



Enterprise OASIS User Guide

Software Version: 7.13.04

1040733-0001
Revision F
November 4, 2022

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Chapter 1

OASIS overview

Scope and audience

This document explains how to use the **Onsite Accelerated Service Installation System (OASIS™)** app when performing a consumer installation. It is written for professional installers who use the app on their smart devices to facilitate their duties during site visits.

Installers should reference this document whenever they need additional guidance.

Overview

The OASIS app is designed for use with smart devices (e.g., tablets and smart phones). It provides a step-by-step process for the installer to follow from site arrival to site departure.

This guide is best read from beginning to end. It follows the flow of the app and the chronology of the installation process.

If you need help at any point in this procedure, use the following link to access all help documents:
<https://dwayinstalls.hns.com/mobile/download/help/help.jsp>

This manual was written using software version 7.13.04.

Installing OASIS

OASIS is available as a download from the Hughes™ Appstore (<http://appstore.hughes.com>); you cannot download this app from the Apple App Store or the Google Play Store. **You must download this app from the mobile browser of a smart device (i.e., not from a computer).**

Notes:

- Make sure you delete any previous versions of the app from your device before installing a new version.
- The app consumes approximately 15 MB of space in Apple iOS and 12 MB of space in Google Android, but Hughes recommends your device have at least 100 MB of free space to accommodate the photos you will take during your installations.
- *For Android devices*, check your settings to make sure apps from unknown sources are allowed.
- *For iOS devices*, check your Device Management settings to make sure Hughes Network Systems™ is listed as a trusted source.
- Before you install a software update for your smart device, uninstall OASIS. Once you have applied the software update, download and reinstall the latest version of OASIS from the Installation Portal.
- For OASIS to work correctly, *you must have GPS location services enabled on your smart device.* Consult your smart device's documentation for instructions on how to enable this.

Launching and logging into OASIS

The mobile device must be connected to the Internet when you log into OASIS so the app can verify your installer account and synchronize your field service orders (FSOs).

Note: For JUPITER installations, download the latest SBC file in addition to synchronizing the FSOs. **If you do not sync your device daily, you may not have the latest SBC file, which will prevent you from getting a high enough signal quality factor (SQF) to complete the installation.**

Once you have connected the mobile device to the Internet:

1. Tap the icon to launch OASIS, as shown in [Figure 1](#).



Figure 1: OASIS icon

2. The User Login page appears, as shown in [Figure 3](#). Enter your installer ID number for your username and enter your password in their respective fields, then tap **Login**.

Your login credentials for OASIS are the same as your credentials for the Installer Portal. When your password expires, OASIS will display an error message ([Figure 2](#)). Reset your password by using the prompts from the error message or by tapping the **Forgot Password** link.

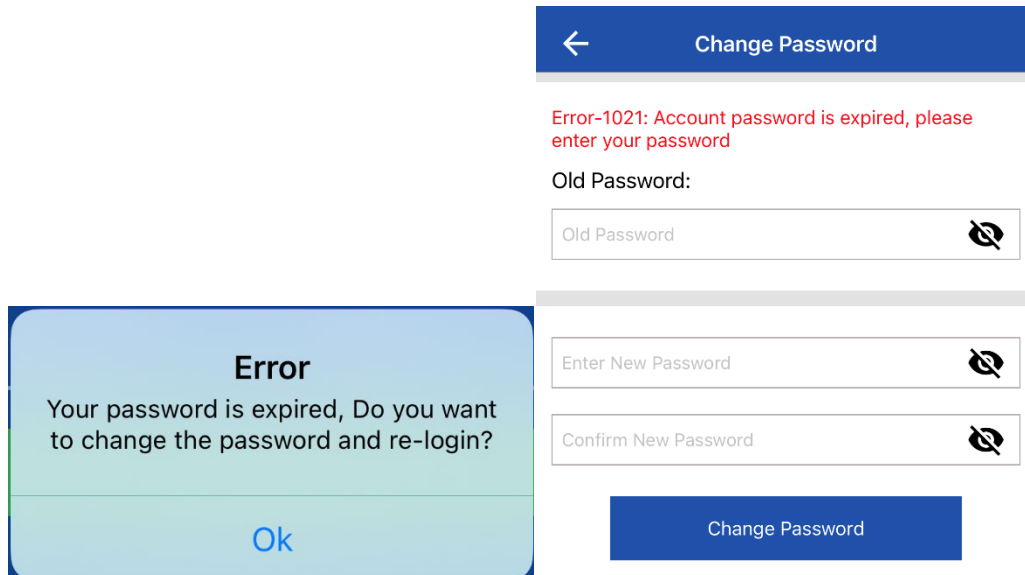


Figure 2: Password Expiration

Note: If you forget your password, use the **Forgot password?** link below the **Login** button.

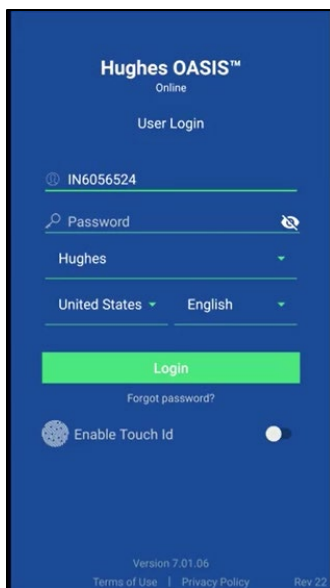


Figure 3: Login password screen

OASIS remembers your username between logins, but you will need to re-enter your password. If OASIS crashes and you re-launch in fewer than 15 minutes, the app will automatically log you in again.

Note: You can leave the app unattended for up to 15 minutes before it automatically logs you out.

3. The OASIS home page appears (Figure 4 on page 7).

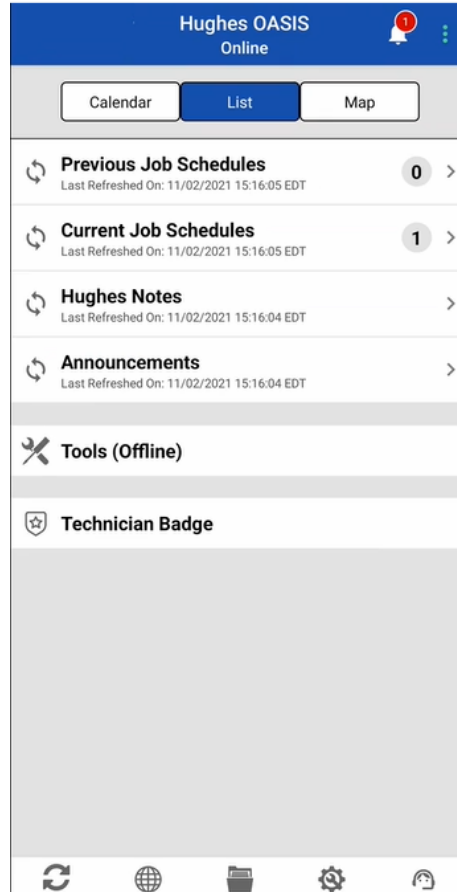


Figure 4: OASIS homepage

The homepage automatically synchronizes when you are connected to the Internet. If you are using a cellular connection, the homepage will synchronize automatically as well, but you will receive the message displayed in [Figure 5](#).

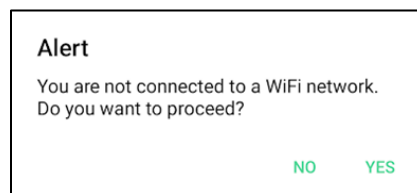





Figure 5: Synchronizing on a cellular connection

To manually refresh OASIS with any changes to the original FSO, swipe down from the top of the screen. To sync OASIS with the original FSO, tap the Sync icon () in the bottom toolbar. An exclamation icon () will appear to show that the sync is in progress, and a checkmark icon () will appear when the sync is complete (Figure 6).

Note: Using the Sync option takes longer than the swipe to refresh option. The mobile device might take up to 30 seconds to manually synchronize. *Do not interfere with the app during the synchronization process.*

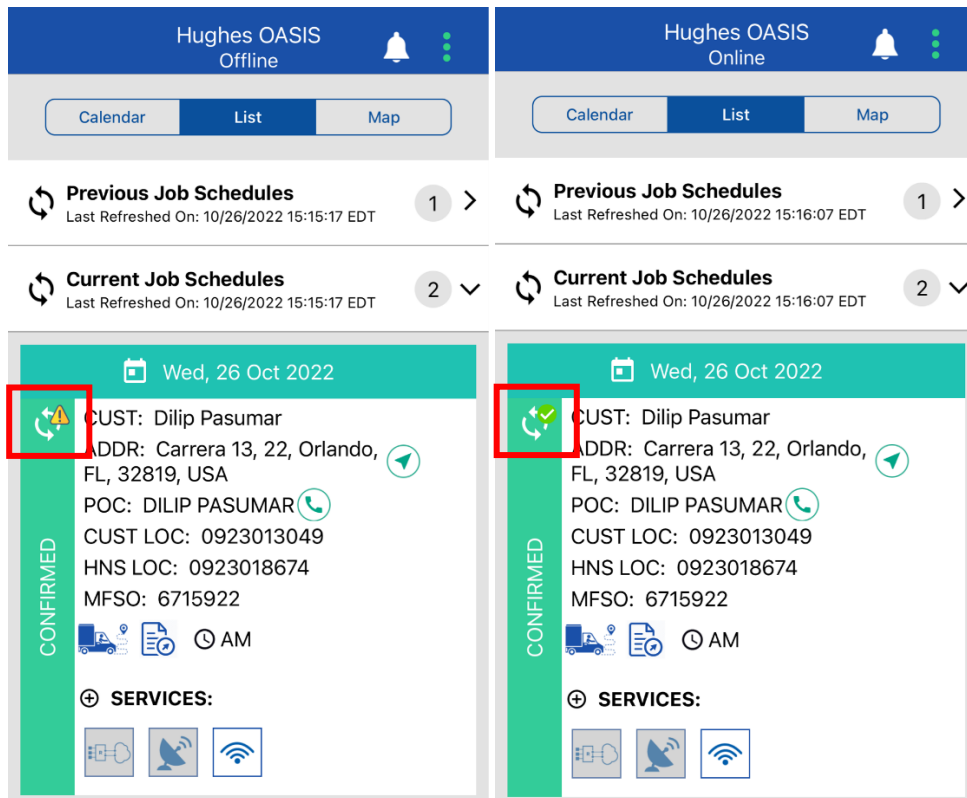


Figure 6: Sync in progress (left) and sync complete (right)

OASIS homepage

The OASIS homepage (Figure 4) contains menus for previous jobs, current jobs, current Hughes notes, and announcements. Tap a menu to expand it.

The contents of each menu are explained below.

- **Previous Job Schedules** – Shows jobs you missed, as well as jobs you completed but have yet to post to the Installation Portal.
- **Current Job Schedules** – Shows current and future jobs and provides maps and directions to the job location.
- **Hughes Notes** – Shows current news pertaining to Hughes. Identical to the notes on the Installation Portal.
- **Announcements** – Shows current news pertaining to HughesNet™ and OASIS. Identical to the announcements on the Installation Portal.
- **Tools (Offline)** – *Commonly used during repair orders or when repointing.* Shows a selection of tools you can use offline without affecting your work order.
- **Technician Badge** – Shows your identification and badge information.

Current Job Schedules

Figure 7 shows an expanded Current Job Schedules menu. By default, the homepage displays a list view of these items. Each job listing includes basic information about the customer, including their address, point of contact and a phone call option, customer location and Hughes location, and the Master FSO reference number. The listing also includes the scheduling time for enterprise customers.

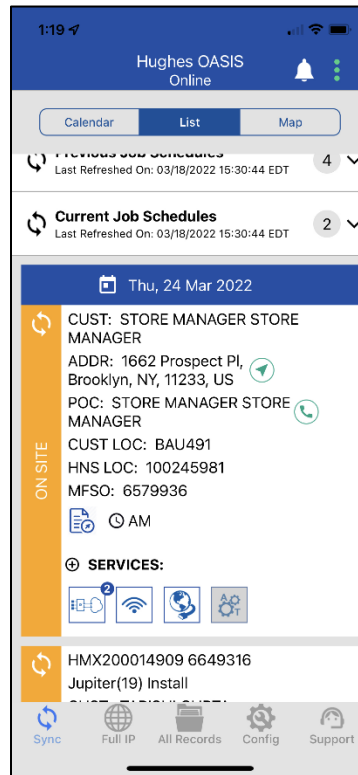


Figure 7: Current Job Schedules

Note: For JUPITER™ installations, the job description specifies the satellite to which you will point the antenna.

If you tap Calendar at the top of the screen, the app switches to a calendar view that shows a timeline of your upcoming installations, as shown in Figure 8.

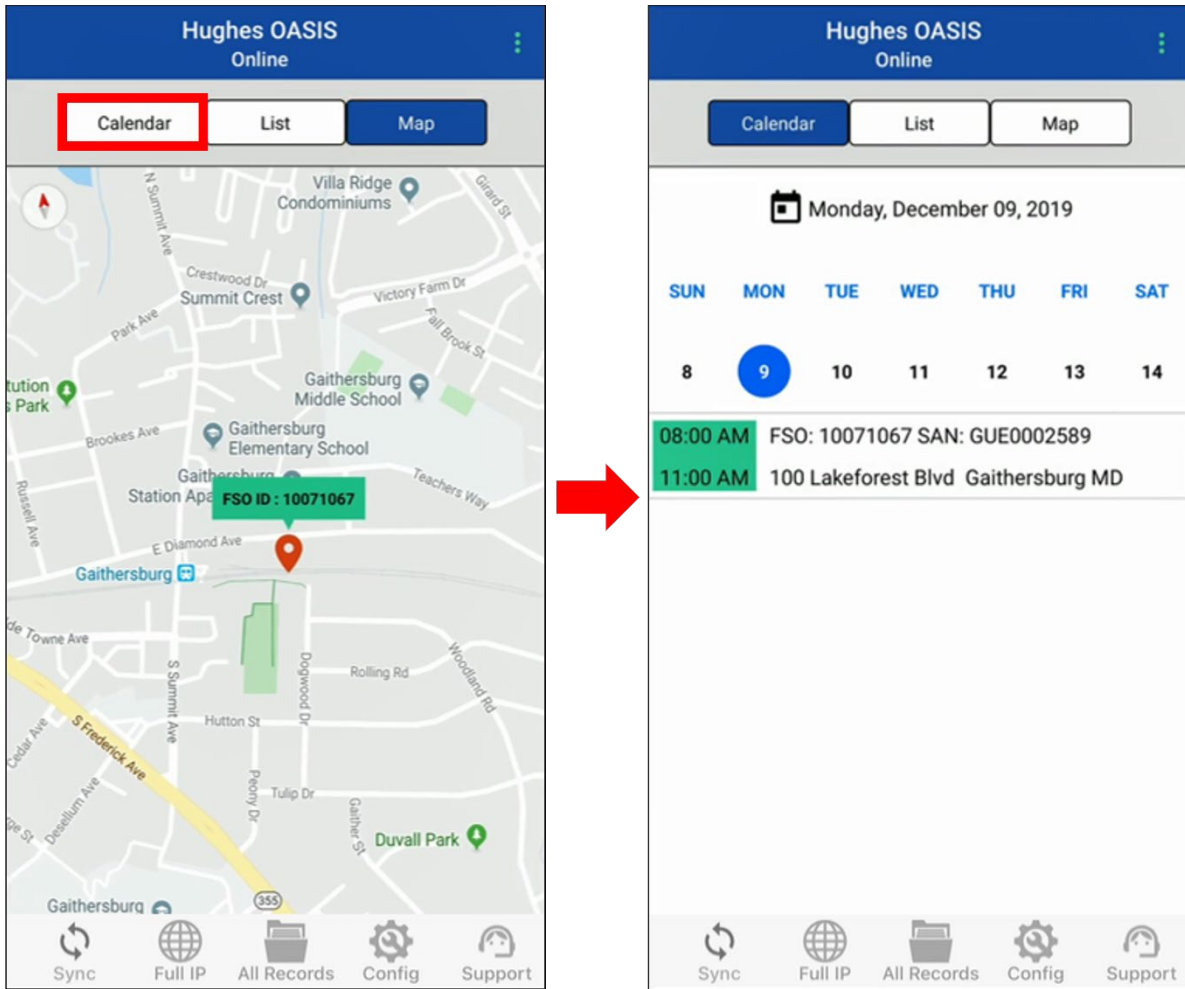


Figure 8: Current Job Schedules – Map and Calendar Views

Announcements

If there are notifications from Oasis, a bell icon will appear on the top-right of the homepage.

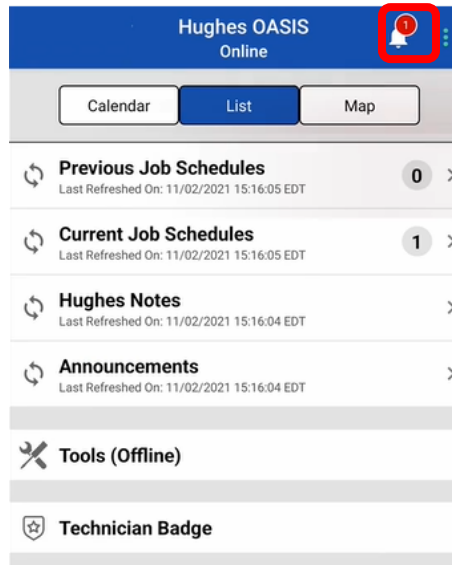


Figure 9: Notification bell icon

Notifications may include order updates, password expirations, and other notes from Hughes (Figure 9).

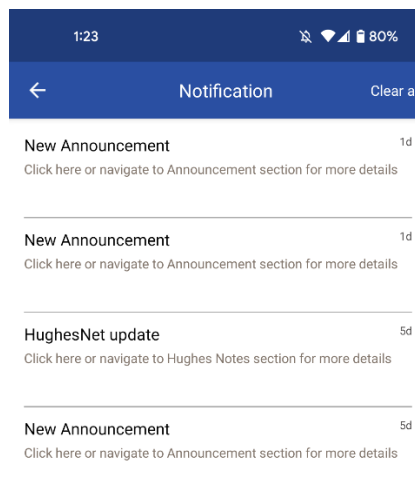


Figure 10: Notification Example

Technician badge

The OASIS homepage includes a link to your electronic badge. To access the badge, tap **Technician Badge** on the OASIS homepage (outlined in Figure 11). The badge includes your photo, name, installer ID, and the current date.

