

# Devices and Hardware Profiles in the enCloud™ Management System

Incore Networks' cloud management system, enCloud™, provides management of your connected Encore devices via a web portal. Using a web browser, tablet, or smartphone, you can gain access to enCloud from anywhere. The enCloud management system manages Encore Networks' EN-1000™, EN-2000™, and EN-4000™ routers.

See the following documents for additional information to set up your enCloud account:

- Account Registration and Log-In for the enCloud™ Management System
- Developing Accounts in the enCloud™ Management System
- Use Cases and Groups in the enCloud™ Management System.
- Establishing Users and Contacts for the enCloud™ Management System.
- Developing Rules for the enCloud™ Management System

See the following sections in this document:

- Section 4.1, Reviewing Device Profiles
- Section 4.2, Adding Devices to the Distributor Account
- Section 4.3, Assigning Devices to Customer Accounts
- Section 4.4, The Device Detail Screen

## 4.1 Reviewing Device Profiles

Determine which device profiles each customer account will include.

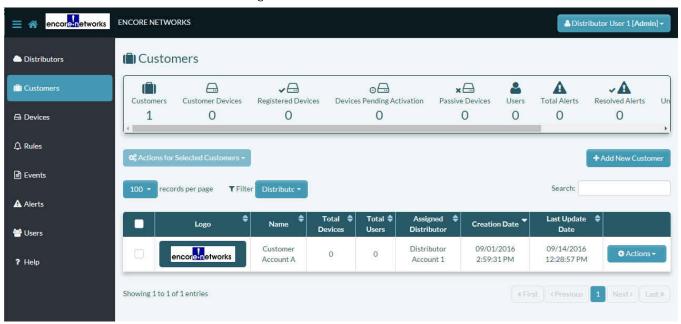
**Note:** In order to see device profiles, the distributor account must contain at least one customer account. If you have not yet added a customer account to your distributor account, see the document *Developing Accounts in the enCloud*  $^{\text{TM}}$  *Management System.* 

enCloud contains profiles for the EN-1000, EN-2000, and EN-4000 routers. To view the device profiles, do the following:

1 If you are at a customer-account level in enCloud, go to step 4.

- 2 If you are at the distributor-account level, select **Customers** in the enCloud menu (along the left side of the screen).
  - » The Table of Customers is displayed (Figure 4-1).

Figure 4-1. Table of Customers



- 3 Select a customer in the Table of Customers.
  - » The customer's Table of Use Cases is displayed (Figure 4-2).

encore networks Customer: Customer Acct A **ூ** Go Back to Distributor **S** Use Cases & Use Cases · × BVA a×A Groups Online Devices Offline Devices **Device Events** Solved Device Alerts Unsolved Device Alerts Users Groups 0 0 0 0 □ Devices **△** Rules Events Search: A Alerts **Last Update Date Creation Date** Description 🕏 Have Access? **W** Users 09/01/2016 5:27:02 PM 09/01/2016 5:27:02 PM Use Case Alpha Contacts Showing 1 to 1 of 1 entries **器 HW Profiles** ? Help

Figure 4-2. Table of Use Cases

- 4 Select **HW Profiles** in the enCloud menu (along the left side of the screen).
  - » The Table of enCloud Hardware Profiles is displayed (Figure 4-3).

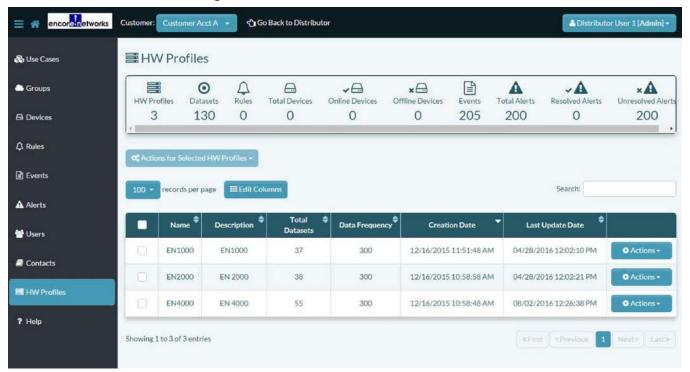


Figure 4-3. Table of enCloud Hardware Profiles

- 5 To review a hardware profile, select a profile in the table. (This example selects the profile **EN1000**.)
  - » The Overview of the Selected Hardware Profile is displayed (Figure 4-4).

