

NextCentury Third Party Upgrade Guide and Checklist

This document outlines the upgrade process of incorporating Third Party hardware into the NextCentury Data Gathering System (DGS). The NextCentury DGS can process the data from Third Party systems equipped with either FA or Echostream devices.

1 | Required Equipment and Documents

1. The most recent Tapwatch file for the property (Provided by Billing/Management Company).
2. NextCentury Third Party Cable (6 feet length).
3. NextCentury DGS equipment (Gateway, Repeaters, Transceivers).
4. Third Party Receiver (FA/Echostream).

2 | Property Creation

1. Log into nextcenturymeters.com using your username and password.
2. Click on the appropriate Property Management Company. If the property has already been created, move onto the Property Layout Set-up. Otherwise, click on the “+ New Property” button.
3. Enter the name and address of the property and click “Next”.
4. A screen will prompt you to enter the utility type. Do not enter any information here. The .CSV file you upload will contain the information required.
5. Click the “Finish” button to create the property.

3 | Property Layout Set-up

At this point, you will need to have all the NextCentury Equipment on hand for the property.

Equipment needed: Gateway, Repeaters (required if installing NextCentury Transceivers), any Transceivers that will replace faulty Third Party transmitters, bar code scanner (recommended, but not essential), the property’s Tapwatch .CSV file. The .CSV file may need to be altered to ensure the upload process runs properly. There are six

column headers that **must be present** for the upload to function. There can be no missing data in the .CSV file. All cells must have data in order for the upload to work. Reference the tables below for the proper column headers, utility, and unit values.

Standard Column Headers

Column Title	Acceptable Alternatives
Building	Bldg, Bld, Building
Unit	Apt, Unit
Serial Number	Tx ID, TXID, Serial Number
Utility	Utility, Util
Units	Units
Multiplier	CF, Multiplier

Supplementary Column Headers

Column Title	Acceptable Alternatives
IMC	IMC
Meter ID	Meter
Notes	Notes

Utility/Units Values

Column	Values
Utility	Cold Water, Hot Water, All Water, Gas, Electric, Run Time
Units	Gallons, Liters, Cubic Feet, Cubic Yards, kWhs, Whs, Hours, Minutes, Seconds

Note: When using a Water Utility, you must specify whether it is Cold, Hot, or All Water in the Utility Column.

3.1 – Uploading a .CSV File

1. Look at the attached documents (Attachment 1 & 2) for an example Tapwatch file before and after editing. Once the .CSV file has been modified and double checked for any missing information, you are ready to upload the file.
2. From the properties Layout screen, click on the “Upload .CSV” button. You can choose the file from your Documents Folder or drag and drop the file from your Desktop. The Uploader will create a preview of the Property Layout.
3. To continue, click the “Upload” button. A pop-up message will appear stating that uploading this file will replace any data currently on the property. Click “Confirm Upload” to continue. Depending on the size of the property, it may take some time for the upload process to finish.
4. If the .CSV file is invalid, the upload process will cease. Review the file for any errors and try again.
5. When the upload is complete, the Property Layout will show up in the Layout Tab.

3.2 – Programming Transceivers

1. It is recommended that the NextCentury Transceivers that are replacing the non-functioning Third Party Transmitters be labeled before programming them into the web portal.
2. From the Layout Tab, click “Start Programming”. Locate the faulty Transmitter serial numbers and delete them from the cells. Scan or manually enter the serial number of the NextCentury Transceiver into the appropriate unit’s cell.
3. Click “Finish Programming” when you have completed the serial number swap-out.