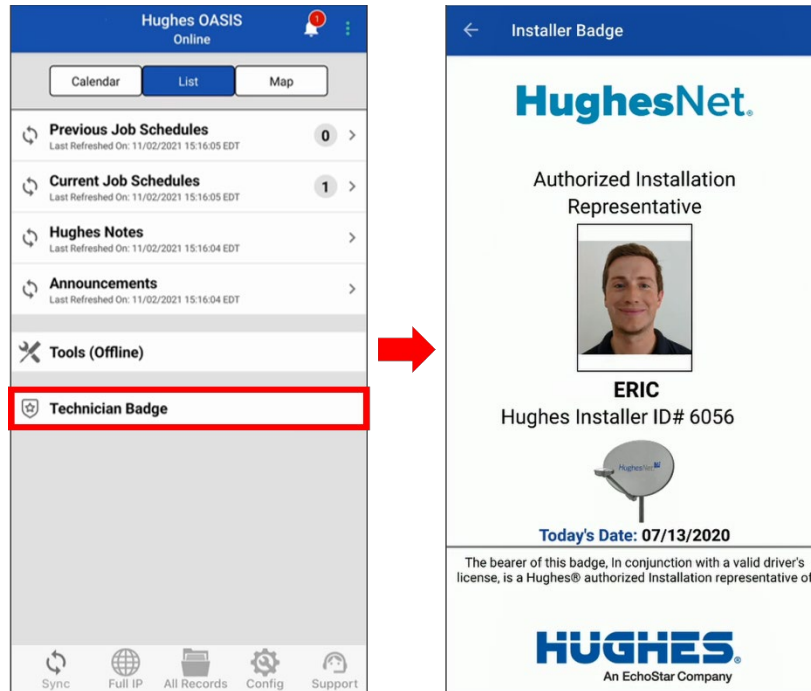





Figure 11: Accessing the electronic badge


Homepage bottom toolbar

The toolbar on the homepage differs from the toolbar while in the installation process. From the homepage, you can:

Sync  – tap to manually resynchronize your orders.

Full IP  – tap to open the installation portal in a web browser and be automatically signed in.

All Records  – tap to see data from orders currently saved on your smart phone device. From this page, you have the option to upload data to the installation portal or to delete data.

Config  – tap to view options to customize oasis such as calendar display, automatic sync interval, photo settings, and more. See below for a full list:

- The number of days displayed on the work order calendar
- How often OASIS downloads information from and uploads information to the Installation Portal
- Whether OASIS will sync using cellular data or Wi-Fi only
- The resolution of the photos you take

Note: We recommend you set this as high as possible for photo audit purposes.

- The app color scheme
- Whether OASIS automatically exports attachments, such as photos and customer signatures, to your device's gallery

- Whether Touch ID is enabled

Support  – tap to access live chat support and a list of support phone numbers.



Figure 12: Bottom toolbar

Support

Use the **Support** button to chat with an installation support person. The steps below describe how to access this tool.

1. Tap on the **Support** button shown in [Figure 12](#).
2. The *Install Support* menu will appear, as shown in [Figure 13](#). You can choose to tap on any of the phone numbers to call any of the support lines directly or chat with a live agent using Live Chat.

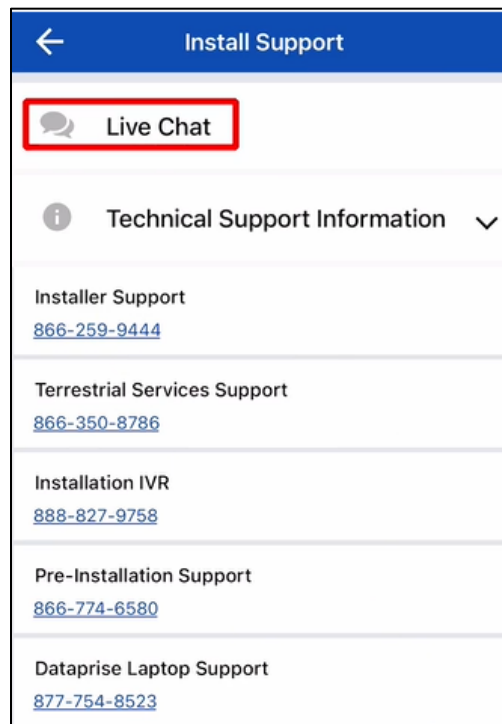


Figure 13: Install support

3. Selecting Live Chat will notify an agent to connect to the chat, as shown in [Figure 14](#). You can discuss whatever issue you are currently experiencing with the agent and work together to correct the issue.

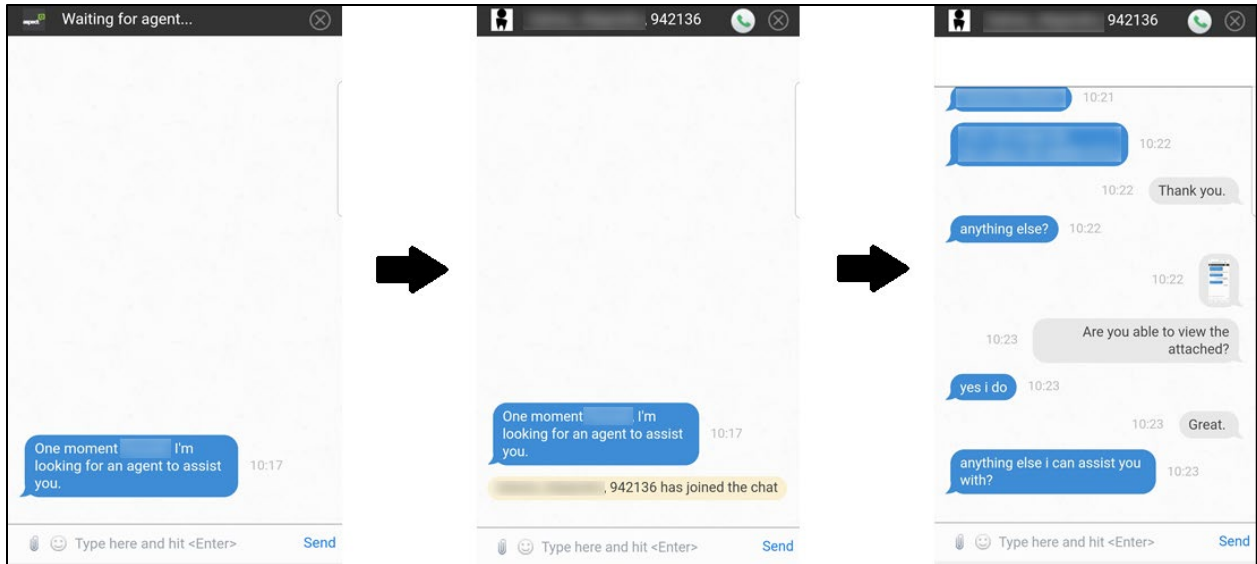


Figure 14: Chatting with an agent

Note: Error codes are present in all error messages that appear in OASIS (Figure 15). If possible, include the error code when speaking to customer service representatives.

Error

Error-1005: Terminal IDU is unavailable. Please verify if you are connected to Wi-Fi and modem.

OK

Figure 15: Example error message with code

4. When you are finished chatting with the agent, you can tap the **Exit** button in the upper right-hand corner of the window, as shown in Figure 16. The chat client will ask you to verify that you want to end the chat session. Tap **OK** to proceed.

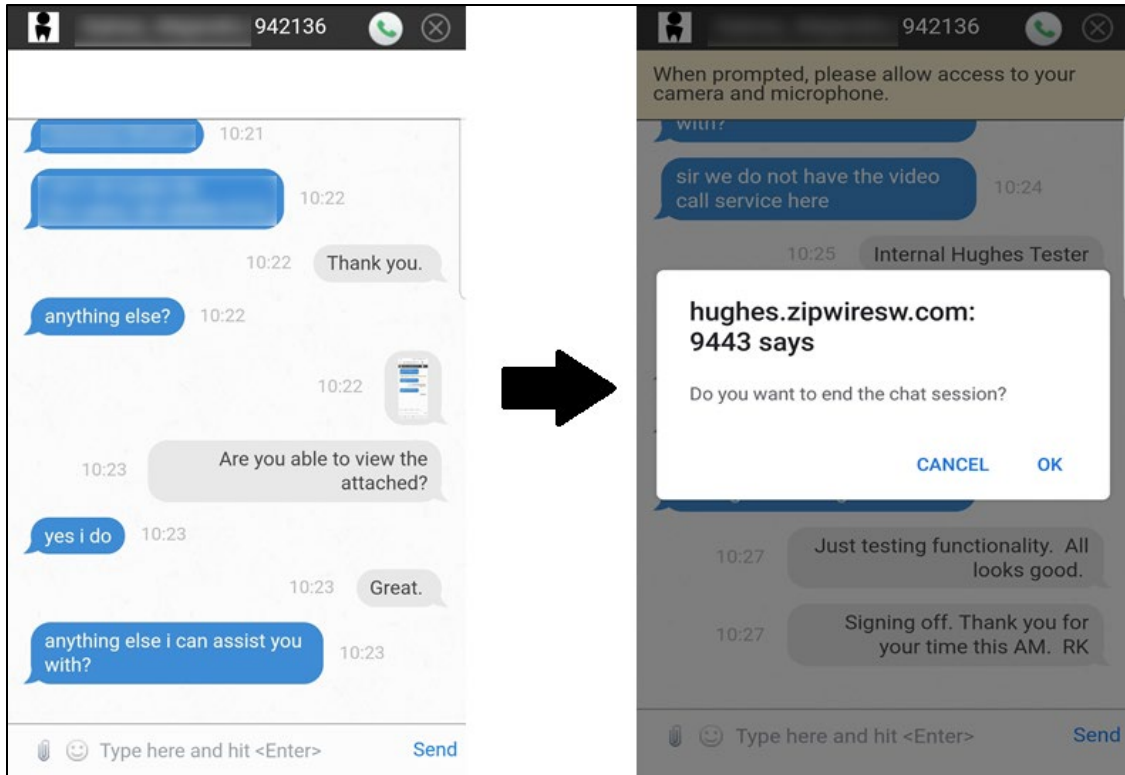


Figure 16: Closing the chat client

Chapter 2 Before installation

Review documentation

Before heading to the site, complete the following:

1. Open the Oasis app to the home page and, in the Service Details, tap the Documentation icon.

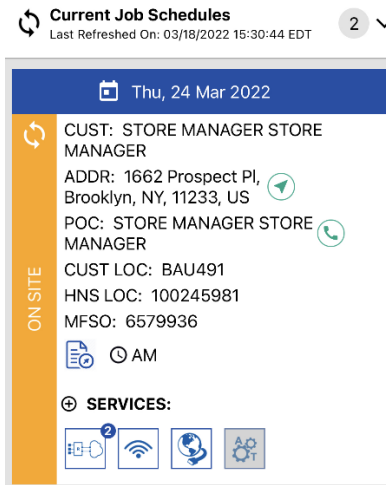


Figure 17: Service details

2. Review all required related documentation.

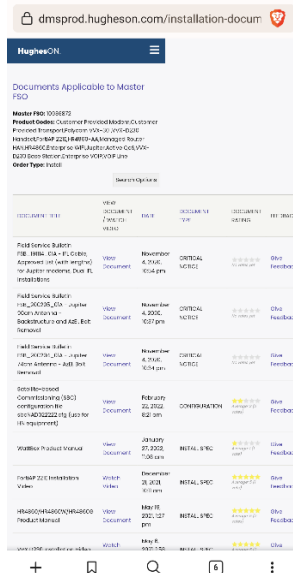



Figure 18: Documentation

Note: Hughes tracks that you have viewed each document.

3. In the FSO Details, tap the Devices checkbox and verify that you have all of the required equipment/devices before heading to the installation site.

Determine if refurbished equipment is needed

If the customer is eligible to receive refurbished equipment, the  icon will appear (as shown in [Figure 20](#)). If this icon is present, use refurbished equipment if it's available.

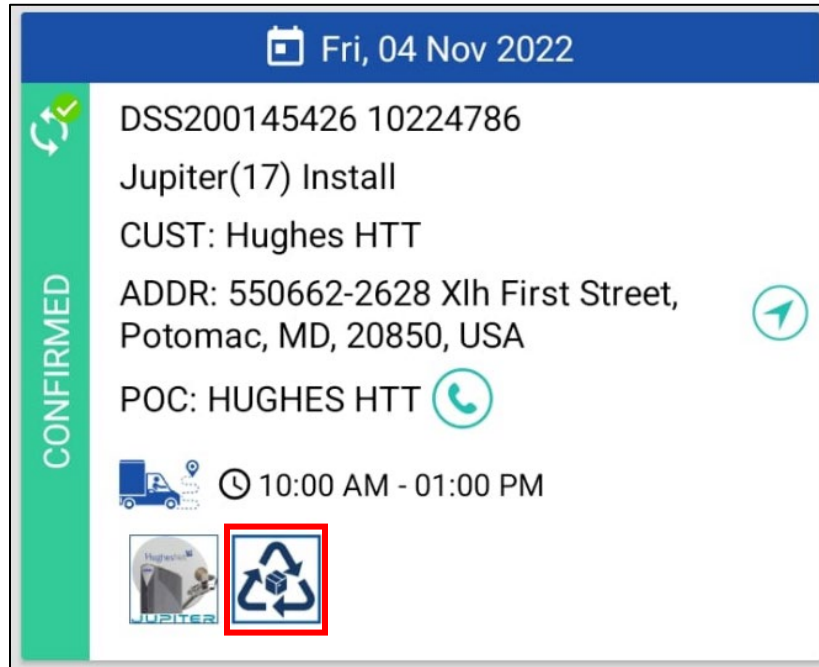


Figure 19: Service order icons

Workflow progression

Tap the arrow in the top right corner to proceed to the next step if you are following the step-by-step OASIS sequence. You also have the option to swipe left to advance to the next step or swipe right to the previous step.

You can also use the navigation bar at the top of the screen to see the current step underlined in orange along with the previous and next steps in the process, as shown in [Figure 21](#). Tap an option in the navigation bar to navigate to that step.



Figure 20: Navigation bar

The toolbar shown in [Figure 22](#) will remain at the bottom of the screen as you progress through the app (unless you choose to hide it).



Figure 21: Bottom toolbar

Tapping an icon on the toolbar does the following.

- Home – Navigates back to the OASIS homepage and syncs any orders you have if you are connected to the Internet.
- Records – Shows the status of completed steps in your current work order. Also shows information about completed orders.
- Notes - At any point during the workflow, you can enter notes about the order by tapping the **Notes** icon (Figure 23). You will also see any other notes that were entered for the work order.

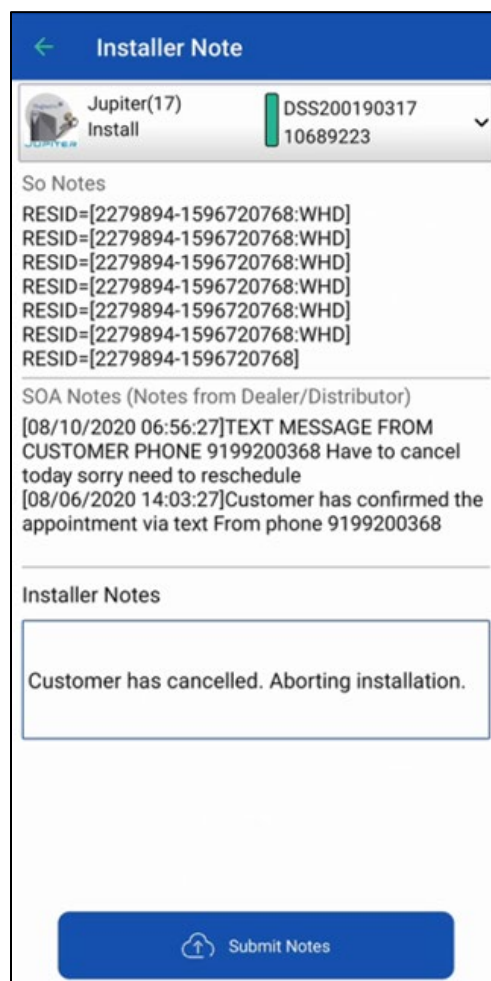


Figure 22: Installer notes

- More – An expanded menu that allows you to jump to any step within the OASIS workflow (see Figure 24).

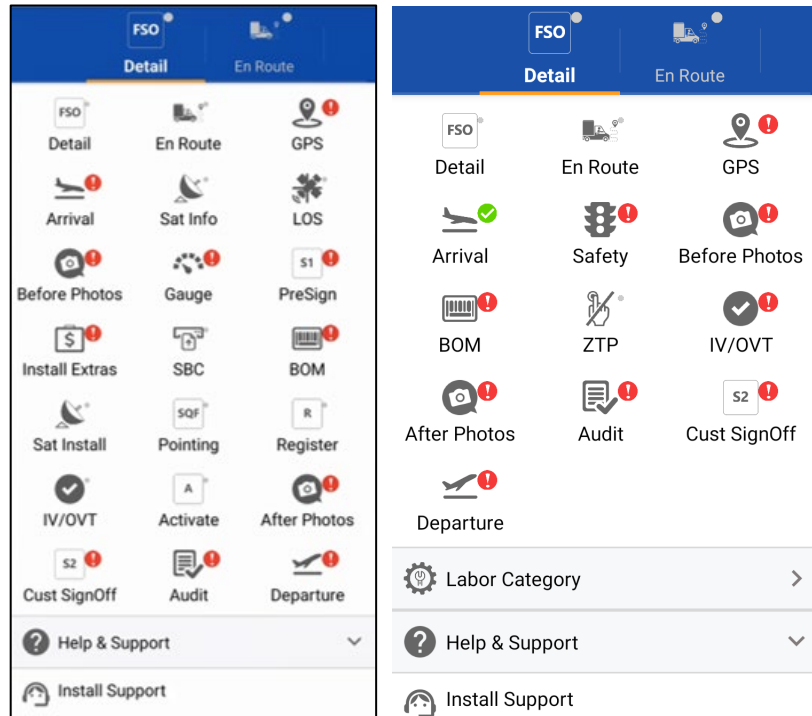


Figure 23: More menu for Jupiter (left) and Enterprise (right) installations

Any step that has a red exclamation point by it is a mandatory step that has not yet been completed. You can also launch the Installer Support page from the *More* menu.

Labor Category

When charging for your time, OASIS will automatically set the category as Standard Time and begin/end when the Arrival and Departure steps are chosen. In some cases, the installer may need to charge their time differently. To change the category, open the More menu and select Labor Category. From the dropdown, select one of the other three categories: Customer Issues, Hughes Support, or NAP issues.

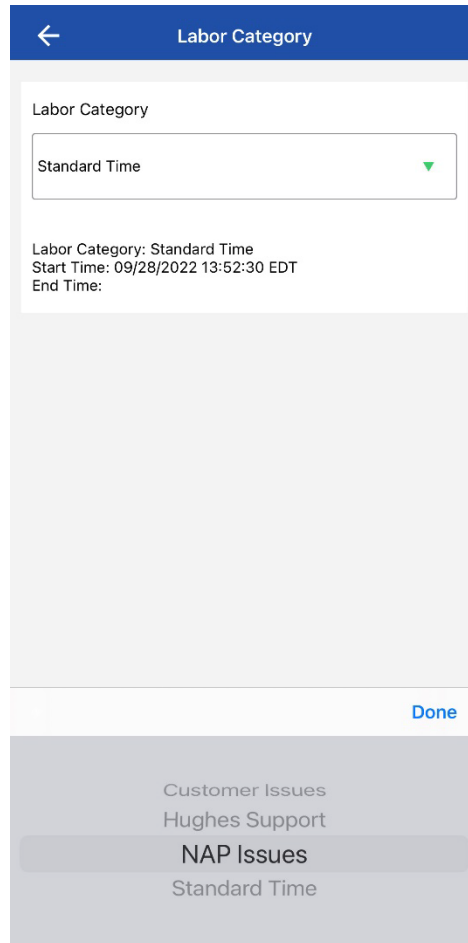


Figure 24: Labor Categories

Reviewing MFSO (Master Field Service Order) details

MFSO Detail

In either the list or calendar view of the OASIS homepage, tap the link for a particular MFSO to begin working on it. This launches the MFSO Detail step, as shown in [Figure 26](#).