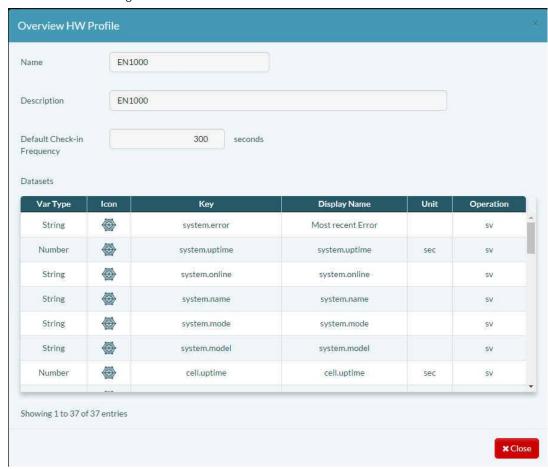


Figure 4-4. Overview of the Selected Hardware Profile

The profile overview lists the keys (also called sensors) that a device with this profile can monitor and report to enCloud when one or more rules are developed for a device or profile. The scrolling list (accessible at the right side of the panel) allows you to view more sensors.

**Note**: For information on sensors, see the document *Developing Rules for the*  $enCloud^{TM}$  *Management System*.

You can also use enCloud to update firmware and to upload custom configurations. See the following documents.

- Using the enCloud™ Management System to Update Firmware
- Setting Up a Device to Send Data to enCloud™

# 4.2 Adding Devices to the Distributor Account

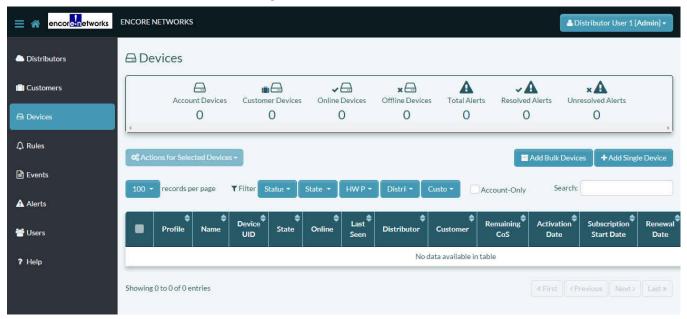
When you log into enCloud, the first screen displayed is usually the Table of Distributor Accounts.

**Note**: You can choose a different screen to display after log-in. To do so, see the document Settings for the enCloud<sup>TM</sup> Management System.

To add one or more devices to the distributor inventory, do the following:

- 1 Make sure you are at the distributor level. Then select **Devices** in the enCloud menu (along the left side of the screen).
  - » The distributor account's Table of Devices is displayed (Figure 4-5).

Figure 4-5. Table of Devices



- 2 On the screen for the Table of Devices, select one of the following buttons above the right side of the table:
  - The button to Add Bulk Devices
  - » The Panel to Add Devices in Bulk is displayed (Figure 4-6). Go to Section 4.2.1, Adding Several Devices (in Bulk) to the Distributor Account, on page 6.

Figure 4-6. Panel to Add Devices in Bulk



- The button to Add Single Device
- » The Panel to Add a Single Device is displayed (Figure 4-7). Go to Section 4.2.2, *Adding a Single Device to the Distributor Account*, on page 13.

Add New Device

Name

Description

Device
UID ①

Full
Address
①

HW EN1000 Profile

Distributor Distributor Acc 
Customer No Customer -

Figure 4-7. Panel to Add a Single Device

## 4.2.1 Adding Several Devices (in Bulk) to the Distributor Account

On the Panel to Add Devices in Bulk (recall Figure 4-6), note the slide tab for the field to Change Type. The default shows the input type as a CSV (comma-separated variables) file.

The slide tab uses toggle selection. You can select the slide tab to show **Manual** input (Figure 4-8).

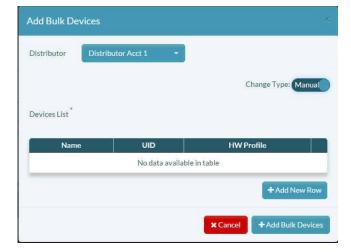


Figure 4-8. Panel to Add Devices in Bulk (Using Manual Input)

- 3 Do one of the following to add devices in bulk:
  - a To use a file to load device information, do both of the following:
    - Read Section 4.2.1.1, The CSV File, on page 7.
    - Then continue to Section 4.2.1.2, *Using a CSV Input File to Load Bulk Devices*, on page 8.
  - b To type device information (manual input), continue to Section 4.2.1.3, *Using Manual Input to Load Bulk Devices*, on page 11.