3.3 – Programming Repeaters

1. Click on “+ Add Repeater” button above the Transceiver information, or click “Add” in the Repeater section of the Layout Tab below the Transceiver information.
2. Enter the serial number of the NextCentury Repeater and add any notes or update the location if known.
3. Click “Save” to continue.
4. Repeat process for additional Repeaters.
5. The process is the same for programming Third Party Repeaters

3.3 – Programming a Gateway

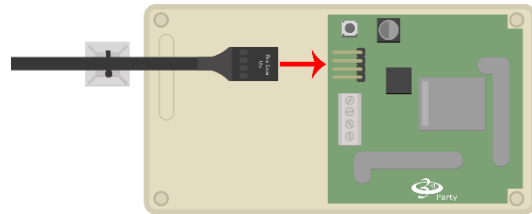
1. From the Property’s main page, click on the “Add Gateway” button.
2. Enter the Gateway’s serial number.
3. Enter a four-digit PIN. This will lock the Gateway’s touch screen until the PIN is entered.
4. Click “Save” to finish.

4 | Equipment Installation

Please refer to the NextCentury Equipment Installation Tutorials located at nextcenturymeters.com/training for guidance on how to properly install each piece of the Data Gathering System. The following will explain how to attach the Third Party Receiver to the NextCentury Gateway.

1. Locate the Third Party RDL/DCC and Receiver. Discard the RDL/DCC and any wiring. Keep the Receiver.
 - a. If this location is suitable to house the Gateway (access to power and internet), install it there. If not, find the best location to house the Gateway and Receiver.
2. Once the Gateway and Receiver are installed next to one another, open the Receiver and connect

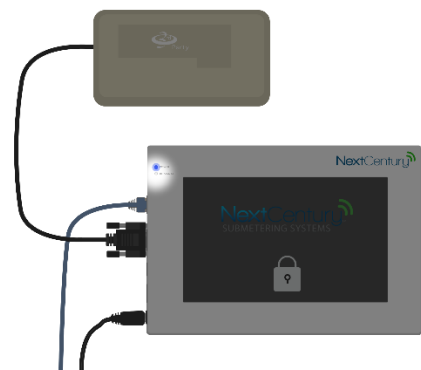
the end of the Third Party Cable onto the four pins of the Receiver. Use the attached 3M tape to hold the cable in place.



3. Connect the other end of the Third Party Cable to the Gateway.



4. The Gateways status LED will blink red when it receives messages from Third Party devices.



5. The Upgrade is now complete. The Gateway will now accept all signals from Third Party devices.



Attachment 1
Tapwatch File Example (Original)

Building Name	Apt Unit#	Meter ID	Tx ID	Utility	Conn	Status	IMC	Count	CF	Total Flow
A	101	19021636	123456789	Water	All	I E	0	0	10	0
A	102	19021585	123456790	Water	All	I E	465	0	10	4650
A	201	19021616	123456791	Water	All	I E	0	0	10	0
A	202	19021598	123456792	Water	All	I E	6	0	10	60
A	301	19021557	123456793	Water	All	I E	18641	0	10	186410
B	101	19021537	123456794	Water	All	OK	6062	37463	10	435250
B	102	19021465	123456795	Water	All	OK	1634	72585	10	742190
B	201	19021524	123456796	Water	All	I E	24806	0	10	248060
B	202	19021556	123456797	Water	All	I E	2874	0	10	28740
B	301	19021559	123456798	Water	All	OK	1195	51016	10	522110
C	101	19021575	123456799	Water	All	OK	17482	41020	10	585020
C	102	19021467	123456800	Water	All	I E	1	0	10	10
C	103	19021548	123456801	Water	All	I E	0	0	10	0
C	104	19021529	123456802	Water	All	OK	12673	37555	10	502280
C	201	19021648	123456803	Water	All	OK	11254	30178	10	414320
C	202	19021608	123456804	Water	All	B E	0	64648	10	646480
C	203	19021622	123456805	Water	All	I E	202	0	10	2020
C	204	19021583	123456806	Water	All	OK	1275	66683	10	679580
C	301	19021595	123456807	Water	All	I E	0	0	10	0
C	302	19021576	123456808	Water	All	I E	20724	0	10	207240
C	303	19021590	123456809	Water	All	I E	0	0	10	0
C	304	19021594	123456810	Water	All	I E	0	0	10	0
D	101	19021581	123456811	Water	All	OK	9873	44432	10	543050
D	102	19021589	123456812	Water	All	I E	16027	0	10	160270
D	103	19021142	123456813	Water	All	OK	5	49611	10	496160
D	104	19021212	123456814	Water	All	OK	5	22355	10	223600
D	201	19021373	123456815	Water	All	I E	2	0	10	20
D	202	19021313	123456816	Water	All	OK	8	22543	10	225510
D	203	19021367	123456817	Water	All	I E	0	0	10	0
D	204	19021419	123456818	Water	All	I E	352	0	10	3520
D	301	19021385	123456819	Water	All	I E	22	0	10	220
D	302	19021381	123456820	Water	All	I E	7	0	10	70
D	303	19021323	123456821	Water	All	I E	1	0	10	10
D	304	19021398	123456822	Water	All	I E	3	0	10	30