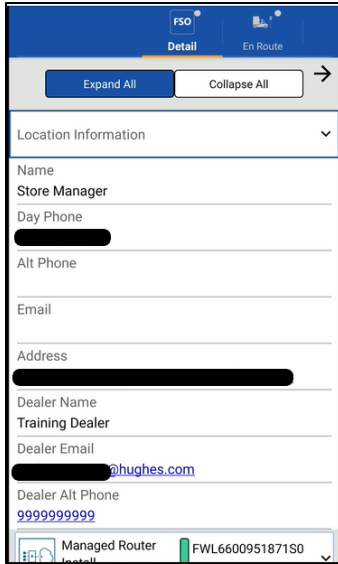


Figure 25: FSO Detail workflow

This step contains all the pertinent information about your currently selected job.

Note: To prepare for an effective use of time onsite, ensure that all equipment pre-configurations have been completed *before* arriving onsite and that you have brought all equipment to the site.

Note: For WWTS orders, the FSO detail page will display Site Only orders as applicable. Site Only orders are distinguishable by their lack of attached FSO. Click on a Site Only order to view a list of information including the Site Parameters. See [Figure 27](#).

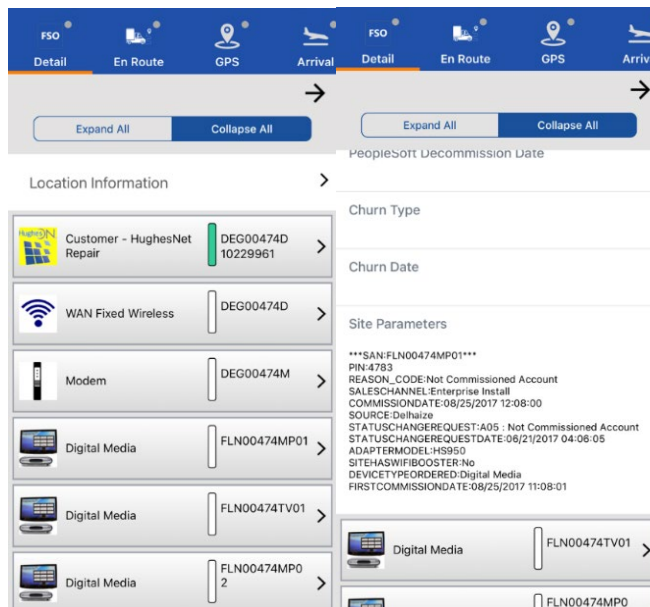


Figure 26: WWTS Site Only orders

Tap **Expand All** or **Collapse All** to open or close every menu at once. The menus include:

- Location Information – Shows the customer name, address, phone number, PIN, SAN, dealer name, phone number, email, etc. Each of the hyperlinked fields on this page automatically launches the applicable app on your smart device. For example, tapping the email address will launch your device’s email program and create a draft message to that address.

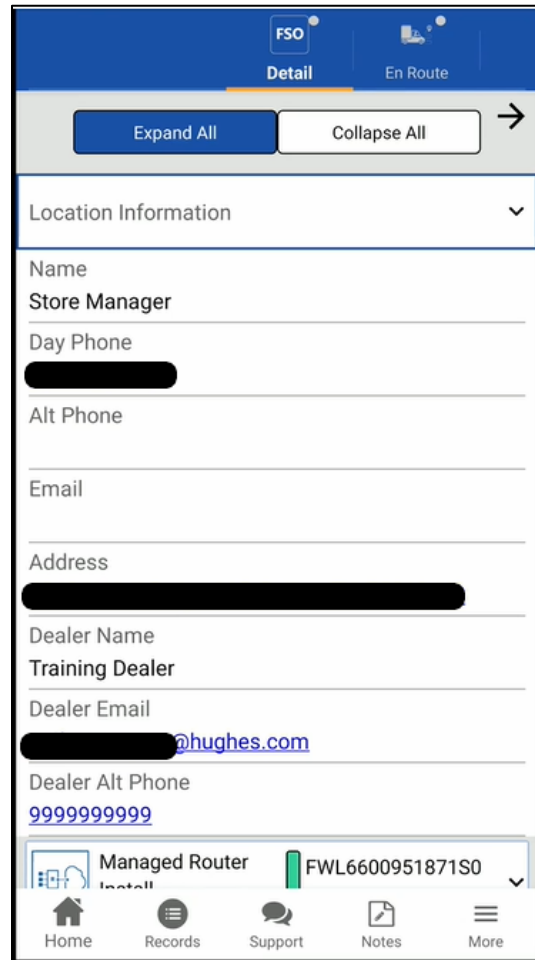


Figure 27: FSO Detail – Location Information

- Service Order Information – Displayed individually for each service and device you are installing. Shows the child FSO, SAN, PIN, BOM information, installation parameters, transport name, as well as Notes fields displaying any relevant information provided by the dealer/distributor, Hughes, or the customer. You can also view the full MFSO housed on the installation portal by clicking the designated link.

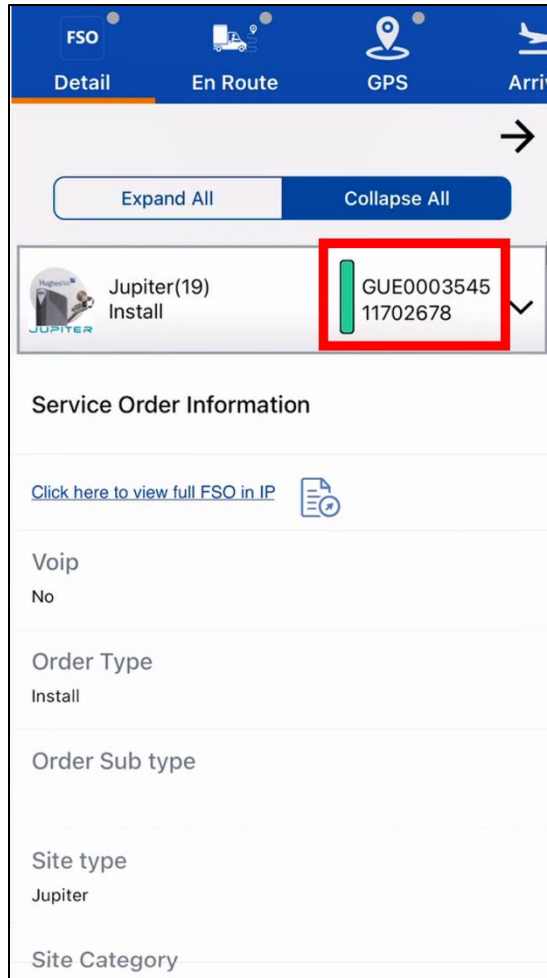


Figure 28: FSO Detail – Service Order Information

- Notes – Shows notes and provides fields to enter new notes that are automatically synced to the Installation Portal

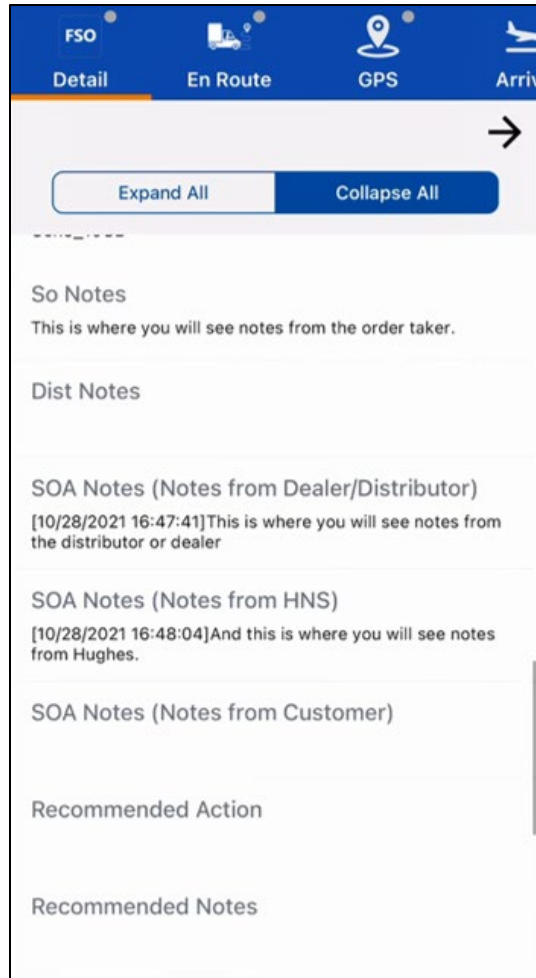


Figure 29: FSO Detail – Notes

- A link to view the full MFSO in the Installation Portal

Chapter 3

Performing an installation

Getting to the site

En route

Before you leave for the site, you must use the En Route function in OASIS to let the customer know you are on the way. This step immediately follows the FSO Detail step.

1. Tap **En Route**, as shown in [Figure 31](#), and select your estimated time of arrival (ETA) to the site from the *Select ETA* drop-down.

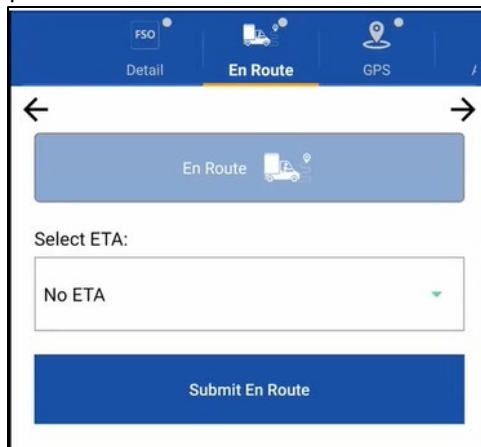


Figure 30: Pre-arrival: En route

2. Tap **Submit En Route**.

Note: The customer will be notified that you are on the way.

If something happens and you need to postpone or cancel the order, you can abort the en route by tapping **Abort En Route** ([Figure 32](#)).

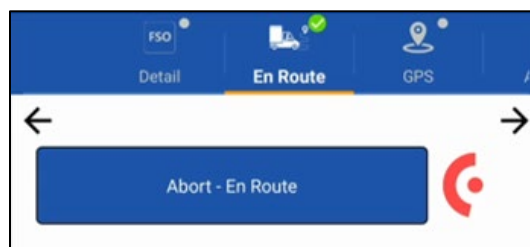


Figure 31: Abort En Route

GPS

1. On the screen that launches after the En Route step (GPS), the application will automatically try to capture your GPS. If the initial try is not accurate, tap **Capture GPS** ([Figure 33](#)) to try again.

Your smart device's GPS must be enabled to capture your coordinates.

If OASIS cannot acquire your location within 15 m accuracy, you need to manually enter your GPS coordinates (from another GPS unit). The coordinates must be in the degrees/minutes/decimal minutes format. OASIS tracks if you manually enter GPS coordinates.

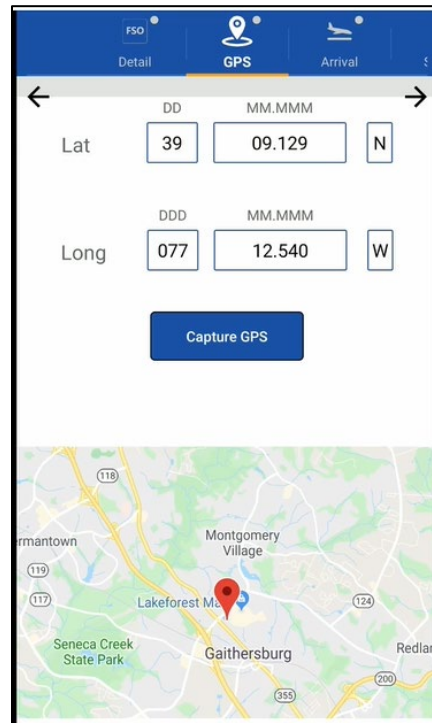


Figure 32: Arrival – capturing GPS coordinates

Arrival – Not Onsite

In some cases, a selection of work can be completed while not onsite. Clicking on the Arrival – Not Onsite button will allow you to see a sidebar with a selection of activities you can perform after the installer leaves the site. This is normally used when a step was missed or unable to be completed while onsite.

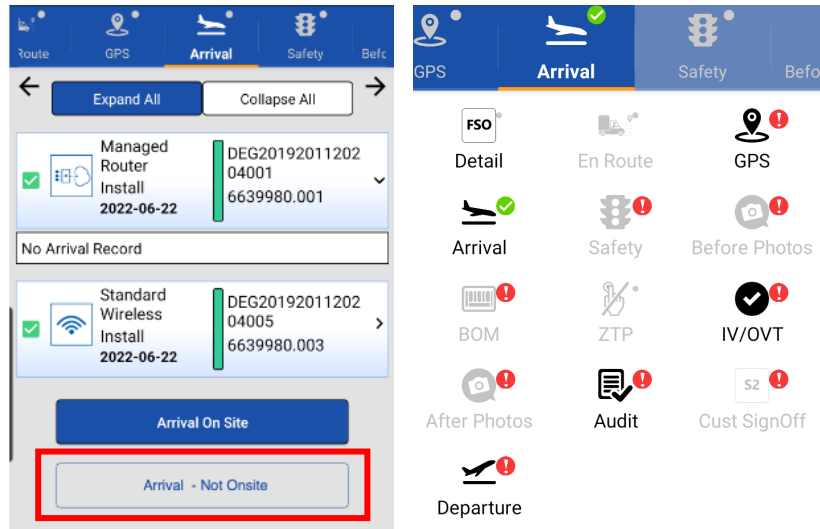


Figure 33: Arrival - Not Onsite

Arrival

Launch the Arrival step after arriving at the customer site, introducing yourself to the customer, showing your ID, and explaining to them how the installation will progress.

Note: At this point, if you have not reviewed all of the required documentation, you will receive an error popup (Figure 35). Use the link to review the documentation, then return to Arrival.

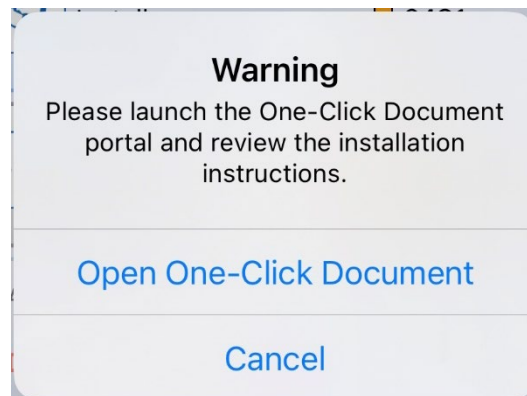


Figure 34: Document warning

OASIS automatically selects the services and devices scheduled for you to install each day. Each service that you are scheduled to install will have a checkmark next to it.

2. Confirm the services and devices that you will install, and then tap **Arrival on Site** in the Arrival step. A textbox appears (Figure 36).

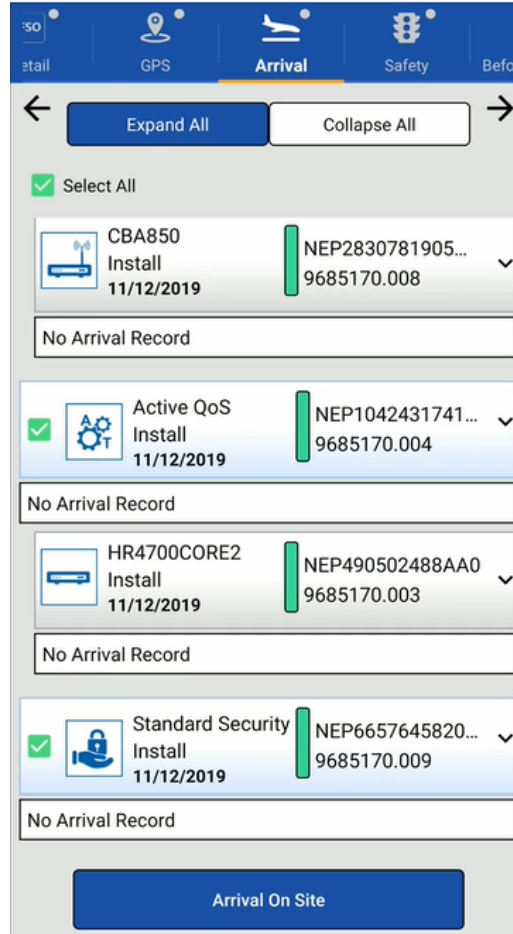


Figure 35: Arrival workflow – entering notes

3. In the textbox, enter any notes about the installation location (e.g., roof access is hard to find), then tap **Submit**. Use only alphanumeric characters when typing notes (i.e., A to Z, a to z, 0 to 9).

Important: Any notes written in the app can be viewed by the customer at any time. Make sure each note you write is appropriate and professional.

4. A verification pop-up message appears (Figure 37). Verify the customer information it shows, then tap **Proceed** to advance to the next workflow – Safety.

Note: Pay close attention to the arrival on site distance measurement. If OASIS shows your location as very far away from the installation location, make sure you are at the correct address for the installation. If you have verified that the location is correct, then enter a note to explain the distance as needed.

Verify Arrival

Customer Name: Mark Willets

Address:
11717 Exploration Ln, Germantown, MD, 20876, US

Arrival on site location is 2.7440 miles away from ordered location.

To proceed, enter the reason notes for being away from Ordered Gps

ABORT **PROCEED**

Figure 36: Arrival workflow – verification

If you receive the error shown in [Figure 38](#), you will need to call the specified number to report your arrival.

Error

IVR submission unsuccessful, you are required to dial 1-888-827-9758 to report IVR

Ok

Figure 37: Arrival workflow – IVR submission not successful

Meeting safety requirements

Safety

The Safety step ensures you have met all the safety requirements for the installation you are performing. Prior to accessing this step, you are prompted to accept the Hughes Loss Prevention Self Assessment (LSPA) and the Stop Work Authority (SWA) in the terms and conditions for safety (Figure 39). Thoroughly read the conditions, then tap the acknowledgement checkbox at the bottom of the screen.