#### 4.2.1.1 The CSV File

A file in CSV format (comma-separated values, also called comma-delimited fields) for enCloud includes the following fields:

• HW (Hardware) Profile Name: EN1000, EN2000, or EN4000

**Note:** A profile name does not include a hyphen or a space.

- **UID** (**Unique Identifier**): The device's LAN MAC address, in IPv6 hexadecimal characters, without colons or other separators
- Device Name: A name that identifies the device. This name does not need to be unique.
- Location (optional): This geographic location will be used to position the site on an onscreen map.

**Caution:** Do not include a comma in the **Location** field. Because commas are used as field delimiters, a comma used in an entry (for example, between a city and state) will signal the end of the field, whether intended or not.

Table 4-1 shows some sample entries.

**HW Profile**  $UID^1$ **Device Name** Location (Optional) EN1000 00A0EBxxxxxx Bulkload 13 EN1000 00A0EBxxxxxx Bulkload 14 13090 Mercy Street Herndon VA 20151 EN1000 00A0EBxxxxxx Bulkload 15 New York City EN2000 00A0EBxxxxxx Bulkload 16 Alexandria Virginia 00A0EBxxxxxx Bulkload 17 EN4000 EN4000 00A0EBxxxxxx Bulkload 18

Table 4-1. Sample CSV Table

Bulkload 19

Figure 4-9 shows the contents of the CSV file that loads the entries in Table 4-1.

Figure 4-9. Sample CSV File

HW Profile, UID, Device Name, Location (optional) 1,2

00A0EBxxxxxx

EN1000,00A0EBxxxxxx,Bulkload 13,

EN4000

EN1000,00A0EBxxxxxx,Bulkload 14,13090 Mercy Street Herndon VA 20151,

EN1000,00A0EBxxxxxx,Bulkload 15,New York City

EN2000,00A0EBxxxxxx,Bulkload 16,Alexandria Virginia

EN4000,00A0EBxxxxxx,Bulkload 17

EN4000,00A0EBxxxxxx,Bulkload 18,

EN4000,00A0EBxxxxxx,Bulkload 19,

- 1. enCloud ignores the first record of the CSV file. Use that line as a reminder for field headers.
- 2. Characters shown as "x" are placeholders for this figure's display. Type the full hexadecimal UID for each product.

In Figure 4-9, note that no space follows a comma delimiter. Note also that a record with no information for the final field (**Location**) may include or omit the final comma delimiter, and

<sup>1.</sup> Characters shown as "x" are placeholders for this table's display. Type the full hexadecimal UID for each product.

that one or more extra commas at the end of a line do not matter. However, the first three fields of each record must contain values, and the first two fields of each record have strict guidelines for values:

• The first field (HW Profile) must contain one of the following values:

EN1000

EN2000

EN4000

 The second field (UID) must contain valid hexadecimal values corresponding to the LAN MAC addresses of the devices you are registering on enCloud. (Those addresses begin with Encore Networks' identifier, 00A0EB.)

#### 4.2.1.2 Using a CSV Input File to Load Bulk Devices

1 In the Change Type field for the Panel to Add Devices in Bulk, select the slide tab, to show CSV input (Figure 4-10).

Figure 4-10. Panel to Add Devices in Bulk (Using a CSV Input File)



- 2 Then, in the Panel to Add Devices in Bulk (Using a CSV Input File), select the **Distributor** field.
  - » A dropdown list of distributor accounts is displayed (Figure 4-11).

Figure 4-11. Panel to Add Devices in Bulk: Select Distributor Account for Devices



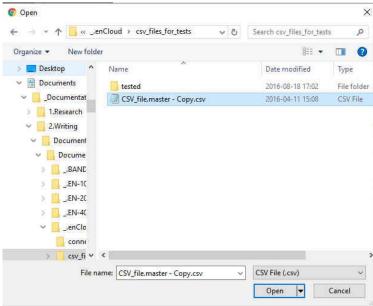
- 3 In the **Distributor** field's dropdown list, select the distributor account that will manage these devices.
  - » The selected distributor account is displayed (Figure 4-12).

