

# SapIP TIPS

## A SapIP needs to be moved from one account to another. What is the best way to transfer, and can

*You need this tip if you:*

A SAPIP90417 should be moved from an existing account. You need to move it to a new account.

The old account has: to keep:

Sensors—keep the same

Formulas—Keep the same

Charts—Keep the same

Existing Names and the existing formulas are imbedded into the “Custom Charts” keep THE SAME

You cant redo all the names, Therefore you must keep all the Existing Account SAPIP and

All the formulas identical!

### Inside this issue:

Take the SapIP to a new gateway. 1

Use the Gateway to re-name the SapIP. 1

Must rediscover the SAPIP 1

Must rediscover SAPIP at Agrisensors. 2-3

Copy the formulas to the new SAPIP , if replacing. 3

Older New SapIP in New account needs to have Custom chart formulas 3

No easy steps, update the graphs needs to be done. 3

The answer is yes! You must leave the old SapIP , formulas, sensor, and setup, and then create a new one (to a new account), or revise to a NEW ID and NAME to the sapIP if you are replacing a bad one.

(1) by over writing a new ID and SAPIP NAME. When replacing a SAP IP that was removed for repair etc.

2) to add a SAPIP with a new name ( for a new account) , add a 7 in front of the ID for 2017 . Recreate all the cable, sensors, group calc, location etc.

The screenshot shows the SAPIP configuration interface. On the left, the 'Info' tab is active, displaying fields for Device ID (SAPIP90417), Sapip Name (90417\_SF\_W), Gateway (Gate90042), Longitude (-119.62708), Latitude (36.37381), and Address. Below this is the 'Data Links' section with a 'Reports' folder containing three items: 'Sensor Report', '90417 SF (gal/day)', and 'Warmerdam SF (g/day)'. The 'Stats' section shows Battery (12.161), Delay Data (20), Signal (85), and Driver (V200.012). On the right, the 'Device Operations' tab is active, showing a 'Status' section with buttons for 'Get Sample Reading', 'Repeat Last Reading', 'Show Device Config', 'Start Logger', 'Stop Logger', 'Reboot Remote', 'Erase All Data', 'Update Date/Time', 'Data Reports', and 'Get Data from Device'. A table of device statistics is also visible, including Error (N), Num. Record (19157), Trigger Count (0), Status dtStamp (189), Status Date/Time (2015-11-30T07:49:52), Logging Enabled (checked), Net Active (checked), DC Config (112100000000854250N1708), AVRO (4264), AVRI (189), Battery (12161), Error Code (KKKKKKKKUK), and Start Record/End Record fields.

This is the prior SAPIP location; You can keep the OLD SapIP at Warmerdam, but you may now copy the formulas to the new location. There is no free lunch here. The new location needs to have new formulas, new sensors config, and new chart configuration, you cannot “drag” from the old account. We rename the new location with a “NEW” SapIP

2) In this example case, we can use the group formulas from the existing location, at the Gallo 90396-33N, because it is being replaced by the SapIP9(9)0417.

First go to the SapIP and rename the Device ID. From 90396 to 990417. Then change the SapIP Name:

The screenshot shows the SAPIP configuration interface after updates. The 'Info' tab is active, displaying fields for Device ID (SAPIP990417), Sapip Name (990417\_33N), Gateway (Gate90137V), Longitude (-121.12183), Latitude (38.29197), and Address. Below this is the 'Data Links' section with a 'Reports' folder containing one item: 'Reports'. The 'Stats' section shows Battery (13.981), Delay Data (15), Signal (90), and Driver (V200.012). On the right, the 'Device Operations' tab is active, showing a 'Status' section with buttons for 'Get Sample Reading', 'Repeat Last Reading', 'Show Device Config', 'Start Logger', 'Stop Logger', 'Reboot Remote', 'Erase All Data', 'Update Date/Time', 'Data Reports', and 'Get Data from Device'. A table of device statistics is also visible, including Error (N), Num. Record (2776), Trigger Count (0), Status dtStamp (60), Status Date/Time (2016-08-04T12:13:13), Logging Enabled (checked), Net Active (checked), DC Config (112100000000854300N1708), AVRO (4344), AVRI (60), Battery (13981), Error Code (KKKKKKKKUK), and Start Record/End Record fields.

Create and move to a new account.

- 1) Use ADD SAPIP in the MANAGER page.
- 2) Assign to the new account, assign to the gate at the sire.
- 3) Copy location to the SAPIP.
- 4) Create the Channel Config save it (it gives an error since we are not comm yet)
- 5) Assign new sensor to the SAPIP for inventory. If you are reusing from a previous account, create a new Sensor using the xxxxB in the serial number... Then save to the new account name.. See Below.
- 6) Copy Group formulas from the "model SAPIP" ( Usually the Groups from DYNAMAX RANCH)
- 7) Copy Charts from the Dynamax Ranch, to the new SapIP, renaming the chart names to new client.
- 8) In any case that there is a CUSTOM chart, the new SAPIP name must be reapplied in the CUSTOM creation.