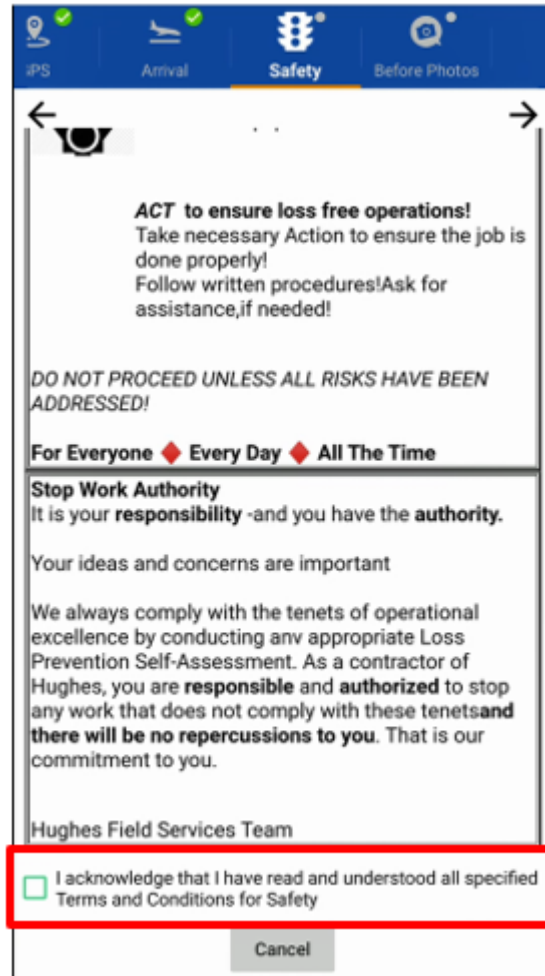


Figure 38: Hughes terms and conditions for safety

The next screen (Figure 39) of the step lists each permit you must fill out, divided into several menus for each section of each permit. Tap **Expand All** or **Collapse All** to expand or collapse every menu, respectively. Proceed through each menu until you have completed this step.

Important:

- For all installations, you must fully fill out each section of the **General Work Permit** menu before proceeding.
- If you will be working at heights, you must select the **Yes** radio button next to **Will you be required to work at Heights?** and fill out each section of the **Permit to Work at Heights** and **High-Risk Emergency Rescue Plan** menus.

For each permit, the permit number auto-generates in the format of SAN#_TIME_DATE.

Note: Mandatory safety sections are marked with a red exclamation point.

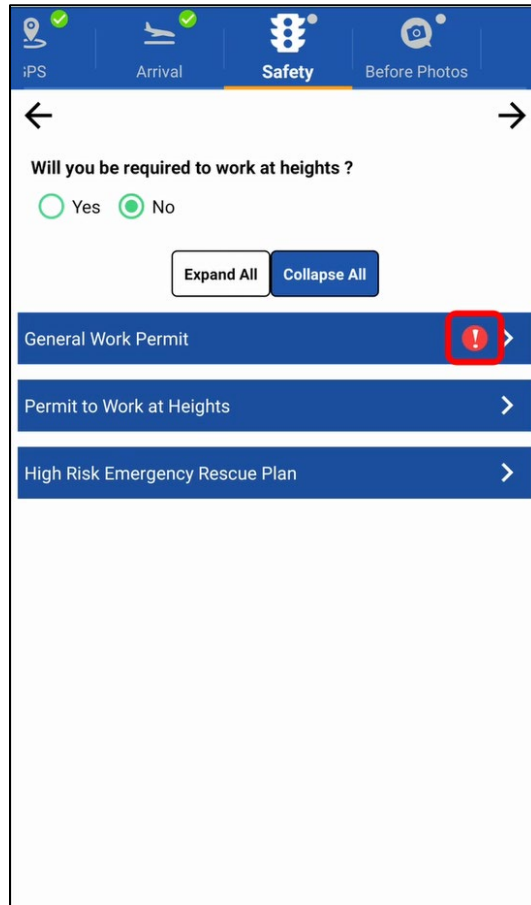


Figure 39: Safety step – work permits

Some menus, such as the **General Work Permit Header** menu require either your signature or the signature of someone else at the installation site. In this case, you must tap the blue **Capture Signature** button to launch the signature screen.

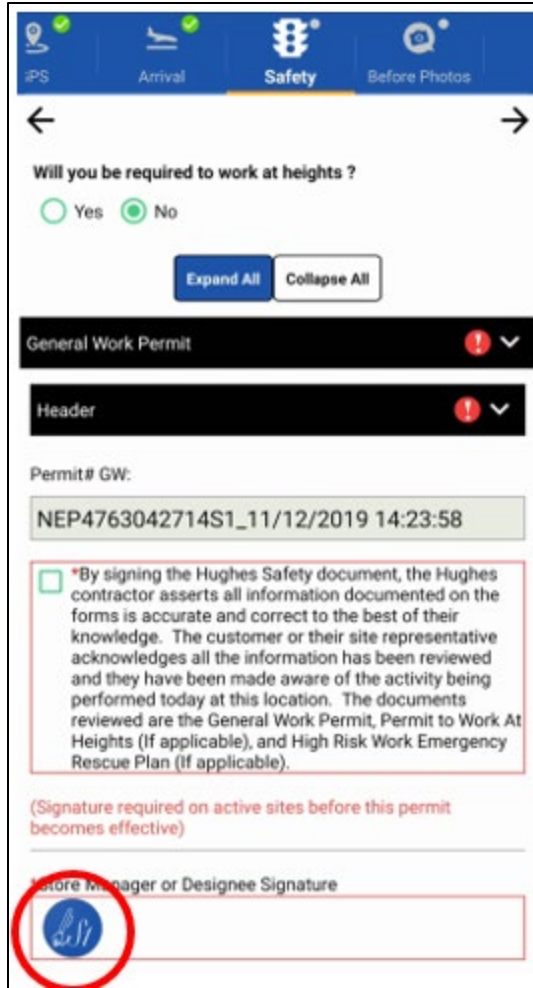


Figure 40: Safety step – work permit menu example

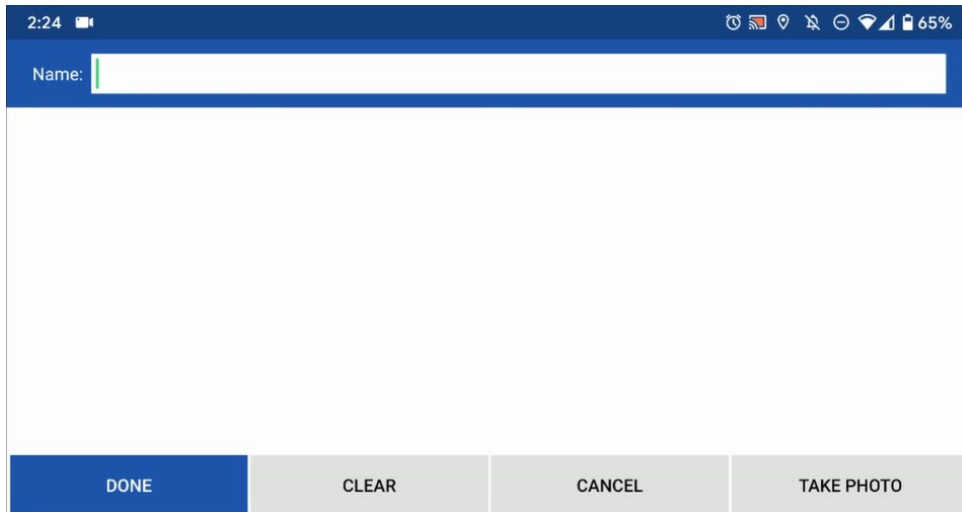


Figure 41: Safety step – work permit signature

The person giving the required signature must also type their full name in the *Full Name* field. In place of a signature signed directly onto the smart device, the customer can choose to sign a piece of paper and have the installer take a picture of it by using the **Take Photo** button.

Once the customer has given their signature, tap **Done** to return to the work permit screen, where you must fill in the following information in required fields marked with an asterisk:

- Travel time
- WWTS ticket # (used for maintenance)
- Travel distance
- Nearest medical facility phone number
- Name of medical facility
- Safety certifications
- Personal protective equipment (PPE) required for the installation
- Survey of completed safety tasks such as a risk assessment and pre-job safety briefing

The customer must check the box to acknowledge that you have completed these tasks, as shown in [Figure 43](#). Do not check this box yourself.

The screenshot shows a mobile application interface for the 'Safety' step. At the top, there are four tabs: 'iPS', 'Arrival', 'Safety' (which is highlighted), and 'Before Photos'. Below the tabs, there are navigation arrows (back and forward). The main content area contains a list of safety tasks, each with a 'YES' and 'NO' button. The tasks are:

- *Pre-job safety briefing (YES/NO)
- *Review of work procedures (YES/NO)
- *All employees properly trained to the appropriate level for work performance (YES/NO)
- *All employees understand Stop Work Authority & Responsibility (YES/NO)
- *Lock Out and Tag Equipment Properly (Deice Electric locations) (YES/NO)
- *Work-at-Heights Permit ☐ Work above 6 ft/2 m, API 1646, Section 7 (YES/NO)
- *Area is required to be barricaded (YES/NO)
- *Fall protection is required (YES/NO)

Below the list, there is a green checkmark icon and the text: '*I (customer) acknowledge and agree to the above selected items as required'. Below this, there is a 'Task' dropdown menu with a red exclamation mark icon. Below the dropdown, there are four more tasks, each with 'YES', 'NO', and 'N/A' buttons:

- Select All (YES/NO/N/A)
- *Has work area been cleaned and organized? (YES/NO/N/A)
- *Have any hazards been created by task? (YES/NO/N/A)
- *Is a return visit necessary? (YES/NO/N/A)

Figure 42: Safety step – safety tasks

Note: You are not required to fill out the permit to work at heights or the high-risk emergency rescue plan unless you will be working at heights or performing other high-risk tasks.

When you have filled all the required permit information, a green checkmark indicates the section is completed, as shown in (Figure 44).

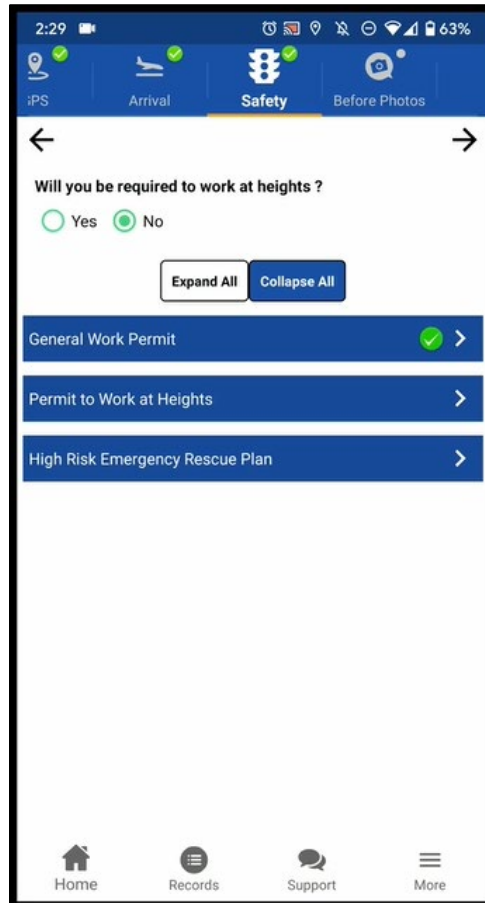


Figure 43: Safety step – completed section (marked with green checkmark)

Important:

- If you do not complete your installation within one day, you *must* collect all of the safety information again (including the required signatures) when you next arrive at the site. OASIS will generate new permit numbers based on the date change, in the format of SAN#_TIME_DATE.
- If you leave the worksite temporarily and *arrive later that same day*, you must collect all safety signatures again; but in this case, OASIS will preserve the rest of the safety information (including your original permit number).
- OASIS keeps a record of safety data from each arrival. You can view the data from either the FSO Workflow Summary page inside OASIS or from the OASIS Workflow Summary page in the Installer Portal.

JUPITER installations only:

The following steps are intended only for JUPITER installations. If you are not performing a JUPITER installation, skip down to [Before photos](#) on page 53.

Satellite Info

The Sat Info step ([Figure 45](#)) displays the recommended satellite, beam, and polarization for best signal and performance. It should only be changed for line of sight issues or if told to do so by install support. On rare occasions, the lat/long on the order may not be accurate and an alternate satellite, beam, or polarization may be recommended on the Sat Install page based on a more precise lat/long captured in OASIS.

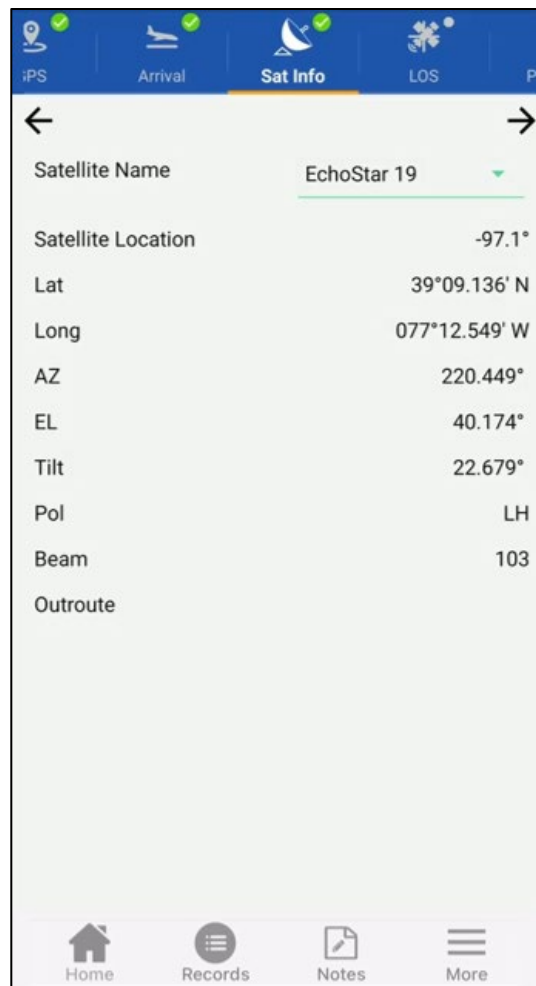


Figure 44: Sat Info step

If, for some reason, you need to change the satellite (for instance, if the customer does not have line of sight to the preferred satellite) then you can change the satellite on this page to obtain new parameters.

Always use the satellite and beam indicated on the work order whenever possible.

Tap → to proceed to the next step, LOS.

Capturing Line of Sight (LOS)

Important: Make sure the compass on your smart device is calibrated correctly prior to using this step. Calibrate the compass by following the instructions provided by your device.

OASIS uses the parameters from the previous step and your device's camera to help ensure you have a clear unobstructed view of the satellite. You can choose to use either the front camera or back camera to take the pictures: in the LOS screen, tap the camera button (📷) in the bottom left-hand side of the screen to toggle the camera.

If OASIS does not automatically launch the line of sight (LOS) tool, tap **Launch LOS**. To find LOS to the satellite:

1. While holding your smart device parallel to the ground, orient the onscreen compass until the needle lines up with the correct azimuth reading. As shown in [Figure 46](#), the compass needle and the vertical line turn green when your device is correctly oriented.

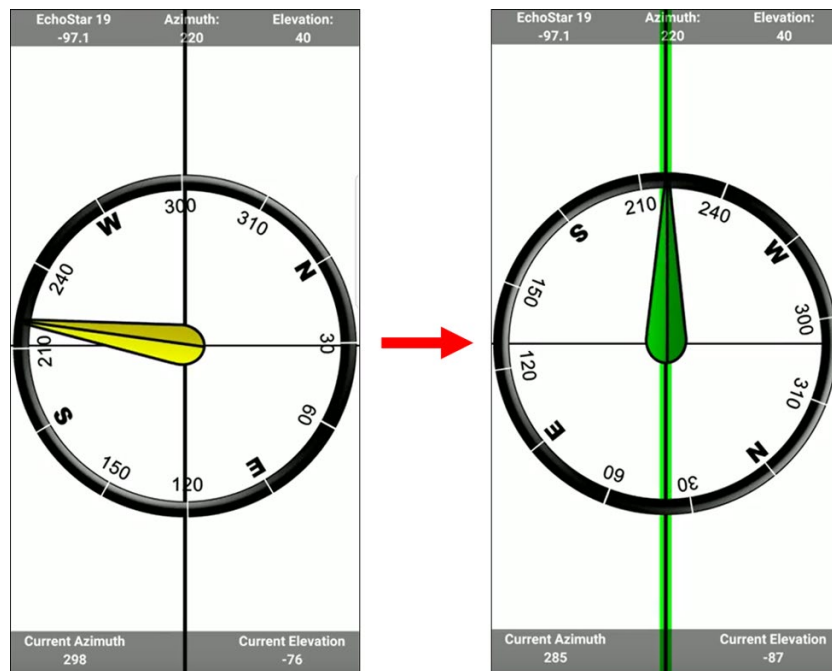


Figure 45: LOS – Azimuth

2. Lift your device towards the sky. This activates your device's camera with a cross-hair overlay ([Figure 47](#)).

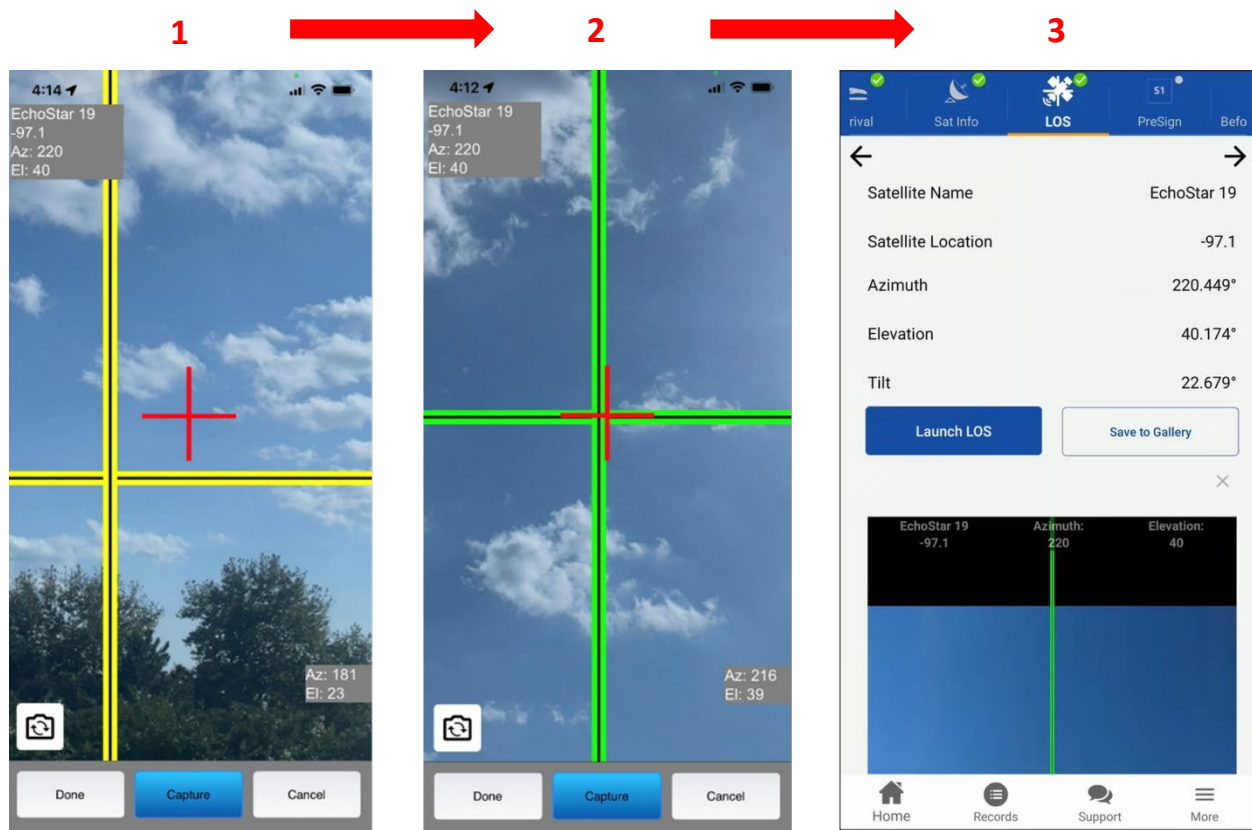


Figure 46: LOS step – Elevation

3. Maneuver your smart device until the red crosshair (which represents the direction you are currently pointing) lines up with the yellow crosshair (which represents the location of the satellite).
4. The yellow crosshair will turn green when you are within 5 degrees of exact alignment with the satellite, as shown in [Figure 47](#).
5. Make sure nothing blocks the LOS. The LOS must be free of obstructions, such as plants, trees, buildings, or other structures.
6. Examine nearby plants and trees and consider how they might grow and eventually block the signal. If you perform the installation during the fall or winter, consider spring and summer leaf growth.
7. Ask the customer if they have any plans (such as landscaping) that might obstruct the satellite signal at some time in the future.
8. If anything blocks the LOS, you must find another installation location.
9. Tap **Capture** (outlined in [Figure 47](#)) to take a screenshot of the LOS measurements. OASIS records the required LOS information (satellite name, satellite location, and Az/EI measurements).