Figure 4-12. Panel to Add Devices in Bulk (Using an Input File)



- 4 Then, in the Panel to Add Devices in Bulk, select **Browse** in the **CSV File** field (Figure 4-12).
  - » A window opens to select the CSV file that holds the device information.
- 5 Navigate to the folder that holds the CSV file, and select the CSV file to load (Figure 4-13).

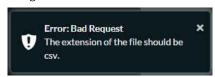
Figure 4-13. Identifying the CSV File to Add Devices in Bulk



Warning: The enCloud system accepts data only from files with the extension .csv.

Make sure you select a file with the extension .csv. If you load a file with any other extension, even if the file contents and formats are identical to those of the .csv file, the message in Figure 4-14 will be displayed.

Figure 4-14. Message: The Data File Must Use the Extension .csv



» When you select a CSV file, the panel display lists the records in the CSV file (Figure 4-15).

Note: If the file is large, a scroll bar is displayed to the right of the list.

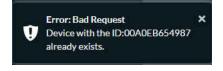


Figure 4-15. Display of CSV File Data

6 To load the devices into the selected distributor account, select the button to Add Bulk Devices.

**Warning:** If there is a problem with a device's UID, or if a device has already been loaded into enCloud, an error message is displayed (similar to Figure 4-16).

Figure 4-16. Error Message: Product UID Already Exists in enCloud Registry



- » If there is a problem, the file is rejected.
- 7 Find out how to resolve the issue. For example, if a UID is a duplicate, find out what the device's correct UID is. The open the CSV file and correct the UID. Then repeat step 6.
  - » The devices are loaded into the distributor account. The distributor account's Table of Devices is redisplayed (Figure 4-17), including the new devices.
- **8** Go to Section 4.3, Assigning Devices to Customer Accounts, on page 15.

ENCORE NETWORKS **△** Devices Distributors A mA A VA ×A VA ×A Customers Add Bulk Devices **△** Rules 10 - records per page ▼ Filter Sta-Account-Only Events Name Online Distributor of Start Date A Alerts Bulkload Distributor 09/01/2016 **Users** EN4000 00A0EB123800 PASSIVE 17 4:05:25 PM Acct 1 ? Help Bulkload Distributor 09/01/2016 EN2000 00A0EB987646 PASSIVE Actions Acct 1 4:05:25 PM Bulkload Distributor 09/01/2016 00A0EB789655 PASSIVE EN1000 4:05:25 PM Acct 1 Distributor 09/01/2016 Bulkload EN1000 00A0EB654988 PASSIVE Acct 1 4:05:25 PM Bulkload 09/01/2016 EN1000 00A0EB456791 PASSIVE Actions Acct 1 4:05:25 PM Bulkload Distributor 09/01/2016 EN1000 00A0EB456790 PASSIVE Acct 1 4:05:25 PM Showing 1 to 6 of 6 entries 1 Next> Last>

Figure 4-17. Table of Devices

#### 4.2.1.3 Using Manual Input to Load Bulk Devices

1 In the Change Type field on the Panel to Add Devices in Bulk, select the slide tab, to show Manual input (Figure 4-18).

**Note**: The panel includes an empty table with columns for device **Name**, unique ID (**UID**), and hardware profile (**HW Profile**).

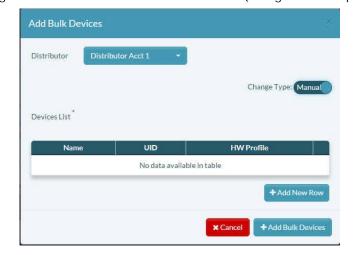


Figure 4-18. Panel to Add Devices in Bulk (Using Manual Input)

- 2 Below the right side of the table, select the button to Add New Row.
  - » A blank row is added to the panel's table (Figure 4-19).

Add Bulk Devices

Distributor Distributor Account 1 •

Change Type: Manua

Devices List \*

Name UID HW Profile

EN1000 • •

+ Add New Row

\*\*Cancel + Add Bulk Devices

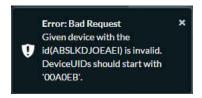
Figure 4-19. Panel to Add Devices in Bulk (Using Manual Input, Blank Row Added)

In the blank row, type a **Name** for the device, type the device's **UID**, and select the **HW Profile** for the device.

**Note:** The UID is the hexadecimal number for the device's LAN MAC address. The UID begins with 00A0EB, identifying the device as a product from Encore Networks, Inc.