Therefore the old account has all information intact, sensors, groups, and custom charts intact.

The screenshot shows the SAPIP Manager interface. On the left, the 'Info' section contains fields for Device ID (SAPIP790670), Sapip Name (790670\_SF), Gateway (Gate90116C), Longitude (-120.38388), Latitude (37.05363), and Address. Below these are 'Save', 'Cancel', and 'Discover Devices' buttons. The 'Data Links' section shows a folder icon and 'Reports'. The 'Stats' section shows 'Battery: Battery'. On the right, the 'Calculations' table is visible, listing various sensors and formulas with their abbreviations, descriptions, and order numbers.

Select	Abbreviation	Description	Order
<input type="checkbox"/>	S1GFACC	Sensor 1 SF Almonds	1
<input type="checkbox"/>	S2GFACC	Sensor 2 SF almonds	2
<input type="checkbox"/>	Almonds_SF_Tgal_Tree1	Sap flow S1 scaled ...	3
<input type="checkbox"/>	Almonds_SF_Tgal_Tree2	Sap flow S2 scaled ...	4
<input type="checkbox"/>	Almonds_SF_Tgal	Sap flow S1 S2 scal...	5
<input type="checkbox"/>	Weth188_ETo	ET mm	6
<input type="checkbox"/>	Weth188_XET_Acc	Accum ET	7
<input type="checkbox"/>	Almonds_Site_SF_Daily_Tgal	Sap flow S1 S2 scal...	8
<input type="checkbox"/>	Vbatt_Almonds	Battery Voltage	9
<input type="checkbox"/>	Almonds_SF_Weekly_Tgal	Sap flow S1 S2 scal...	10
<input type="checkbox"/>	Almonds_SF_Monthly_Tgal	Sap flow S1 S2 scal...	11
<input type="checkbox"/>	Almonds_SF_Season_Tgal	Sap flow S1 S2 scal...	12
<input type="checkbox"/>	ETo_Cimis188_in	ETo_Cimis188_in	13
<input type="checkbox"/>	Almonds_Site_SF_Tmm	Sap Flow in mm/area	14
<input type="checkbox"/>	Ks_Ratio_Almonds	SF mm divided by E...	15

Sensor Inventory								
Account: Ash Slough Farms								
ID	Sensor ID	Sensor Type	Ch Index	Size	Serial Number	Device	Account	Date Added
20777	SGEX25-152507...	SGEX	2	25	152507	790670_SF	Ash Slough Farms	03/15/2017
20780	SGEX25-152507...	SGEX	1	25	152507B		Ash Slough Farms	03/21/2017
20776	SGEX25-163181...	SGEX	1	25	163181	790670_SF	Ash Slough Farms	03/15/2017
20781	SGEX25-163181...	SGEX	2	25	163181B		Ash Slough Farms	03/21/2017

Three of next methods will work to change the Node ID of the Digi Radio:

1) Use the Gateway to rename the Node ID of SappIP:

2) Enter IDIGI, and find the gate.

A) Make sure the Gateway discovers the old device:

B) Refresh the device after finding the SapIP

C) Go to the Node Identifier and change the name add a "7" for 2017 changes to 79xxxx:

D) Save the change, this will be permanent change.

2) You may log onto the Gateway with the crossover cable or on the LAN, or to IDIGI

A) Follow the same procedure as above. (permanent Change).

3) You will need to reboot the Gateway, which will discard the old SaPIP Name ID, and then reregister the new name and ID.

0383)

#### Settings

(MT)	Broadcast retries:	3
(NN)	Network delay slots:	3
(NI)	Node identifier:	SAPIP990383
(RO)	Packetization timeout:	3 chars
(ID)	PAN identifier:	0x510
(PL)	Transmit power level:	0
(PR)	Pull-up resistor enable:	0x3f7f
(M0)	PWM0 output level:	0
(M1)	PWM1 output level:	0
(RP)	RSSI PWM timer:	40 x 100 msec

3) If you are in the Field or in the LAB, and would like to use the SapIP command lines with Teraterm, there are several added steps:

A) Enter the command mode (\*\*\*), Stop the Logger, and enter the IDIGI command AT mode (++++)

B) ATNI to See the existing SapIP number:

C) ATNI SAPIP790417 - Then this will enter the new Node ID>

D) ATWR - You will need to make this permanent with ATWR.

E) Exit, and turn the module off.

F) Power on and then check the module has the correct value, using the ATNI ID.

