • Display links to the customer accounts under "Prepayments" page • Displays button "Update and go to the customer XXXX page" under "Modify Maintenance" page • Allows access to the "Revenue/Customer" page

	• Allows access to view customer subscription on main customer account • Allows access to the "Modify Salesman Task" page • Allows to download VCard from customer account • Allows access customers details page • Displays "Add" button on "Salesman Task" page • Allows to generate KML for Google Earth • Allows access to "Send Email" page • Allows to generate coverage graphs on google earth • Allows access to the "Import External Subscription" page • Allows to modify customer notes • Allows to access Google Earth • Allows to sync SIMPLer with Google contacts • Allows access to the "Work Order Templates" page
Add	• Displays "Add a new customer" button on customers landing page • Allows access to "Add Customer" page
Modify	• Displays "Display customers by status" button on customers landing page • Displays "Change customer monitor status" button on customers landing page • Displays "Change customer invoicing status" button on customers landing page • Displays "Change customer 'marketing emails' status" button on customers landing page • Allows access to "Customer Tracking Definitions" page • Allows access to "Customer Groups" page • Allows access to "Maintenance Ownership" page • Allows access to "Modify Customer" page
Search	• Displays link to customer account from "Maintenance" page • Displays link to customer account from "Salesman Task" page • Displays customers search engine • Allows to search for customer invoices • Allows to list customers after search
Mass email	• Displays "Mass mail notification" button on customers landing page • Allows access to the "Mass mail notification" page
Spreadsheets	• Displays "Download Customer Spreadsheet" button on customers landing page • Displays "Traffic Spreadsheet" button on customers landing page • Displays "Email Customer Spreadsheet" button on customers landing page • Allows access to the "Aged Debtor Analysis" page • Allows to export traffic spreadsheet • Allows access to "Traffic spreadsheets" page
Credit Card	• Allows access pop-up tool to pay off an invoice with credit card • Allows access to the "Custom Credit Card Payment" page • Allows access to the "Customer Credit Card" section of customer account • Displays "Custom Credit Card Payment" button

	under "Invoices" section
Bank Details	• Displays "Include Customers' Bank Details" checkbox on customers landing page • Displays "Custom EFT Payment" button under "Invoices" section • Allows access to "Customer Bank Details" page • Allows access to the "Custom E-check Payment" page
View bank account	• Allows to view bank account numbers
Private Note	• Allows to view customer private notes
Modify Subscriptions	• Allows access to "Modify Subscription" page
Free Service	• Allows access to "Modify Free Service" page
View EUP Password	• Allows to view customer EUP password
SAND - traffic	• Allows to access customer SAND Network section under "Add/Modify Customer" page
SAND - invoice	• Allows to access customer SAND Billing section under "Add/Modify Customer" page
Payment Authorization Codes	• Allows access to "Payment Authorization Codes" section of customer account
CC/echeck transaction log	• Allows users to see the transaction log on the customer record to see payments made via a payment gateway and authorization / failure details
Send sms	• Allows users to send SMS to customers
Refund	• Allows users to send refunds via the payment gateway
RADIUS - Access	• Allows users to see RADIUS details on the customer record.
RADIUS – Modify Usernames	• Allows users to modify RADIUS user names on a customer account
RADIUS – Modify Attributes/Groups	• Allows users to modify RADIUS attributes such as groups (speeds) on a customer account
Network Details	• Allows users to access the network details section of the customer account
Modify subscription price	• Allows users to modify the price on individual subscriptions on the customer account
Modify subscription premium	• Allows users to modify the percentage premium on individual subscriptions on the customer account
Modify subscription discount	• Allows users to modify the percentage discount on individual subscriptions on the customer account
Modify customer status	• Allows users to modify the customer status on a customer account, for example changing the customer from “current” to “post”.
Modify group	• Allows users to modify the group a customer is assigned to. Groups are operator created labelling that can attach a different set of settings to a customer in a group.
Custom Fields	
Access	• Allows access to "Custom Fields" page
Modify	• Allows to modify custom fields
Dashboard	
Access	• Allows access to the "Dashboard" section