- 4 Then do one of the following:
  - a If there is another device to add, select the button to Add New Row.
    - » A new row is added to the table. Repeat step 3.
  - b If you have finished adding devices, select the button to Add Bulk Devices.
    - » If a device has an invalid UID, a message similar to Figure 4-20 is displayed.

Figure 4-20. Invalid Device UID



- » When no device has an error, the devices are added to the Table of Devices. (Figure 4-21).
- 5 Go to Section 4.3, Assigning Devices to Customer Accounts, on page 15.

ENCORE NETWORKS □ Devices Distributors A **m**= ×A A VA VA ×A Customers Add Bulk Devices **△** Rules 10 - records per page ▼ Filter Sta-Account-Only Events Name State Online Distributor of Start Date A Alerts Bulkload Distributor 09/01/2016 🖶 Users EN4000 00A0EB123800 PASSIVE 17 4:05:25 PM Acct 1 ? Help Bulkload Distributor 09/01/2016 EN2000 00A0EB987646 PASSIVE Actions Acct 1 4:05:25 PM 09/01/2016 Bulkload Distributor 00A0EB789655 PASSIVE EN1000 4:05:25 PM Acct 1 09/01/2016 Bulkload Distributor EN1000 00A0EB654988 PASSIVE Acct 1 4:05:25 PM Bulkload Distributor 09/01/2016 EN1000 00A0EB456791 PASSIVE Actions Acct 1 4:05:25 PM Bulkload Distributor 09/01/2016 EN1000 00A0EB456790 PASSIVE Acct 1 4:05:25 PM Showing 1 to 6 of 6 entries 1 Next> Last>

Figure 4-21. Table of Devices

## 4.2.2 Adding a Single Device to the Distributor Account

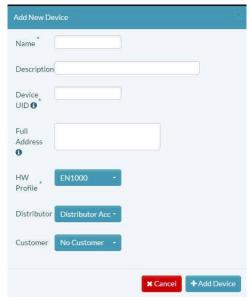


Figure 4-22. Panel to Add a Single Device

- 1 On the Panel to Add a Single Device (Figure 4-22), type the following information for the device.
  - The device Name
  - (Optional) A Description of the device or its purpose
  - The device's unique identifier (Device UID). This is the device's hexadecimal LAN MAC address.

**Note:** The UID begins with 00A0EB, identifying the device as a product from Encore Networks, Inc.

 (Optional) The Full Address (street address or other geographic address) where the device is located. (Commas may be used in this field—for example, between city and state.)

**Note:** This information is used for mapping in some enCloud displays.

2 Select the panel's **HW Profile** field and, in the dropdown list, select the device's hardware profile (Figure 4-23).

Add New Device

Name\*

Description

Device UID ①

Full Address
①

HW Forfile\*

Figure 4-23. Panel to Add a Single Device: Select Hardware Profile

3 Select the panel's **Distributor** field and, in the dropdown list, select the distributor account for this device.

EN1000

EN4000

**4** (Optional) Select the panel's **Customer** field and, in the dropdown list, select the customer account. (Or leave the setting as **No Customer**.)

Note: You may assign the device to a customer now or later.

Distributor

Customer

If you wish to assign devices only after use cases have been developed for the customer account (thereby saving some steps), see the document  $Use\ Cases\ and\ Groups\ in\ the\ enCloud^{tm}\ Management\ System.$ 

When you have finished entering the device's information, select the button to **Add Device**.

**Warning:** If the system finds a problem, it will display an error message. Figure 4-24 indicates that the letters in that hexadecimal number were not capitalized. In that case, retype the information in the **Device UID** field, with capital letters.

Figure 4-24. Message Requiring Capital Letters in Device UID

UIDs can include only uppercase letters and number without spaces.

» When the device information has been accepted, the distributor account's Table of Devices is redisplayed, with the new device (Figure 4-25). 6 Go to Section 4.3, Assigning Devices to Customer Accounts, on page 15.

encoranetworks ENCORENETWORKS □ Devices v □ × A ·A ×A Custom n 0 0 0 △ Rules Events ecords per page T Filter Users 00A0EBLMNOPQ ? Help 00A0EB104PHD 09/20/2016 3:53:05 PM 00A0EBCDEFGH Account 1 09/01/2016 4:05:25 PM PASSIVE 00A0EB123800 09/01/2016 4:05:25 PM EN2000 00A0EB987646 PASSIVE Account 1 EN1000 00A0EB789655 **PASSIVE** Account 1 4:05:25 PM Distributor 09/01/2016 EN1000 PASSIVE 00A0EB654988 Account 1 4:05:25 PM EN1000 00A0EB456791 PASSIVE Account 1 4:05:25 PM Distributor 09/01/2016 EN1000 00A0FR456790 PASSIVE «First «Previous 1 wing 1 to 9 of 9 entries

Figure 4-25. Table of Devices

# 4.3 Assigning Devices to Customer Accounts

The devices have been loaded into the distributor account but have not yet been assigned to customer accounts.