Note: This is a site assessment tool only. The photo you take here does not count as the required LOS photo.

OASIS returns you to the main screen of the LOS step. A thumbnail of the photo appears on the bottom of the screen ([Figure 47](#)).

10. Tap → to proceed to the next step, Uploading SBC file.

Uploading the satellite-based commissioning (SBC) file

In this step (Figure 48), you connect to the modem and upload the latest satellite-based commissioning file, which was downloaded when you synced OASIS. Make sure the modem is powered on and fully booted, and that you are connected to it wirelessly with your smart device.

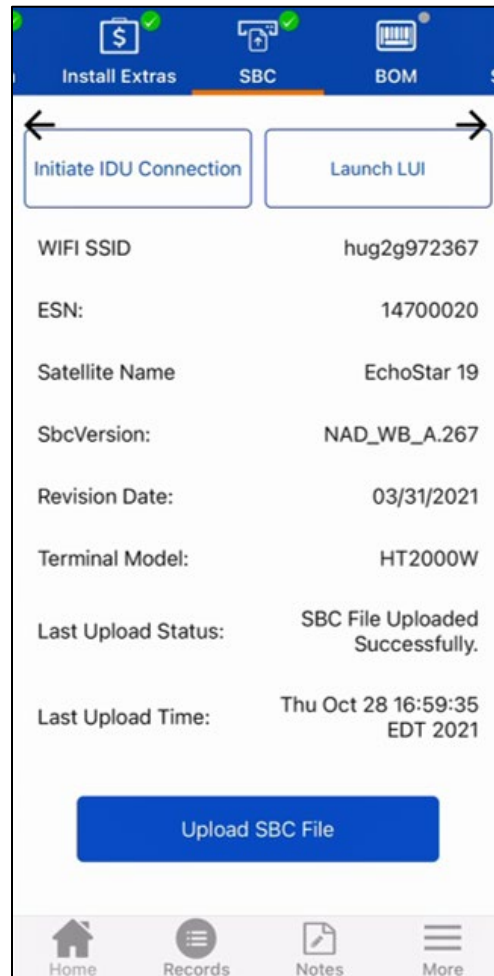


Figure 47: SBC screen

1. Tap **Initiate IDU Connection**. Notice how information about the modem populates.
2. Tap **Upload SBC File**. This uploads the most recent SBC file from your device to the modem.

This is very important and must be done for every installation.

When the **Last Upload Status** indicates that the upload was completed successfully, tap → to proceed to the next step, Gauge.

Gauge

The Wi-Fi gauge (Figure 49) tests the signal strength of the wireless router.

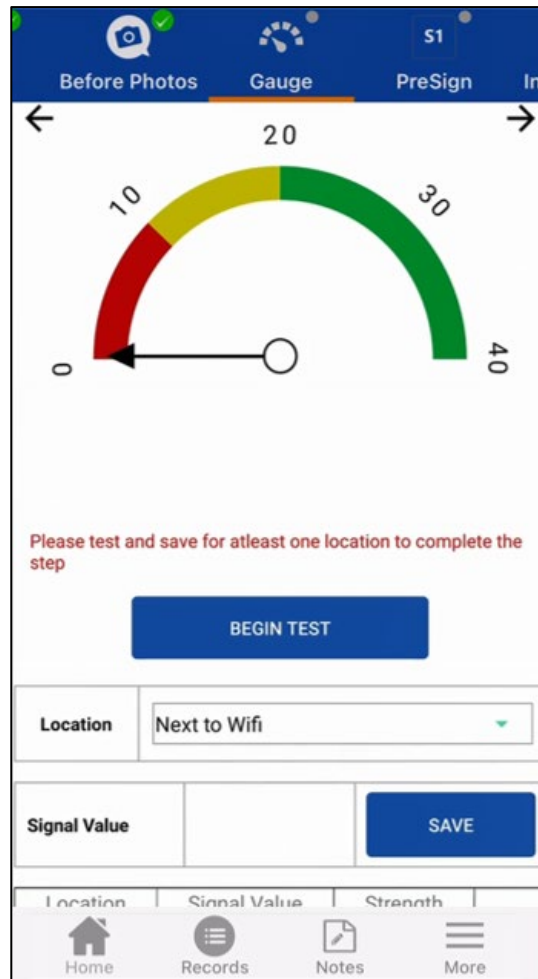


Figure 48: Wi-Fi gauge

Your smart device must be wirelessly connected to the modem's Wi-Fi to complete this step.

Connecting to the modem's Wi-Fi

The SSIDs and the corresponding passwords are provided on a sticker on the back of the modem (Figure 50).



Figure 49: HT2000W and HT3000W label

Some devices may ask you to confirm the connection.

Testing the Wi-Fi signal strength

Use the gauge to help determine if the router can provide adequate Wi-Fi coverage to the house by itself. To use the gauge:

3. Select an area of the house from the *Location* drop-down (Figure 51). OASIS has several locations from which to choose, but you can also create your own location by selecting **Other** and typing the name of the location in the field that appears.

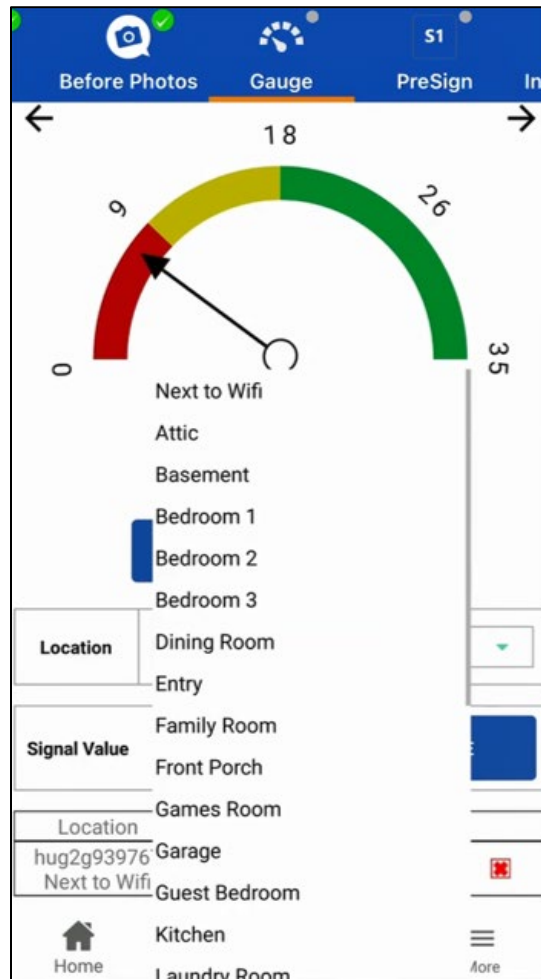


Figure 50: Choosing a location on the Gauge step

Note: Always get permission from the customer before moving around their house to test the Wi-Fi.

1. Tap **Begin Test** to have OASIS test the signal strength. The signal strength value will appear in the *Signal Value* field.
2. Tap **Save** to save the value to a table that appears below the *Signal Value* field. See [Figure 52](#).

Location	Next to Wifi		
Signal Value		SAVE	
Location	Signal Value	Strength	
hug2g939767 Shed/Barn	8.11	Poor	✖
hug2g939767 Kitchen	12.55	Marginal	✖
hug5g939767 Next to Wifi	72.65	Excellent	✖
DELETE ALL			

Figure 51: Signal value table

3. Repeat this process for each area of the house you want to test. You must tap **Save** after you collect each value, otherwise it will not save to OASIS.

Note: Hughes recommends you test the signals in at least three locations in the house.

Based on the results, you may want to relocate the modem or suggest the customer purchase a Wi-Fi extender.

When you are done checking signal values throughout the house, tap → to proceed to the next step, PreSign.

Sat Install

The Sat Install step ([Figure 53](#)) gives you the parameters you need to have the modem generate the correct polarization, beam, and outroute values. The step sends latitude and longitude information to

the modem to put it into pointing mode. The *Sat Name*, *Sat Location*, *Lat*, *Long*, *Az*, *El*, and *Tilt* fields on the screen will populate automatically.

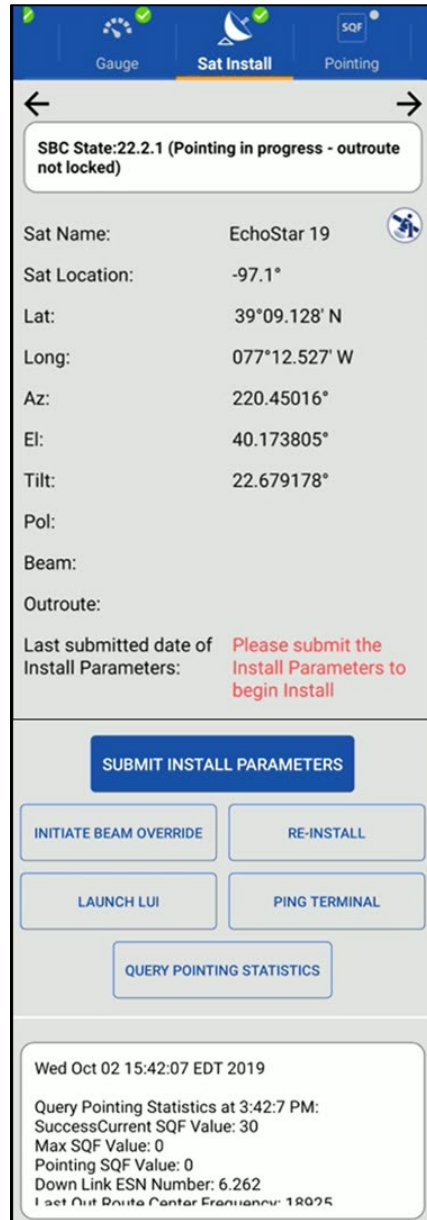


Figure 52: Sat Install screen

Note: OASIS may take some time to respond during the following steps. Follow the logs at the bottom of the Sat Install screen (Figure 53) to check the app's progress.

To calculate the values:

4. Tap **Submit Install Parameters**.
5. Tap **Yes** on the pop-up warning message that asks if you want to start the installation.

OASIS populates the *ODU Pol*, *Beam*, and *Outroute* fields once the modem calculates the correct values.

Important: Ensure the ODU (radio) polarization shown in OASIS matches the polarization shown in the service order notes in the FSO Detail step.

If the site location requires a different beam than is listed in the FSO, you must choose the beam manually.

To manually choose the beam:

1. Tap **Initiate Beam Override**. You will get a selection of different beams.
2. Select the specific beam that matches the coordinates of the installation site. Check the Parameters textbox of the FSO (outlined in [Figure 54](#)) for these coordinates.

Site Information
Commission Date: First Commission Date:
Registration Date: First Registration Date:
Lock Date:
Churn Type: Churn Date:

Order Information
*Order Type: Install
Status: In Progress
*Sales Channel: Hughes Sales Agents
Order Sub Type: [Dropdown]
Status Changed Date: 04/01/2020 11:29:57
Source: Red Ventures- AllConnect.com (SA) ID: 92937
Status Changed By: WebWeclnterface
Bill To: HNS
Payment Source Id: 92937
Cust Store/POS Date: [Dropdown] 31
Dish Type:
Agent Id:
*Order Rec'd@HNS: 04/01/2020 00:00:00
Installation Type: Residential
*Priority: 2 - Normal
Satellite/Trans ID: EchoStar 19 /
Transport Name: Gen5_20GB(RV_03)
Device Type Ordered:
Partner Transaction#: I094179647
Order Plan Code:
Bring Equipment: Install & Equipment required
SO Lock Status:
Partner Ticket#: [Dropdown]
Transaction Type: ORD-DSS
Service Offer Id:
Billing Validation Num: [Text]
Brand/LE Account: [Text]
Ordered Payment Code: 13 - Lease (Current: 13 - Lease)
Antenna Size:
Backup Ord Admin:
Parameters (CPE/Add Prod Conf):
SATELLITEID: EchoStar 19
POLARIZATION: RH
DEVICE_ID: DSS38657807
CHECKDIGIT: 9
BEAMID: 108
Notes: RESID=[2133850-1585739737]...
3969
View Case Notes

Figure 53: Parameters textbox on the FSO

This message (Figure 55) indicates the modem is in pointing mode.

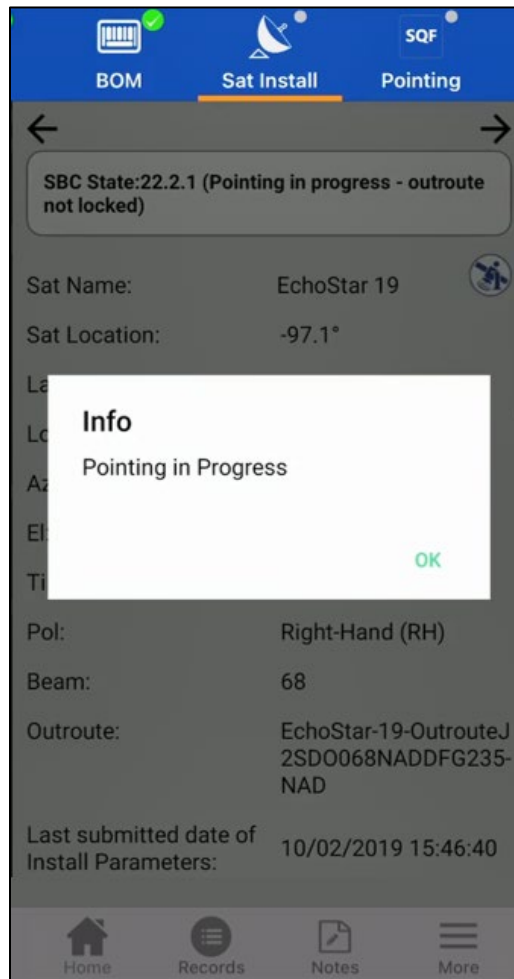


Figure 54: Pointing mode

3. Tap → to proceed to the next step, Pointing. This is described in the next chapter.

Pointing the antenna

The Pointing step (Figure 56) aids you in pointing the antenna by showing the signal quality factor (SQF). It displays the:

- Maximum IDU value achieved during this session
- Target SQF value determined by OVT within a 6-mile radius
- Maximum SQF value achieved during this session

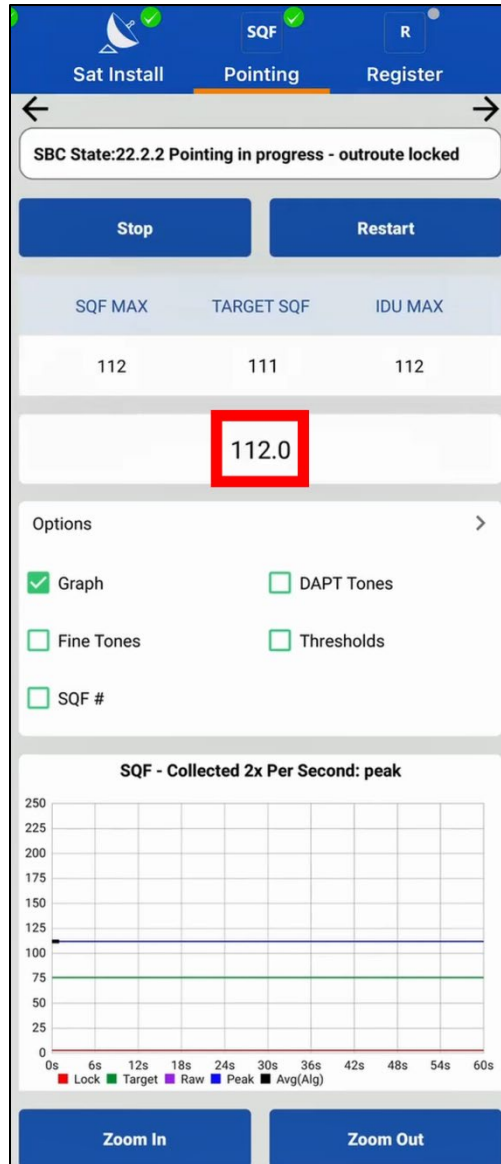


Figure 55: Pointing screen

The central number (outlined in [Figure 56](#)) displays the current SQF value.

The Pointing step also includes a graph (see [Figure 56](#)) that shows how the SQF value has fluctuated over time, with markings for the peak SQF, the target SQF, the raw SQF, the average SQF, and the locking threshold.

Audio options for pointing include:

- DAPT Tones – The higher pitched and faster the beeping, the greater the signal.
- Fine Tones – Indicates whether the SQF is rising, falling, or remaining even.
- Thresholds – Indicates when you cross a certain threshold (peak, target, etc.)
- SQF # – A computerized voice speaks the current SQF value every 3 seconds.

To point the antenna:

NOTICE

Do not attempt to point the antenna manually by pulling on the feed support arm. This can cause permanent damage to the antenna. Instead, use the antenna mechanical adjustments.

You may gently maneuver the antenna reflector to coarsely point the antenna, but only if the Az/EI canister bolts are loose enough so that the reflector rotates easily.

1. Preset the antenna elevation to 1° above the number specified in the Sat Info step in OASIS. This helps compensate for any elevation loss caused by the loose antenna canister. Remember to align the elevation value with the black line under the elevation bolt.
2. Sweep the antenna in the direction of the azimuth value until you get an SQF above 30, indicating you acquired the satellite.
3. Continue to carefully sweep the antenna until you achieve an SQF value of 50 or more.
4. Lock down the canister bolts to steady the antenna on the mount. You will now begin to fine-point the antenna.

Note: After you have locked down the canister bolts, do not attempt to adjust the antenna by grabbing the reflector. This will damage the reflector.