arpu	• Displays "ARPU" tables and graphs
Spreadsheet	• Allows to download "Statistics" spreadsheet from "Dashboard" section
Debtor Aging	• Displays "Debtor Aging" graphs
Subscribers	• Displays subscribers tables and graphs
Form 477	• Allows access to Form 477 pages
Cash flow projection	• Displays cash flow projection graphs
Top 20	• Displays "Top20" tables • Allows access to TOP 20 customers from "Tools" section
Pipeline	• Displays "Sales Pipeline" graphs • Displays pipeline details on "Sales Opportunity Type" page
Revenue	• Displays "Revenue" graphs and tables
Tickets	• Displays ticket details.
Financial Tools	
Access	• Allows to download "Cash Flow Projection" XLS from "Invoices" section • Allows access to the "Totals" pages • Allows access to the "Tax Zone" page • Allows access to the "Tax Rate" page • Access to Customer statements
Cash Flow	• Allows to download "Cash Flow Projection" XLS from "Invoices" section
Lock Database	• Allows to download "Cash Flow Projection" XLS from "Invoices" section
Customer Statement report access	• Allows users to access the customer statement on an individual customer account
Customer transactions report access	• Allows users to access the transaction report on an individual customer account
Access – cash	• Allows users to access the cash report for their own user
Download xls	• Allows users to download XLS financial reports
Gateway	
WIB - Access	• Allows access to the WIB graphs • Allows access to "modify WIB" page • Allows access to free IP addresses of WIB
WIB - modify	• Allows to modify WIB details
Buckets - access	• Allows access to traffic shaping buckets • Allows access to buckets graphs
Buckets - modify	• Allows to modify traffic shaping buckets
Routes - access	• Allows access to WIB routes
Routes - modify	• Allows to modify WIB routes
History	
Access	• Allows access to the history section
Hotspots	

Access	• Allows access to the "Customers" section of Hotspot • Allows access to the "Usage" section of Hotspot • Allows access to the "Graphs" section of Hotspot • Allows access to the "Tokens" section of Hotspot • Allows access to the "Products" section of Hotspot • Allows access to the "Stats" section of Hotspot • Allows access to the "Owners" section of Hotspot
Manage share plans	• Allows users to manage share plans
Manage Hotspots	• Allows users to add/modify hotspots
Manage Products	• Allows users to add/modify products of hotspot
Add Tokens	• Allows users to add tokens to the hotspot
Installers	
Access	• Allows access to the "Installers" page
Add	• Allows to add new installer
Modify	• Allows to modify installers
Installer Tracking	
Access	• Allows to download work order • Allows access to the "Installer Tracking" page
Add	• Allows to add new installer tracking entry
Modify	• Allows to modify installer tracking entry
List not owned	• Displays Installer Tracking box on Maintenance page
Invoices	
Access	• Allows to display & generate invoices • Allows access to the "Customer Invoice" page • Allows access to the "Custom Invoice" page
MySIMPLer	• Allows access to the voucher generation section of SIMPLer
Delete	• Allows to delete invoice
Lodgements	
Access	• Allows to create payment & access pages to do that • Allows to update lodgements • Allows to access "Lodgements" page • Allows to lodge prepayments • Allows to view payment transactions
Delete	• Allows to delete lodgement
Modify Processing Date	• Allows to modify processing date on payment pages
Maintenance	
Access	• Allows access to the "Maintenance" page • Allows access to the "Modify Maintenance" page

Send	• Allows to send installer notification email
Only Disti	• Displays only Disti type maintenance issues
Modify not owned	• Allows to modify maintenance issues created by other users
Access Attachments	• Allows to access maintenance attachments
Modify Attachments	• Allows to modify maintenance attachments
Maintenance Type	
Access	• Allows to access & modify maintenance types
Map	
Coverage Checker	• Allows to generate coverage checker
Coverage – view only	• Allows only to view coverage checker
Network	
Access	• Allows access to radius bucket usergroup • Allows access to the "Equipments" page • Allows access to the "Provision w/o CPE" page • Allows access to the "Sites" page • Allows access to the "Gateways" page • Allows access to the "Email/FTP" page • Allows access to the "CPE" tool pop-up • Allows access to the "Modify Basestation" page • Allows access to the "Modify Equipment" page • Allows access to the "Modify Site" page • Allows access to the "Interfaces" page • Allows access to the "Delete Unused Equipment" page • Allows access to the "Daily Usage" page • Allows access to the "Basestations" page • Allows access to the "Modiy CPE" page • Allows access to the "Modify Interface" page • Allows access to the "List Free IPs" page
ModCredentials	• Allows to update equipment details
Site Costs	• Displays Site costs field
Delete Equipment	• Allows users to delete equipment from SIMPLer (CPE , base stations etc)
Add Equipment	• Allows users to add equipment to Network – Equipment section of SIMPLer
Update Equipment	• Allows users to update equipment in Network – Equipment section of SIMPLer
Reboot Equipment	• Allows users to reboot equipment from the customer record, as a trouble shooting step
Notes	
Delete	• Allows to delete customer notes
Prepayments	
Access	• Allows access to the "Prepayments" page
Add	• Allows to add prepayment
Modify	• Allows to modify prepayment