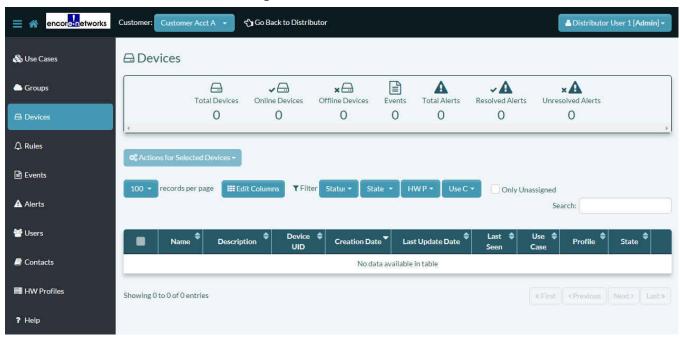
**Note**: If you wish to assign devices only after use cases have been developed for the customer account (thereby saving some steps), see the document *Use Cases and Groups in the enCloud*  $^{\text{TM}}$  *Management System*.

To see the devices in a customer account, do the following:

- 1 Make sure you are at the distributor level in enCloud.
- 2 Select Customers in the enCloud menu (along the left side of the screen).
  - » The distributor account's Table of Customer Accounts is displayed.
- 3 Select a customer in the table.
  - » The selected customer account's Table of Use Cases is displayed.
- 4 Select **Devices** in the enCloud menu (along the left side of the screen).
  - » The customer account's Table of Devices is displayed (Figure 4-26).

Note: In Figure 4-26, the Table of Devices is empty.

Figure 4-26. Table of Devices



To assign a device to a customer account, do the following:

- 1 Beside the navigation button (near the upper left corner of the screen, next to the logo for Encore Networks, Inc.), select **Go Back to Distributor**.
  - » The Table of Distributor Accounts is displayed (Figure 4-27).

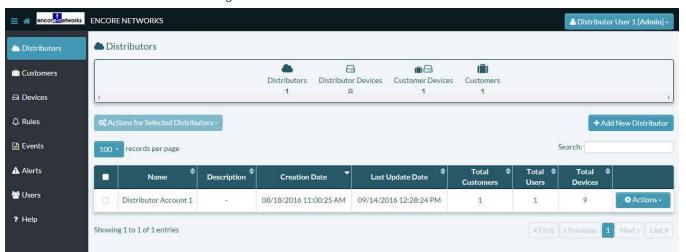


Figure 4-27. Table of Distributor Accounts

- 2 Select **Devices** in the enCloud menu (along the left side of the screen).
  - » The distributor account's Table of Devices is displayed (Figure 4-28).

ENCORE NETWORKS A Distributor User 1 [Admin] **⊟** Devices Distributors A 100 VA × A VA ×A no Doulene Customer: **△** Rules Search 10 records per page ▼ Filter Events Activation Creation Name Device UID State Online Distributor Custo of Date CoS Date Start Date Date A Alerts Bulkload Distributor 09/01/2016 Users EN4000 00A0EB123800 PASSIVE 17 Acct 1 4:05:25 PM ? Help 09/01/2016 Bulkload Distributor 00A0EB987646 PASSIVE EN2000 Distributor 09/01/2016 Bulkload EN1000 00A0EB789655 PASSIVE Actions 15 4:05:25 PM Acct 1 Bulkload Distributor 09/01/2016 EN1000 00A0EB654988 PASSIVE Acct 1 4:05:25 PM 09/01/2016 Bulkload Distributor EN1000 00A0EB456791 PASSIVE 12 4:05:25 PM Bulkload Distributor 09/01/2016 EN1000 00A0EB456790 PASSIVE 4:05:25 PM Acct 1 1 Next> Last> Showing 1 to 6 of 6 entries

Figure 4-28. Table of Devices

**3** Review the devices in the distributorship.

**Note:** Your distributorship might contain more than one customer account. A device can belong to only one customer account.