Now the Gateway will need to be rebooted.

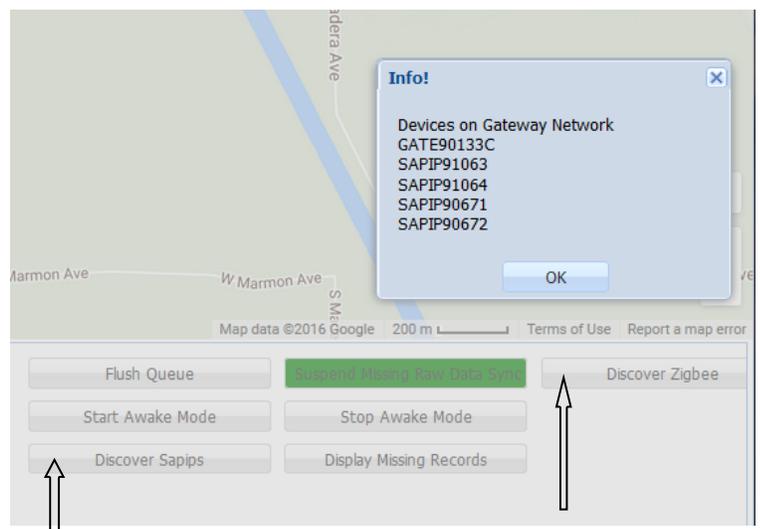
Next is to check and register the changes to the Web Site, and communicate with the SaPIP

A) Reboot the GATE, then Check the web site on the GATE to see if your new device is registered on the gateway:

B) You may discover SapIP if it has not been listed for 5 minutes.

C) If Listed your new SapIP, you can go the SAPIP control page, and

D) Enter the new Mac address, and start talking to the Device.



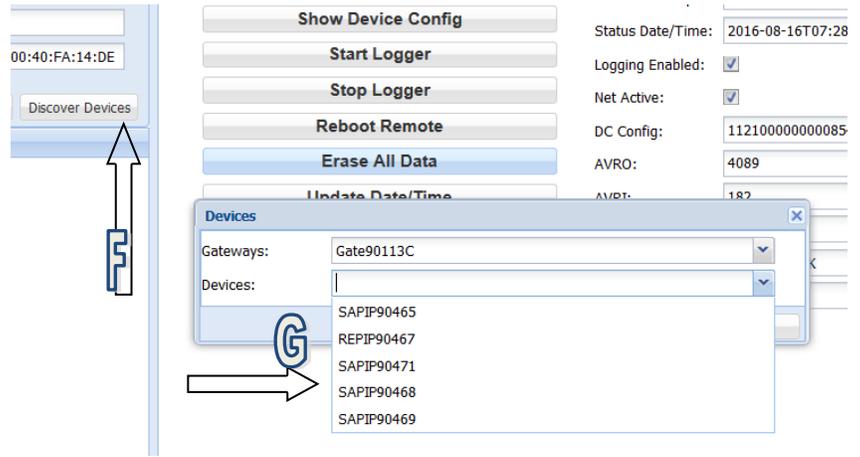
E) Enter the device operations,

F) Click the Discover devices, and pick the gateway in use

G) Choose the device and click select, which should enter the Mac address into the "Address" locations

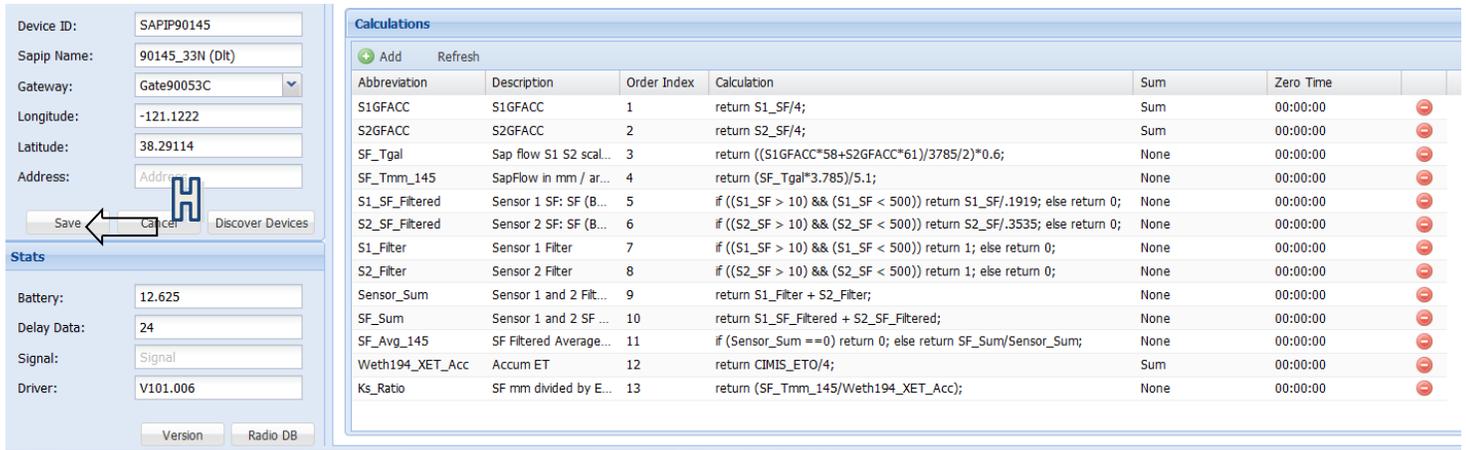
H) When all is done, click Save.