Information needed from the TapWatch file

Attachment 2
Tapwatch File Example (Modified)

Building	Unit	Serial Number	Utility	Units	Multiplier	IMC	Meter ID	Notes
A	101	123456789	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
A	102	123456790	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
A	201	123456791	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
A	202	123456792	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
A	301	123456793	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
B	101	123456794	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
B	102	123456795	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
B	201	123456796	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
B	202	123456797	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
B	301	123456798	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	101	123456799	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	102	123456800	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	103	123456801	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	104	123456802	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	201	123456803	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	202	123456804	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	203	123456805	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	204	123456806	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	301	123456807	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	302	123456808	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	303	123456809	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
C	304	123456810	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	101	123456811	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	102	123456812	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	103	123456813	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	104	123456814	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	201	123456815	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	202	123456816	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	203	123456817	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	204	123456818	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	301	123456819	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	302	123456820	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	303	123456821	All Water	Gallons	10	*Optional*	*Optional*	*Optional*
D	304	123456822	All Water	Gallons	10	*Optional*	*Optional*	*Optional*

 Mandatory Column Headers
 New Columns not found in TapWatch file (must be present for NextCentury Uploader to function)

Attachment 3 Third Party Checklists

Items needed to accomplish Property Layout/Equipment Programming

- Completed appropriate NextCentury Training (WebEx/In-Person/Tutorials).
- Obtain NextCentury account access for desired Property.
- Property Name and Address (needed for property creation).
- Most Recent Tapwatch File (modified to match format in example).
- All NextCentury Equipment (Gateway, Repeaters, Transceivers).
- Complete Equipment Programming by following Tutorials.

Items needed to accomplish Equipment Installation (complete before install begins)

- Completed appropriate NextCentury Training (WebEx/In-Person/Tutorials).
- NextCentury account access for desired Property.
- Download the NextCentury Mobile App.
- Verify the Property has Internet and power at Gateway location.
- Verify the Property has power at Repeater locations.
- Verify the Meter type (reference NextCentury Meter Compatibility sheet).
- All NextCentury Equipment (Gateway, Repeaters, Labeled Transceivers).
- NextCentury Third Party Cable.
- Functioning Third Party Receiver (FA/Echostream).

Attachment 4 Third Party Checklists

Items needed to *complete* Equipment Installation (complete before leaving property)

- Completed appropriate NextCentury Training (WebEx/In-Person/Tutorials).
- Gateway powered on and connected to the Internet.
- Repeaters installed and powered on (GPS locations and notes recorded).
- Transceivers installed (meter wires connected securely).
- Test Connect button pressed for each installed Transceiver.
- Green LED light returns from each installed Transceiver.
- Each unit's IMR recorded or uploaded via the NextCentury Mobile App.
- Verify all equipment is online and activated via Mobile App or web-portal.
- Set up any desired Alert Settings and Report Templates.