- **4** Do one of the following:
  - » To assign one device to a customer, see Section 4.3.1, Assigning a Single Device to a Customer Account, on page 17.
- 5 To assign two or more devices to a single customer, see Section 4.3.2, Assigning Two or More Devices to a Single Customer Account, on page 19.

# 4.3.1 Assigning a Single Device to a Customer Account

- 1 In the distributor's Table of Devices, use the **Device UID** to identify the device to assign to a customer. Select the **Actions** button at the right end of that device's row.
  - » The selected UID's Panel to Assign a Device is displayed (Figure 4-29).

Figure 4-29. Panel to Assign a Device



2 On the panel, select the **Customer** field and, in the dropdown list, select the customer account for the device (Figure 4-30).

Figure 4-30. Panel to Assign a Device: Select a Customer Account



3 Then, still on the panel, select the subscription period for the device (Figure 4-31).

Figure 4-31. Panel to Assign a Device: Select a Subscription Period



4 Then select the box to agree with the terms and conditions (Figure 4-32).

**Note:** Contact your Encore Networks, Inc., sales representative for a copy of the agreement.

Assign Selected Devices to
Customer

Customer

Customer Account A 

Cos 1 Year Subscription

Terms 
Agree with the terms and conditions

\*\*Cancel

Figure 4-32. Panel to Assign a Device: Agree to Contract

- 5 Then select the button to **Assign [Device] to Customer**.
  - » The device is assigned to the selected customer. The customer's Table of Devices now includes the added device (Figure 4-33).

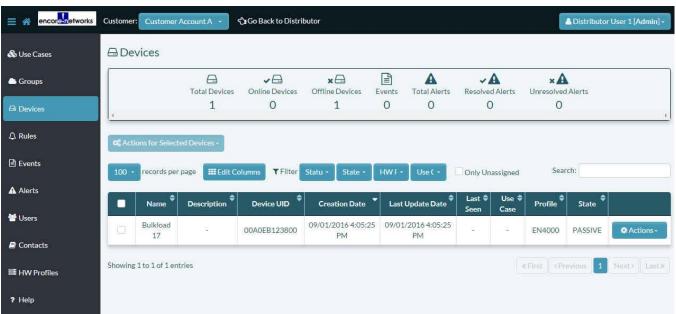


Figure 4-33. Table of Devices

**Note:** The distributor's Table of Devices will also show the new customer assignment for the device.

## 4.3.2 Assigning Two or More Devices to a Single Customer Account

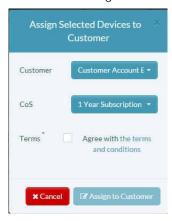
- 1 Check the box at the left end of each row for the devices you will assign to the same customer. (Use **Device UID**s to determine the devices to assign.)
- 2 Select the button for **Actions for Selected Devices** (above the left side of the table) and, in the dropdown list (Figure 4-34), select **Assign to Customer**.

Figure 4-34. Dropdown List for Actions Button (for Selected Devices)



» The Panel to Assign Selected Devices is displayed (Figure 4-35).

Figure 4-35. Panel to Assign Selected Devices



3 On the panel, select the **Customer** field and, in the dropdown list, select the customer account for the device (Figure 4-36).

Figure 4-36. Panel to Assign Selected Devices: Select a Customer Account



4 Then, still on the panel, select the subscription period for the device (Figure 4-37).

Assign Selected Devices to
Customer

Customer Customer Account A 

Cos 1 Year Subscription
1 Year Subscription
2 Years Subscription
3 Years Subscription

Figure 4-37. Panel to Assign Selected Devices: Select a Subscription Period

5 Then select the box to agree with the terms and conditions (Figure 4-38).

**Note:** Contact your Encore Networks, Inc., sales representative for a copy of the agreement.

Figure 4-38. Panel to Assign Selected Devices: Agree to Contract



- 6 Then select the button to Assign [Devices] to Customer.
  - » The devices are assigned to the selected customer. The customer's Table of Devices now includes the added devices (Figure 4-39).