Products	
Access	• Allows access to the "Products" page • Allows access to the "Packages" page • Allows access to the "Campaign" page • Allows access to the "Products & Buckets" page
Add	• Allows to add product
Modify	• Allows users to modify products
Delete	• Allows users to delete products
RADIUS	
Access	• Allows access any of RADIUS pages on the RADIUS tab
Add	• Allows to add any of RADIUS details on the RADIUS tab
Modify	• Allows to modify any of RADIUS details on the RADIUS tab
Quotes	
Access	• Allows users to access and view quotes
Add	• Allows users to add and generate quotes to a customer record
Modify	• Allows users to modify existing quotes on a customer record
Delete	• Allows users to delete existing quotes on a customer record
Refer a Friend	
Access	• Allows access to the "Refer a Friend" page
Sales Issues	
Access	• Allows access to the "Sales Items" page • Allows access to the "Modify Sales Items" page
Emails	• Allows to send "Sales Item Notification Email"
Modify not owned	• Allows to modify sales items created by other users
Summary	
Sales Tracking	
Access	• Allows access to the "Salesman Tracking" page • Allows access to the "Salesman" page
Add	• Allows to add Salesman • Allows to add Salesman Tracking
Modify	• Allows to modify Salesman • Allows to modify Salesman Tracking
See other members	• Allows to view other salesmans and their tasks
Settings	
Payment Gateways	• Allows access to the "Payment gateways" page
Billing Type Issues	• Allows access to the "Billing Issues Types" page
Cron jobs - access	• Allows users to access the cron jobs tab to schedule scripts (i.e auto payment)

Customer Groups	• Allows users to access the group settings
Tax Calculators	• Allows users to visit and define tax calculators (i.e Suretax)
Trigger API	• Allows users to set and define triggers to external systems
Sms Gateways	• Allows users to configure SMS gateways to send mass SMS
Third Party Modules	• Allows users to set up third party modules (i.e USPS)
Electronic Documents	• Allows users to define electronic documents so that they can have customers sign contracts on their mobile device
Stats	
Access	• Allows access to any NHM pages • Allows access to old stats
Tools	
Access	• Allows access to the “Tools” page
Autoprovision	• Allows to auto-provision customer
Reboot WIB	• Allows to reboot WIB
Update WIB	• Allows to update WIB files
Update Buckets	•
Update Services	•
Tcpdump	• Allows to download tcpdump from WIB
Zip	• Allows to access “XIP codes” page
Fetch Files	• Allows users to access certain files (invoices etc)
Users	
Access	• Allows users to access “users” page
Add	• Gives permissions to add new users
Modify Other	• Allows to modify other users details
Change Operator	• Allows a user to switch between instances
Operator Details	• Allows to view/update global Operator details
Translations	• Allows to access translation database
gcal	• Allows to access Google Calendar features
Rights Templates	• Allows user to use user right templates
Gcontact	• Allows to access Google Contacts features
Disable Other	• Allows users to disable other users, for example when they are leaving the company
Manage User Groups	• Allows users to manage groups of other users. For example to define a group of “support” users to receive reminders from tickets.
VOIP	
Access	• Allows access to the “VOIP” section

Fig. 3.4-5: User Rights Definitions

Too add a new user in SIMPLer you must fill out the details requested as per fig. 3.4-3 and fig. 3.3-4 above. Once you are happy that all is set correctly, you can click **add** from the **user details** section and the log in credentials will be sent to the user in question. See fig. 3.4-6.

Fig. 3.4-6: Add a new User

User rights templates can be added on the settings tab by clicking on **add a user rights template** in the general section as per fig. 3.4-7 or by setting a user as a template as described in point 3 of fig. 3.4-3.

Fig. 3.4-7: Add User Rights Template

ANNEX A: REFERENCES

A.1 DOCUMENT REFERENCES

06003 Azotel SIMPLer Billing Manual

06043 Azotel SIMPLer Operators Manual

07074 Azotel WIB-C Quick Start Guide

08005 Azotel SIMPLer Operator Support Procedure

A.2 LINK REFERENCES

[L1] http://www.azotel.com/

ANNEX B: DEFINITIONS AND ABBREVIATIONS

B.1 DEFINITIONS

B.2 ABBREVIATIONS

For the purposes of this document, the following abbreviations apply:

SIMPLer Azotel's integrated operators' platform

ANNEX C: CHANGE HISTORY

Date	Author	Subject/Comment	Old	New
23/10/09	ar	Original	000	001
11/11/09	oharej	Split out from “WIB-C Quick Start Guide”	001	002
12/11/09	ar	Updated images to be placed in-line	002	003
18/11/09	ar	Added manual installation process	003	004
26/07/10	keith	Emphasized and clarified the idea of an installer IP	004	005
20/06/11	oharej	Split out the WIB-C portions to separate doc	005	100
24/11/11	justyna	Updated screenshots	100	101
20/06/13	emma	Updated adding a user section	101	102
21/01/14	emma	Reviewed	102	200
03/11/17	emma	Updated Section 3.4	200	201