I) On this page you will need to start over by choosing the Gateway, and then select the device, actually refreshing the latest data.

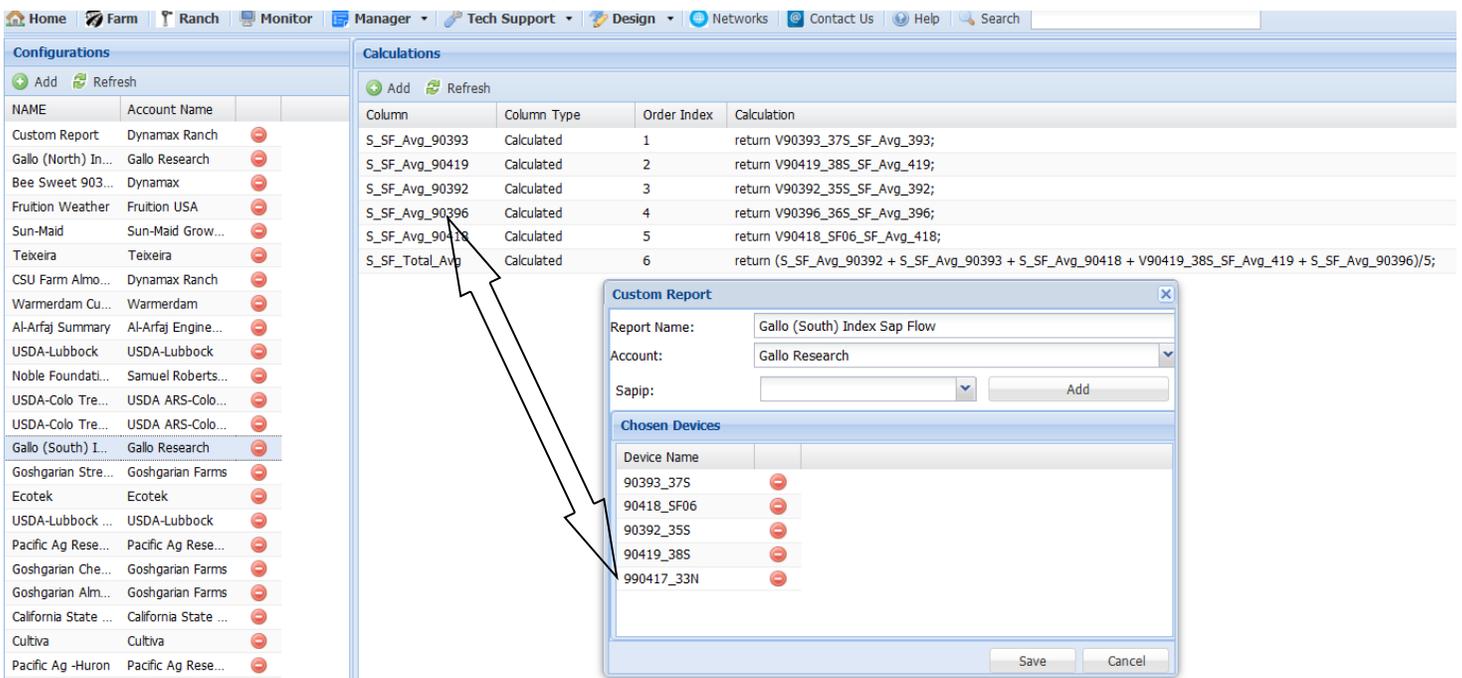


Then at this point you can interact with SAPIP, set the date time, test it and start the logger.

All group calculation that worked before will still work, however charts will use the new SapIP



All CUSTOM CHARTS that use the new SapIP name will need to be switched over to 990417.



When new SapIP is changed from a version “D” to a version “E”, typically the new SapIP has a new number that corresponds to the SAPIP with a higher serial number.

In this fashion, 1) if the previous SAPIP should be kept “alive with real time data, 2) the new SaPIP has a new setup, new groups, and new custom graphs.