5. Wait for the SQF to settle on a value, then use the appropriately sized wrench for the antenna (found in the manual specific to that antenna) to fine-tune the antenna's azimuth and elevation adjustments. Continue until you achieve the highest possible SQF value.
6. When the signals are peaked, tighten the azimuth and elevation bolts completely.

Note: Because slight movement of the antenna occurs during lockdown, always measure the signal peak value after locking down the antenna.

7. When you are done pointing, make sure all outdoor cable connections are weatherproofed with dielectric grease and securely tightened. A loose connector will degrade SQF. Depending on your installation environment, additional weatherproofing may also be needed.

Note: Use cable ties and cable hangers that are resistant to ultraviolet rays to secure all outdoor cables.

NOTICE

Hughes-approved connectors, in conjunction with the dielectric grease on the F connector threads, provide weatherproofing for outdoor connections. These connectors should be used in new installations, upgrades, and any repairs.

Outdoor connectors on radios and ground blocks that are in areas with corrosive environments (e.g., salt air) may need additional weatherproofing, such as weatherproofing tape or a weather boot filled with dielectric grease.

8. Tap → to proceed to the next step.

Registering the modem

Note: You can only register and activate a modem via OASIS during JUPITER installations. As such, all the content in this chapter, except for the IV/OVT step, only pertains to JUPITER installations.

To register and activate the modem during installations of the HN9000 or HN7000 series modems, you must launch the modem's user interface from your smart device's Internet browser, then proceed as you normally would as if using a laptop.

The Register step ([Figure 57](#)) allows you to perform the modem's registration procedure.

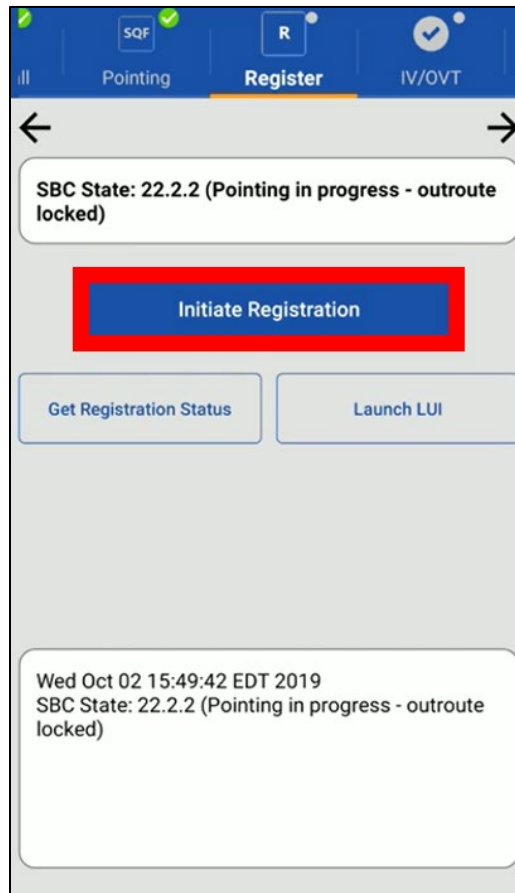


Figure 56: Register screen

To register the modem:

1. Tap **Initiate Registration** (outlined in [Figure 33](#)).

As the registration process progresses, the current modem state is shown in the top textbox and a summary of states the modem has achieved is shown in the bottom textbox.

Note: If the terminal fails to register, OASIS will recommend a solution in the bottom textbox.

When the modem successfully registers, a success pop-up message appears ([Figure 58](#)). Tap **OK**.

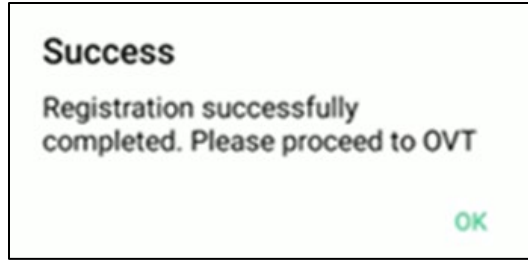


Figure 57: Registration successful

2. The SBC state on OASIS will turn to 22.3.5, terminal activation stage (see [Figure 59](#)).

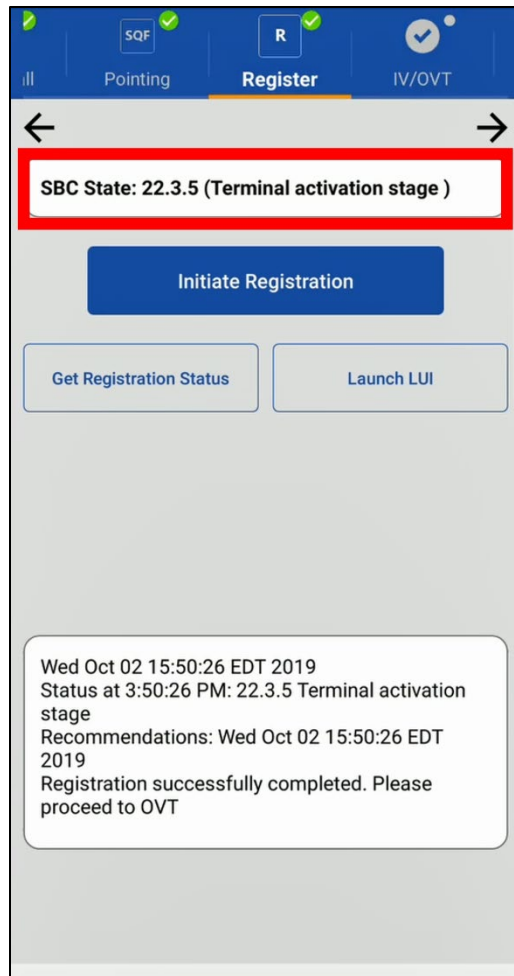


Figure 58: Register step – post-registration

3. Tap → to proceed to the next step.

Activate

The Activate step ([Figure 60](#)) allows you to activate the modem.

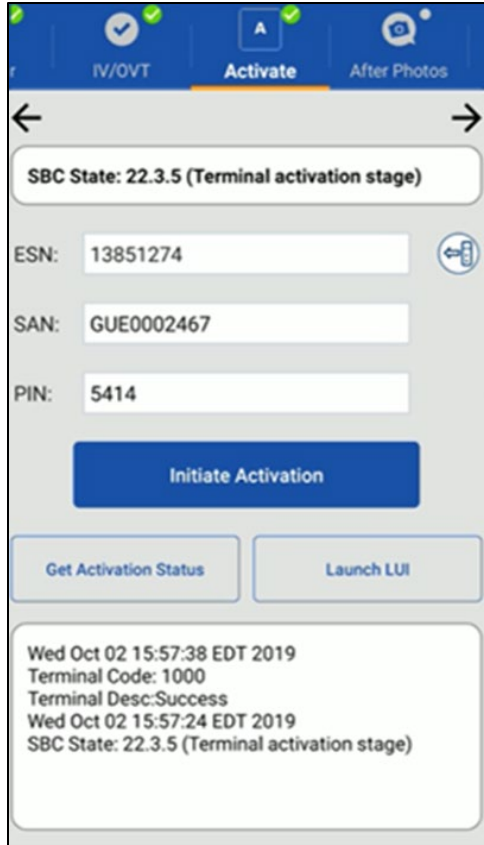


Figure 59: Activate screen

To activate the modem:

1. Tap **Initiate Activation**. The box below the button should show that the process was successful. A successful activation will enable a “Success” popup (Figure 61) to appear. Before continuing, make sure the terminal code is *1000* and the terminal description is marked as *Success* in the box below the button.

Success

Activation successfully completed.
Please proceed to Service Activation

OK

Figure 60: Terminal activation success

2. Tap → to proceed to the next step.

Before photos

Before photos is the next step in the workflow after Safety. During the installation, you can take required *before* photos by tapping the **Before Photos** icon in the top toolbar of OASIS, as shown in Figure 62.

To see which photos you need to take, expand the menu for the current FSO.

Each item you need to photograph has a corresponding drop-down. The colored camera icons and circles have the following meanings.

- Red (📷 0) – you still need to take the required photo.
- Green (📷 1) – you have taken the required photo.
- Gray (📷 0) – optional photo.

You must take these photos before you begin installing any of the devices. Photos may or may not be required, depending on the customer-specific requirements and the devices being installed for each individual install. A red circle appears next to all required before photos. Tap the name of the photo to launch your device's camera and take the photo. It is recommended to take all optional photos as well.

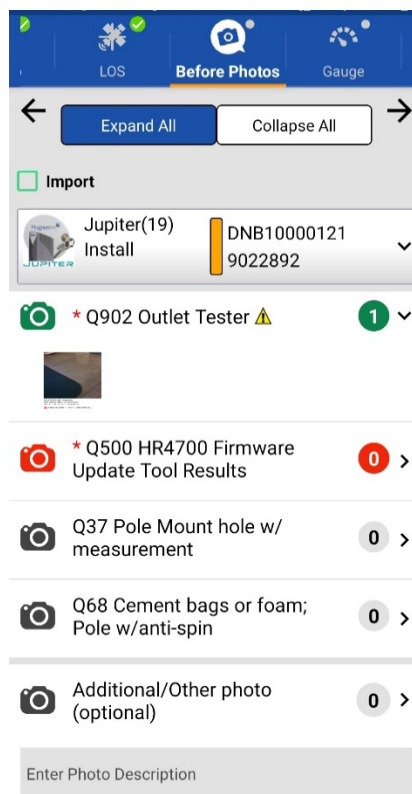


Figure 61: Before Photos screen prior to taking photos

After you have taken the photo, a green circle indicates that the photo was taken and a thumbnail of the picture appears below the name of the item, as shown in [Figure 63](#).

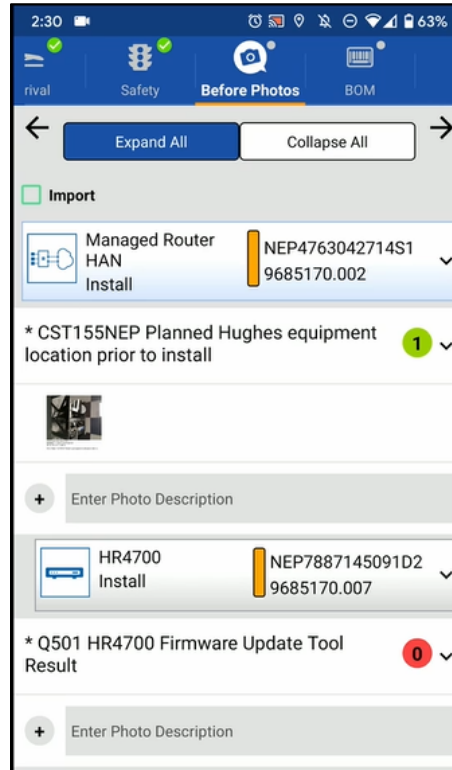


Figure 62: Before photo completed with thumbnail

Bill of Materials (BOM)

The bill of materials (BOM) step requires you to record all part numbers and serial numbers (S/Ns) of the devices you are installing (e.g., network switch, modem, SIM card). Select a device from the list, as shown in [Figure 64](#).

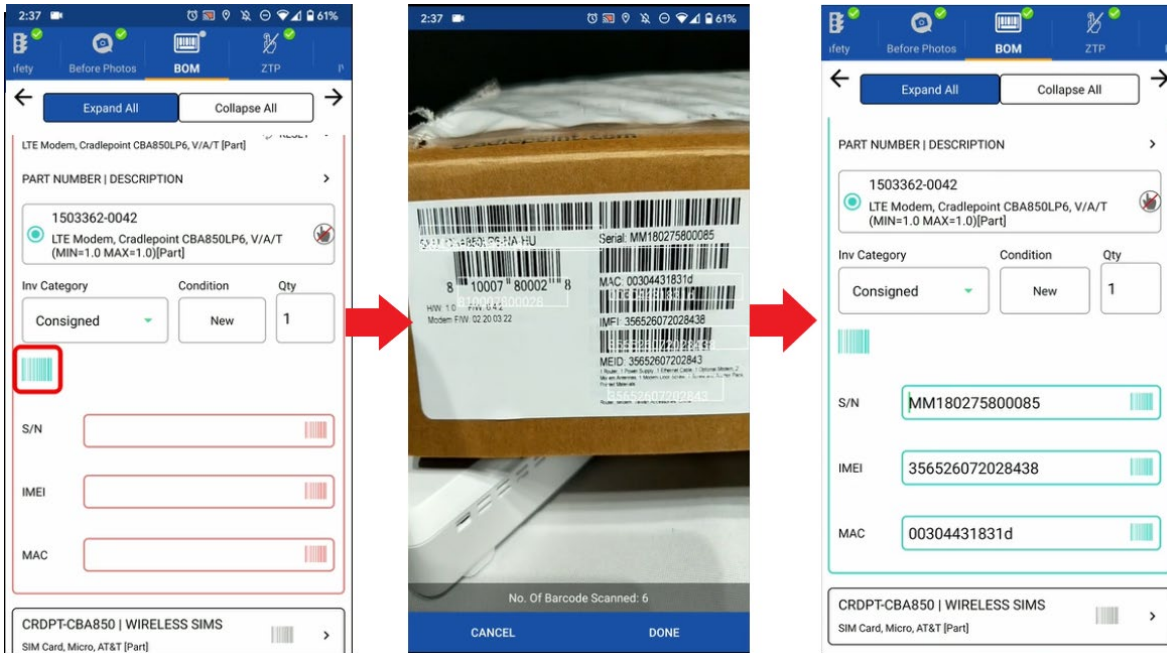


Figure 63: BOM step

To scan a barcode:

3. Select the part number for which you need to scan the S/N.

Note: A hand icon next to the kit part number ([Figure 65](#)) indicates that the device can be configured using zero-touch provisioning (ZTP). Refer to **Registering the modem**.



Figure 64: Hand icon for ZTP configured devices

Note: When scanning SIM cards, select the part number, scan the barcode, then use the HOST BY dropdown the select serial number of the device that is using the card. See [Figure 66](#).

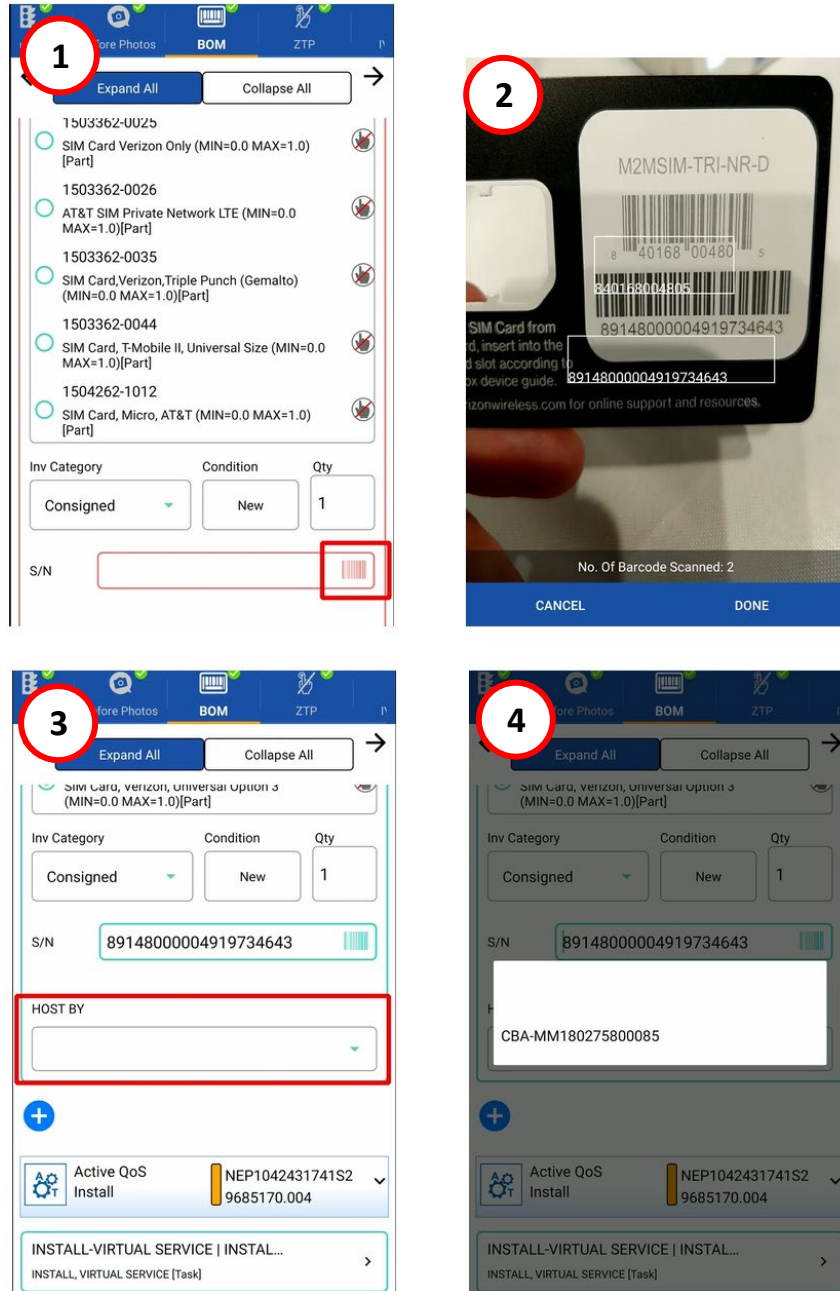


Figure 65: Scanning a SIM card

Zero-touch provisioning (ZTP)

The purpose of zero-touch provisioning (ZTP) is to automatically update and configure the devices that you are installing. The steps below describe how to perform the ZTP steps.

During the normal installation process, the ZTP step appears after the BOM step. ZTP uses the information from the BOM step to pull the correct configuration files from the Hughes servers.

4. When you reach the ZTP screen, first ensure that the correct site account number (SAN) is selected, and that the device type is correct (Figure 67). OASIS associates the device to the indicated SAN.
 - a. Make sure that the device is connected to the internet, and then press the **Assoc** button as shown in (Figure 67). Alternatively, expand the device and select the individual Assoc button to complete the associations one at a time.

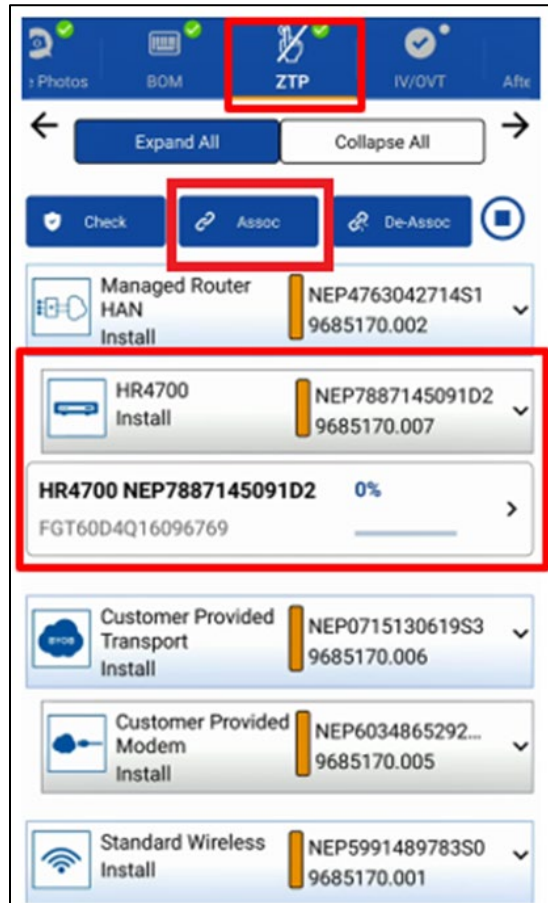


Figure 66: ZTP screen

5. OASIS automatically applies the latest configuration settings to the devices and associates the devices with the site. OASIS shows status updates, as shown in Figure 68 to do a bulk association. You can track individual steps in the ZTP process by referring to the status messages.