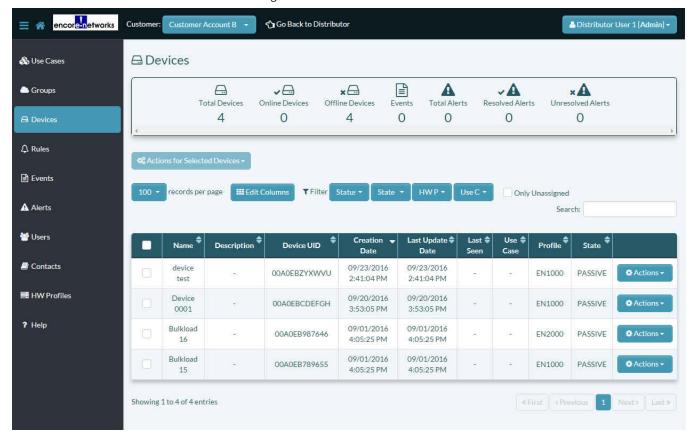


Figure 4-39. Table of Devices

**Note:** The distributor's Table of Devices will also show the new customer assignment for the devices.

### 4.4 The Device Detail Screen

- 1 To see detailed information for a device, select that device in the table of devices.
  - » A screen showing Detailed Information for a Selected Device is displayed (Figure 4-40).

**Note:** On the first viewing of the screen, you may wish to rearrange the display. Drag items into place. You can also set up a graph to monitor the device's activity. On the next viewing, the screen will display as you have arranged it.

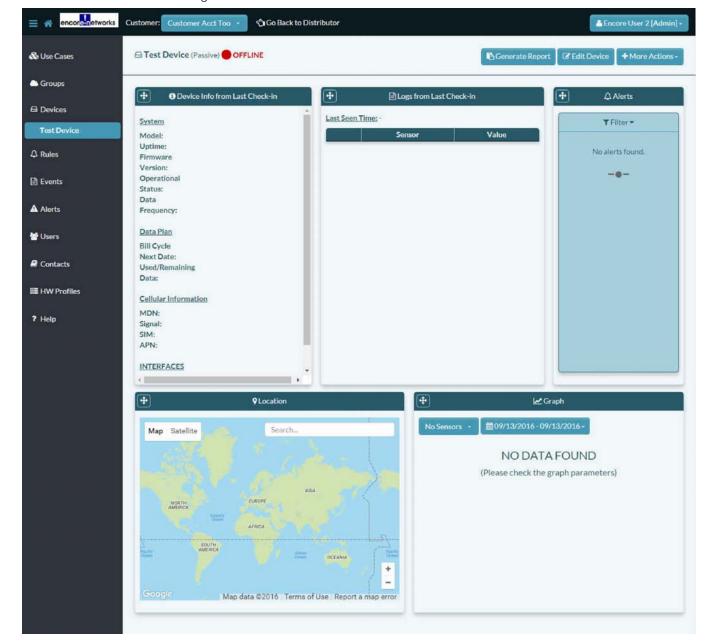


Figure 4-40. Detailed Information for a Selected Device

**Note**: You can also reach this detail screen from the Use Case Dashboard. For information, see Section 3.3, *Viewing the Use Case Dashboard*, in the document *Use Cases and Groups in the enCloud™ Management System*.

Figure 4-40 shows information for a passive device; there is no activity. Figure 4-41 shows information for device that has been activated. The device's activity is represented.

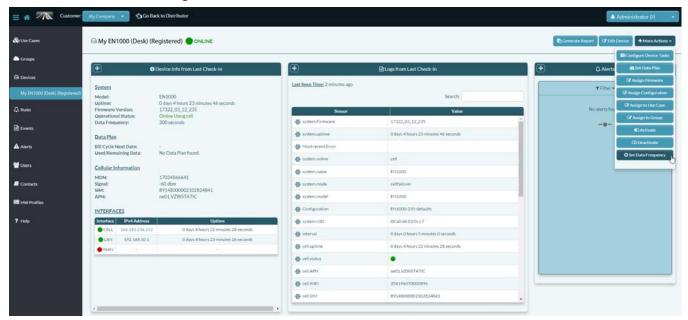


Figure 4-41. Detailed Information for an Activated Device

- 2 Note the Data Frequency in line 5 of the System information in Figure 4-41. To change this frequency, select the button for **More Actions** (near the upper right corner of the screen).
- 3 On the dropdown menu, select the button to **Set Data Frequency**.
  - » The Panel to Set Data Frequency is displayed (Figure 4-42).

Figure 4-42. Panel to Set Data Frequency



4 Set the check-in interval, and select the button to **Set Frequency**.

**Note:** The default check-in interval is 300 seconds (5 minutes).

- 5 When you have finished reviewing device details, select **Devices** in the enCloud menu (along the left side of the screen).
  - » The Table of Devices is redisplayed (recall Figure 4-28).