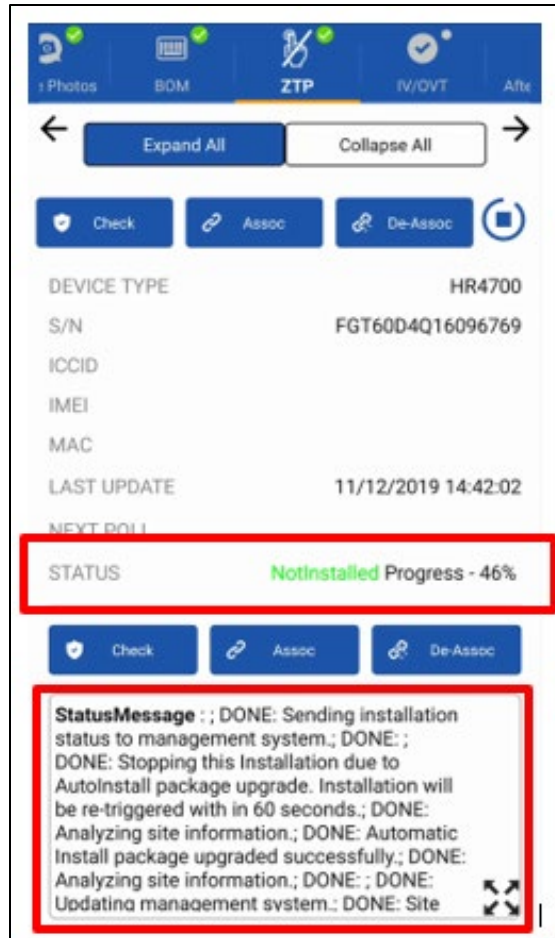


Figure 67: ZTP status updates

6. Once all devices have been configured, proceed with the rest of the physical installation per the customer installation spec, and then finish the OASIS step.

Performing the installation verification (IV/OVT) check

JUPITER installations only: OVT

Onsite Validation Tool (OVT) checks are required for all JUPITER service installs. For all other installs, skip to IVT on page 65.

The OVT performs checks on all devices to ensure that the satellite services meet Hughes requirements and specifications for speed and connectivity. Every device must pass the checks, and you will need to pull signoff codes from OVT into OASIS in order to close out the order.

1. To open OVT in a browser on your smart device, tap the **Launch OVT** button, as shown in [Figure 69](#).



Figure 68: IV/OVT step

2. The OVT sign-in page will open on your smart device's web browser. OASIS automatically fills the fields on the OVT sign-in page (Figure 70).

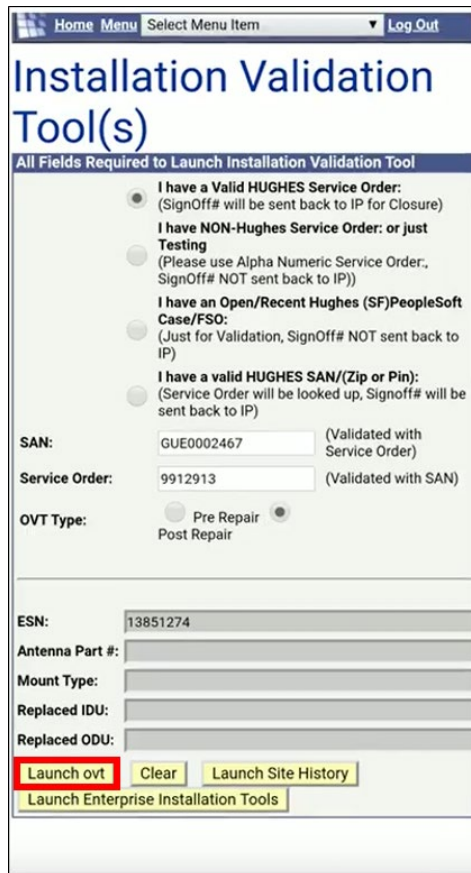


Figure 69: OVT pre-collection page

3. Ensure the information is correct, then tap **Launch OVT** (outlined in [Figure 70](#)) to open the tool.
4. Verify the FSO and site information. Tap Refresh Site Information (outlined in [Figure 71](#)) to ensure the most up-to-date information is populated.

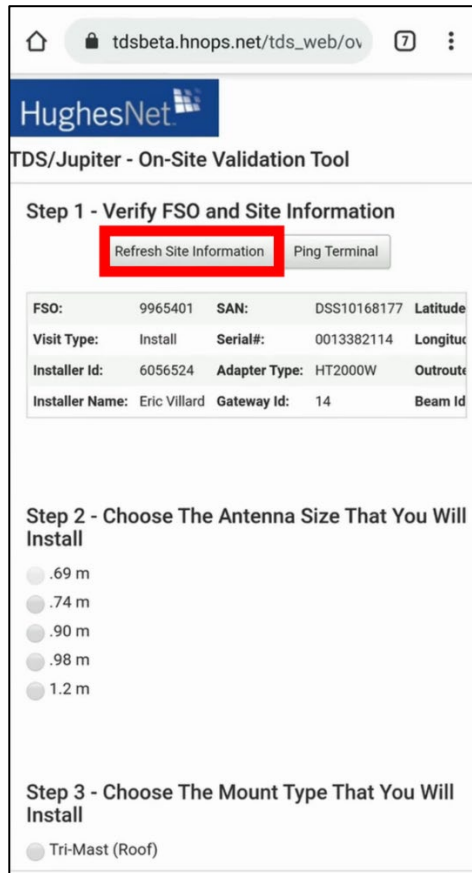


Figure 70: OVT step 1

You will receive confirmation that the refresh was successful (see [Figure 72](#)).

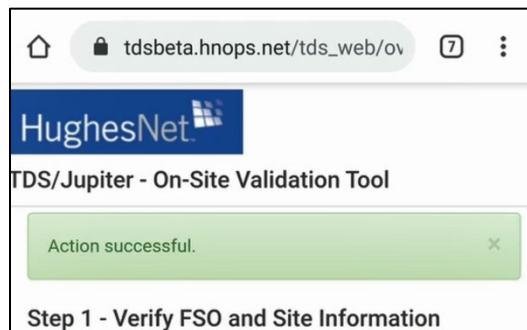


Figure 71: OVT refresh successful

3. Tap **Ping Terminal** (outlined in [Figure 72](#)).

You will receive confirmation that the ping was successful (see Figure 73).

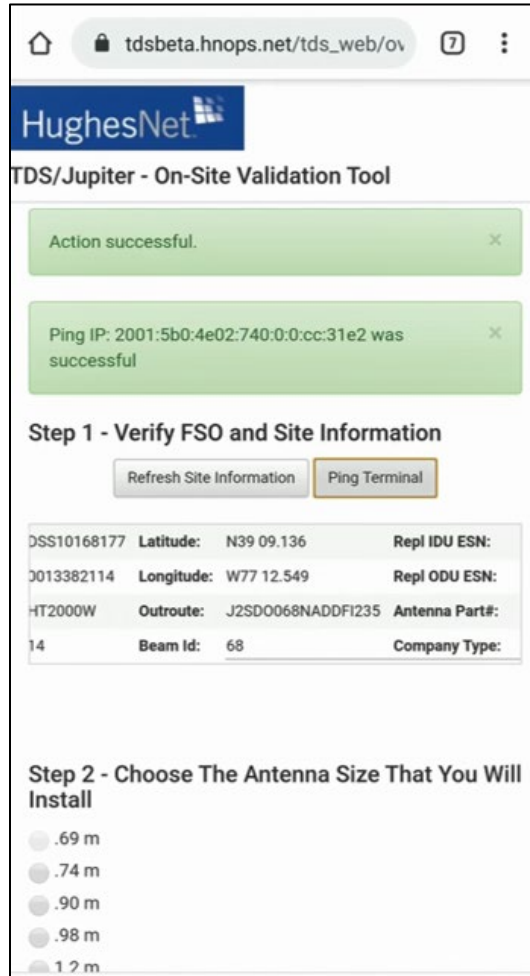


Figure 72: OVT ping successful

- For Step 2, select the size of the antenna you installed (Figure 74).

HughesNet

TDS/Jupiter - On-Site Validation Tool

Refresh Site Information Ping Terminal

FSO:	9965401	SAN:	DSS10168177	Latitude
Visit Type:	Install	Serial#:	0013382114	Longitud
Installer Id:	6056524	Adapter Type:	HT2000W	Outroute
Installer Name:	Eric Villard	Gateway Id:	14	Beam Id

Step 2 - Choose The Antenna Size That You Will Install

.69 m

.74 m

.90 m

.98 m

1.2 m

Step 3 - Choose The Mount Type That You Will Install

Tri-Mast (Roof)

Tri-Mast (Wall)

Pole

Non-Penetrating

Proceed

Figure 73: OVT steps 2 and 3

- For Step 3, select the type of mount you installed (Figure 74).
- Ensure all the information is correct, then tap **Proceed** (outlined in Figure 74). OVT will begin to test the satellite connection and compare your installation to others in the area to determine if it meets Hughes' requirements for uplink, downlink, and other values.

The OVT results page launches (Figure 75).

The screenshot shows the HughesNet TDS/Jupiter On-Site Validation Tool interface. At the top, the browser address bar shows 'tdsbeta.hnops.net/tds_web/ov'. The HughesNet logo is visible. The main title is 'TDS/Jupiter - On-Site Validation Tool'. Below this, there is a table of system information:

Outroute:	JZSDU066NADDF1Z35	Last Reboot Time:	
Antenna Size:	0.9	Last Reboot Reason:	R
ODU Power:	1	SW Version:	W
Satellite ID:	EchoStar-19-NAD	IDU ESN:	0
Activation Date:		ODU SN:	6
System State Code:	22.3.5	FAP State Code:	2

Below the table is an 'SHP' button. Further down are three buttons: 'Get Current Stats', 'Clear Terminal Stats', and 'Reload Tables'. At the bottom of this section are four buttons: 'Force Fallback', 'Reboot', 'Enable WiFi', and 'Sign Off' (highlighted with a red box).

Below the buttons is a table with performance metrics:

	Timestamp	UL Es/No Avail	DL Es/No	MOI
Target Values	N/A	281	108	16A
Current Values	10/28/2019 12:09:53	284	111	16A
Difference	N/A	3	3	0

At the bottom, there is a 'Diagnosis:' section with an 'OK' button and a 'Recommended Action:' section with a 'Click Signoff' button.

Figure 74: OVT results page

7. Perform any recommended actions listed in the *Recommended Action* box.
 - If OVT displays polarization errors, you must change the polarization at the radio by adjusting the orientation of the feedhorn. Your JUPITER training provides instructions for how to do this.
 - If you are installing an HT2000W, you may see a Wi-Fi error. This error indicates Wi-Fi is turned off on the modem. To correct this error, tap **Enable WiFi**.
8. Tap **Sign Off** (outlined in Figure 75) when the recommended action says *Click Signoff*.

9. On the page that launches (Figure 76), select any installation problems or extra actions performed during the installation. If you had no problems, tap the *No Installation Problems* checkbox.

The screenshot shows a web browser interface for the HughesNet TDS/Jupiter On-Site Validation Tool. The browser address bar shows the URL `tdsbeta.hnops.net/tds_web/ov`. The page header includes the HughesNet logo and the title "TDS/Jupiter - On-Site Validation Tool". Below the header, there is a form with the following sections:

- Installation:** Contains four checkboxes: "Line Of Sight", "Replaced Dish", "Repaired/Replaced Cable Connector/Ground Block/Weather", and "No Installation Problems" (which is checked).
- Hardware:** Contains four checkboxes: "Replace/Repair Feedhorn/Polarizer", "Defective Radio being returned for repair", "Defective Modem being returned for repair", and "Replaced Power Supply".
- Software:** Contains two checkboxes: "Modem Software Installation/Processing Problem" and "NOCC/Tier 3 Corrected Network Problem".
- Customer Related:** Contains two checkboxes: "Customer Refused Install" and "Customer Equipment/Software/Router Problem".
- Other:** Contains one checkbox: "Other".

Below these sections is a text area labeled "Provide Installation Details Below". At the bottom of the form, there is a "Sign Off" button, which is highlighted with a red rectangular box.

Figure 75: OVT page 3

In the *Provide Installation Details Below* textbox, type any additional notes you have. *You must enter text inside this textbox to proceed.* If you have no notes, simply type *No problems with installation.* Use only alphanumeric characters when typing notes (i.e., A to Z, a to z, 0 to 9).

10. Tap **Sign Off** (outlined in [Figure 76](#) on page 64).

OVT will generate a sign-off code that displays at the top of the screen (see the screenshot on the left in [Figure 77](#)).

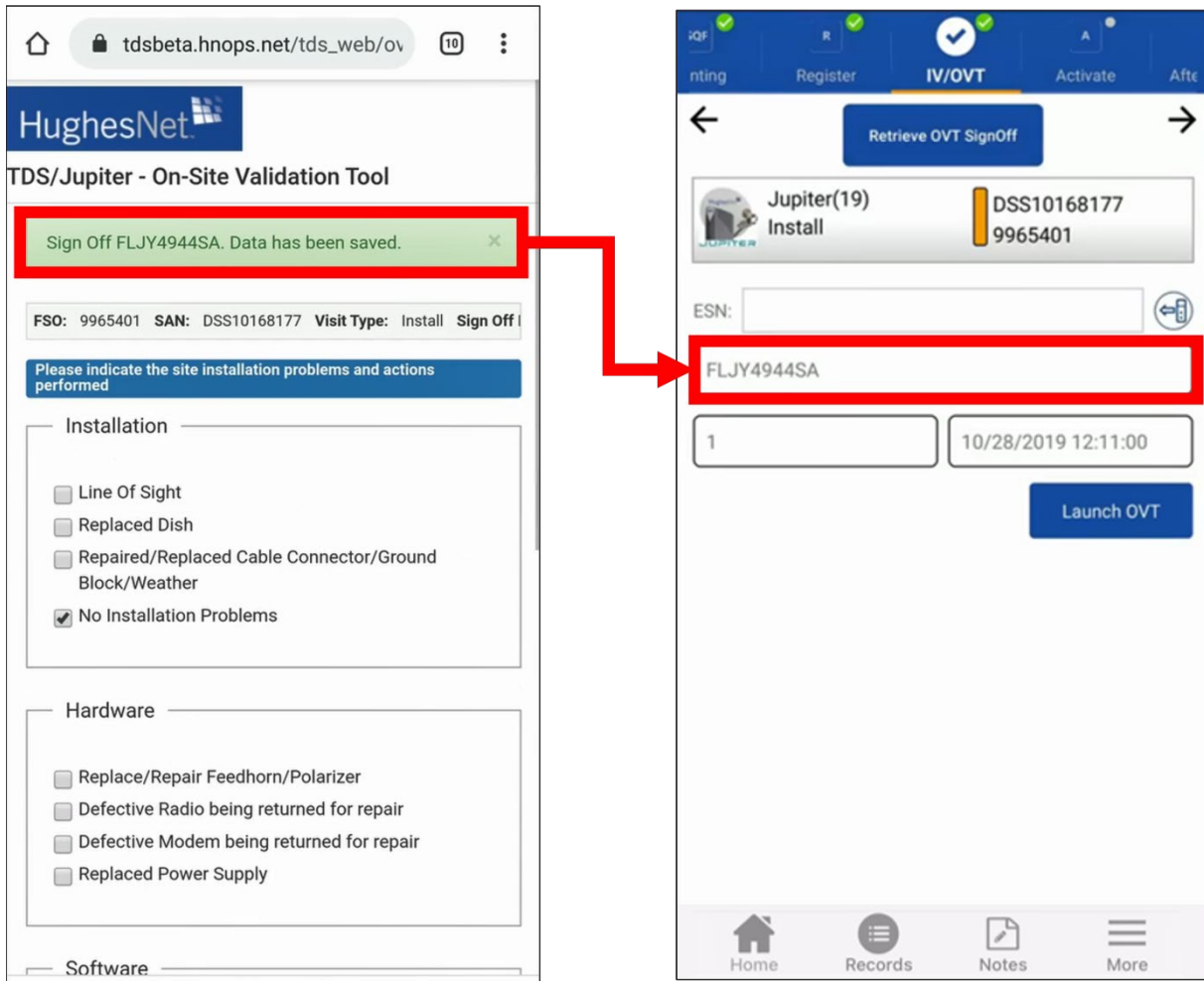


Figure 76: OVT step – signoff number

11. Return to OASIS.

12. Tap **Retrieve OVT SignOff** to pull the number from OVT (see the screenshot on the right in [Figure 77](#)).

IVT


The installation verification tool (IVT) performs checks on all devices to ensure the terrestrial satellite services meet Hughes requirements and specifications for speed and connectivity. Every device must

pass the checks, and you will need to pull signoff codes from IVT into OASIS in order to close out the order.

1. To open IVT in a browser on your smart device, tap the **Launch Installation Verification** button, as shown in [Figure 78](#).



Figure 77: Launch IV Signoff

2. The services and devices you installed are listed IVT ([Figure 79](#)). Services/devices that are not yet verified are highlighted in blue.
Note: Services are marked with an “(S)” and devices are marked with a “(D)” ([Figure 79](#)). Items with a note icon  will require additional input from the installer.

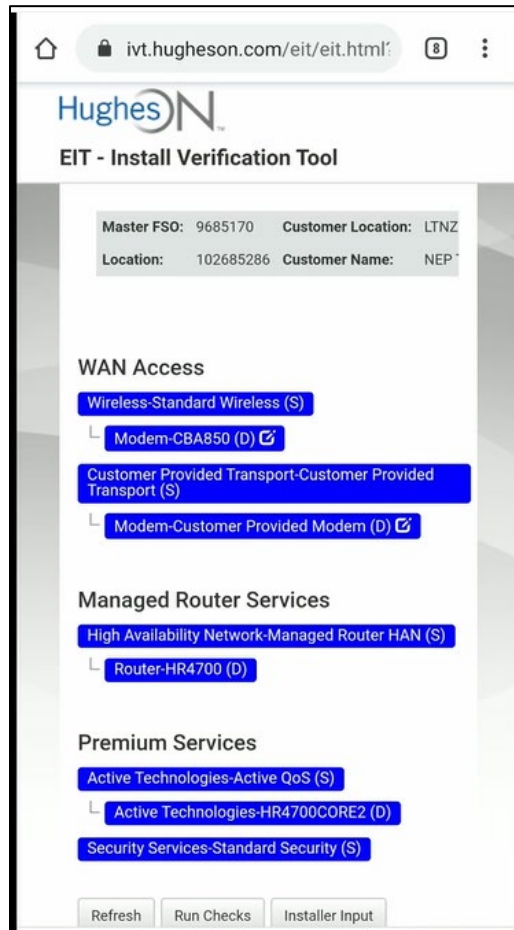



Figure 78: IVT screen 1

3. Tap any note icon  to fill out any additional required information, then tap *Update*. Or, tap the Installer Input button on the bottom of the screen to input all required parameters at once.

Note: Additional information may include upload/download speeds, latency, and signal strength values. Some cases may require you to verify that the Customer Provided Transport meets Hughes requirements.

4. When all notes have been added, tap the **Run Checks** button or the **Run Checks/Signoff** button.

EIT - Install Verification Tool

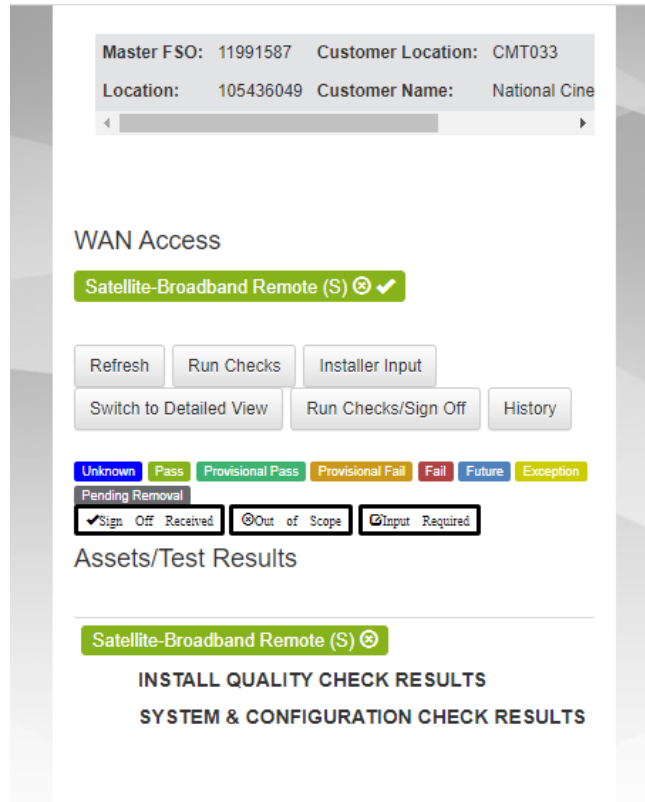


Figure 79: Run checks

5. The services and devices listed will now be highlighted in a different color. The legend at the bottom describes the meaning of each.

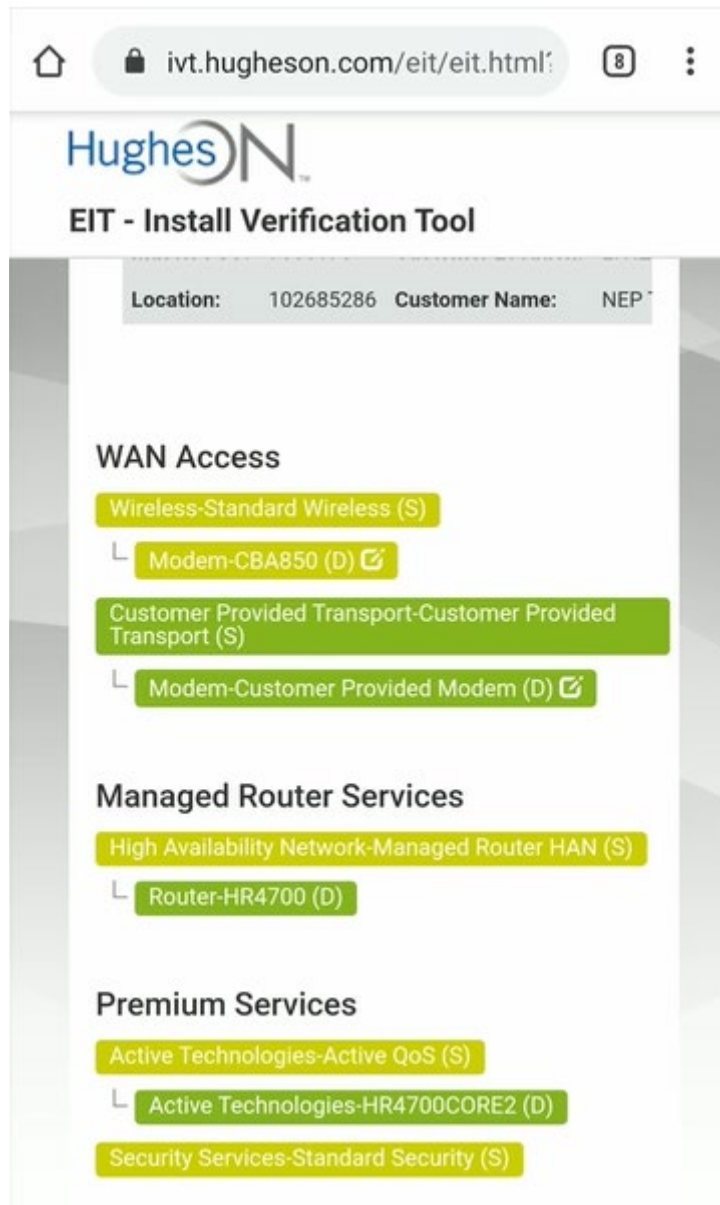


Figure 80: IVT screen 2

Note: The Assets/Test Results located at the bottom of the IVT screen shows any failed tests and notes of what failed and why, if applicable.

6. Tap **Sign Off** (Figure 81) to generate signoff codes for each product, and verify the signoff was successful (Figure 82). Return to OASIS.

Note: If the Run Checks/Signoff button was selected, the signoff will be completed automatically.

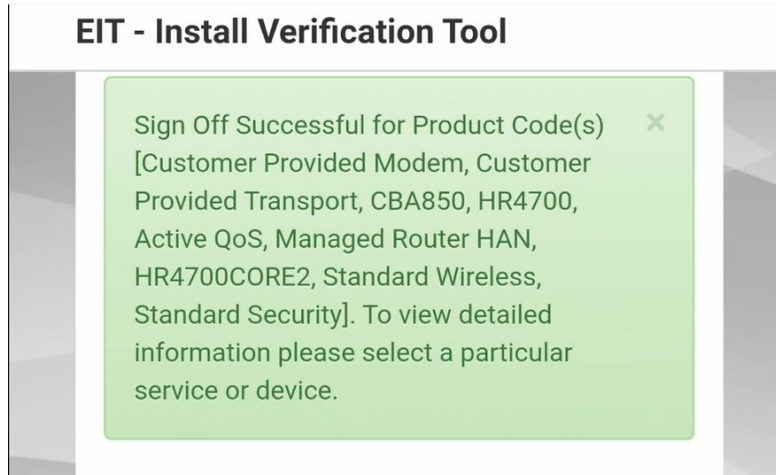


Figure 81: IVT signoff

7. Tap **Retrieve OVT SignOff** to pull the number from the IVT and confirm each code was populated.

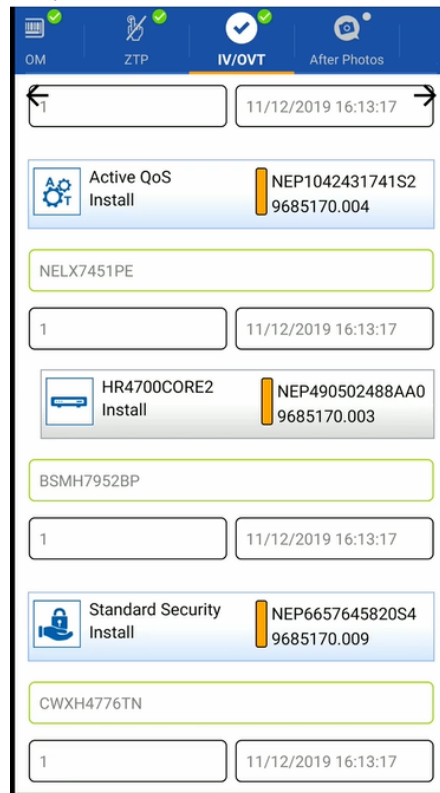


Figure 82: IVT signoff populated

8. Tap → to proceed to the next step.

After photos

Once the signoff codes that were generated in the IV tool have been captured in OASIS, you must take after photos. All required after photos are marked with a red camera icon and circle, as shown in [Figure 84](#). Tap the name of the photo to launch your device's camera and take the photo.

Note: Green circles and camera icons indicate that the required before photos were already taken.

Note: The photos needed for this step vary based on the customer-specific requirements for each individual install.

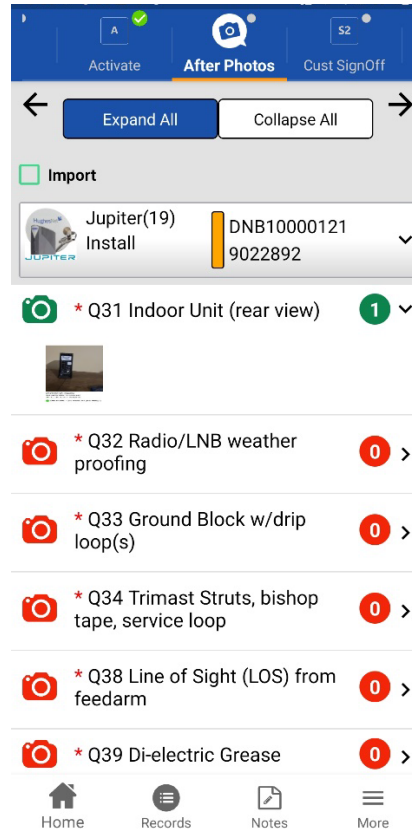


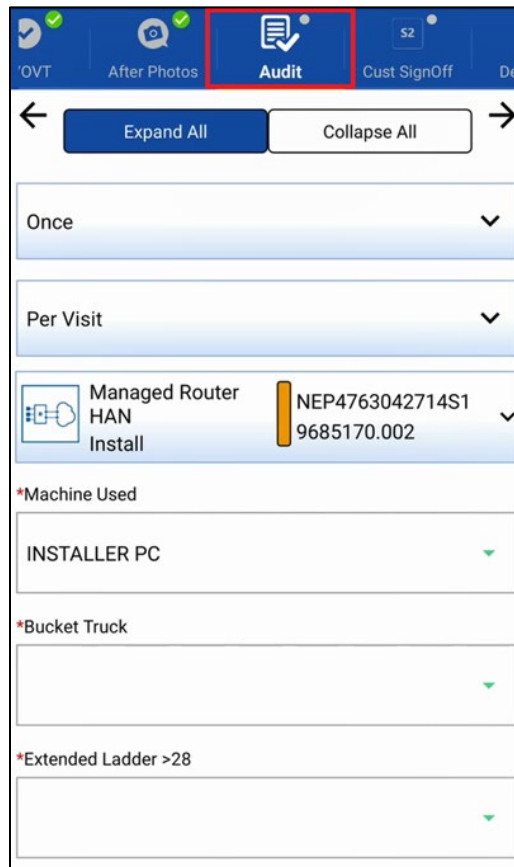
Figure 83: After photos

Audit

An audit must be done for each piece of equipment installed or service completed.

1. Use the dropdown menus to answer questions for the machine and installation equipment (bucket truck or extension ladder) used ([Figure 85](#)).
2. Enter in the signoff number.
3. Enter in the customer's name, email address, any comments, and answer questions regarding the installation and the workplace status (adequate ventilation, trash picked up, and etc.).

Note: Some questions may be repeated, but some are specific to the equipment installed.



The screenshot shows a mobile application interface for the 'Audit' step. The top navigation bar includes 'OVT', 'After Photos', 'Audit' (highlighted in red), 'Cust SignOff', and 'De'. Below the navigation bar are 'Expand All' and 'Collapse All' buttons. The main content area contains several dropdown menus: 'Once', 'Per Visit', 'Managed Router HAN Install' (with a yellow bar and ID 'NEP4763042714S1 9685170.002'), '*Machine Used' (with 'INSTALLER PC' selected), '*Bucket Truck', and '*Extended Ladder >28'.

Figure 84: Audit step

Customer signoff

The customer must sign off on every service and device you installed to signify that they were satisfied with the installation, as shown in [Figure 86](#).

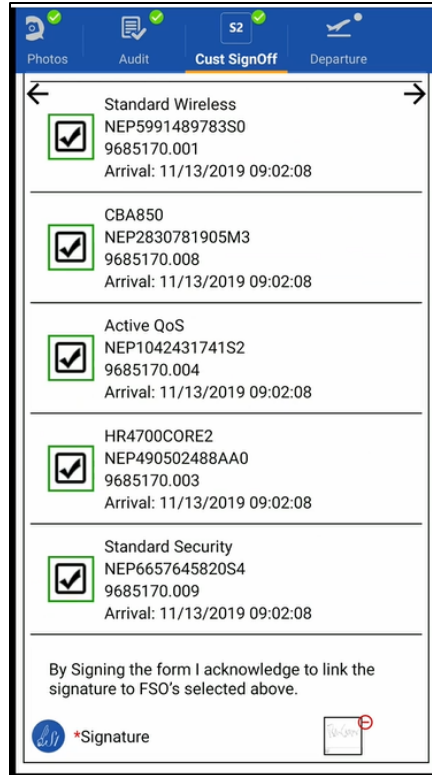


Figure 85: Customer signoff list of devices

Tap the signature field to bring up a touchscreen for the customer to type their name and signoff using their finger, as shown in [Figure 87](#).



Figure 86: Customer signoff touchscreen

A confirmation page will appear if the signature was good ([Figure 88](#)). If the customer signature needs to be re-captured, a warning will appear ([Figure 89](#)). Tap the **checkmark** to continue.

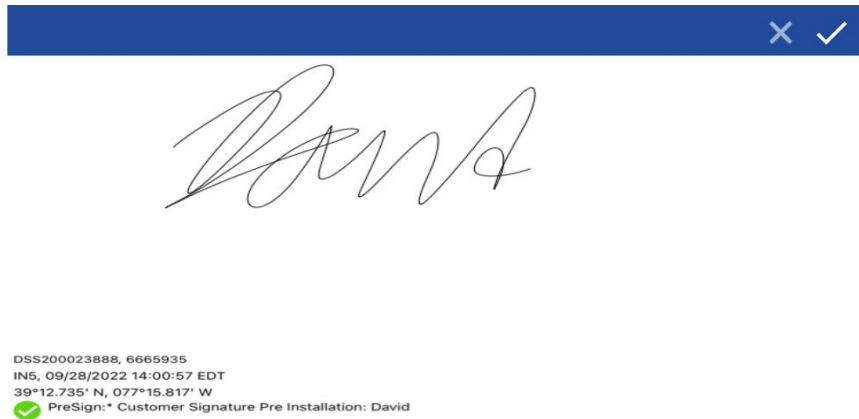


Figure 87: Good signature

Warning

Signature appears invalid, please ask customer to sign again with their unique signature

[RE-CAPTURE](#) [PROCEED](#)

Figure 88: Invalid signature

Departure

Verify that the *Departure Complete* checkbox is checked for every device you installed, as shown in [Figure 90](#).

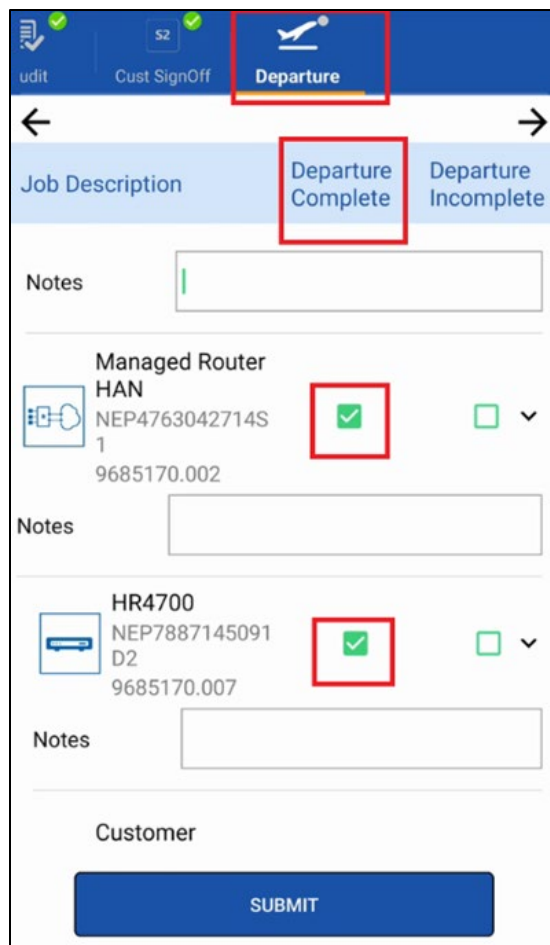


Figure 89: Departure Complete items

If the *Departure Incomplete* checkbox is checked, OASIS will identify the outstanding issues that need to be addressed before you can complete the order, as shown in [Figure 91](#).

For an incomplete departure:

If you must depart with an incomplete status, then OASIS requires that you enter a reason code and notes (Figure 91).

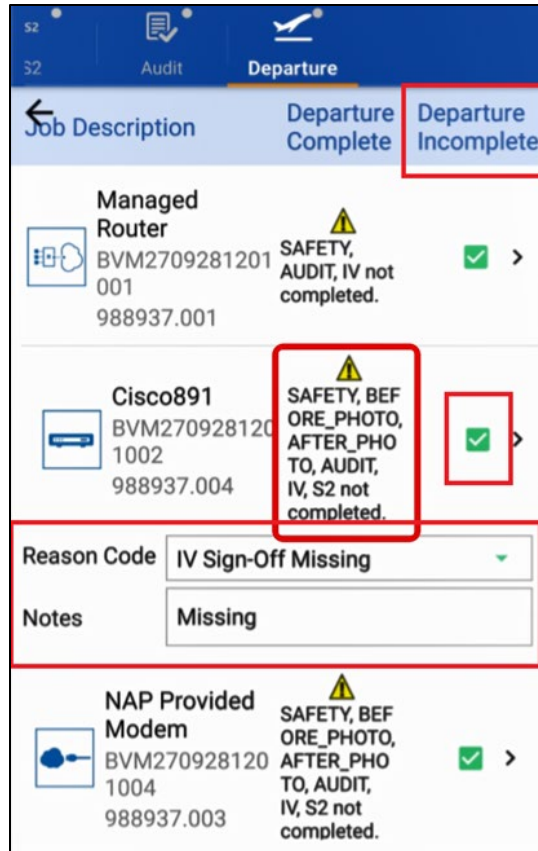


Figure 90: Departure Incomplete items

For a complete departure:

1. Enter a note of “Successful” to indicate a successful installation has been completed. The note you enter in the top *Notes* textbox will be copied in the notes textboxes for all devices, but you can manually change the individual notes as needed.
2. Tap **Submit**.

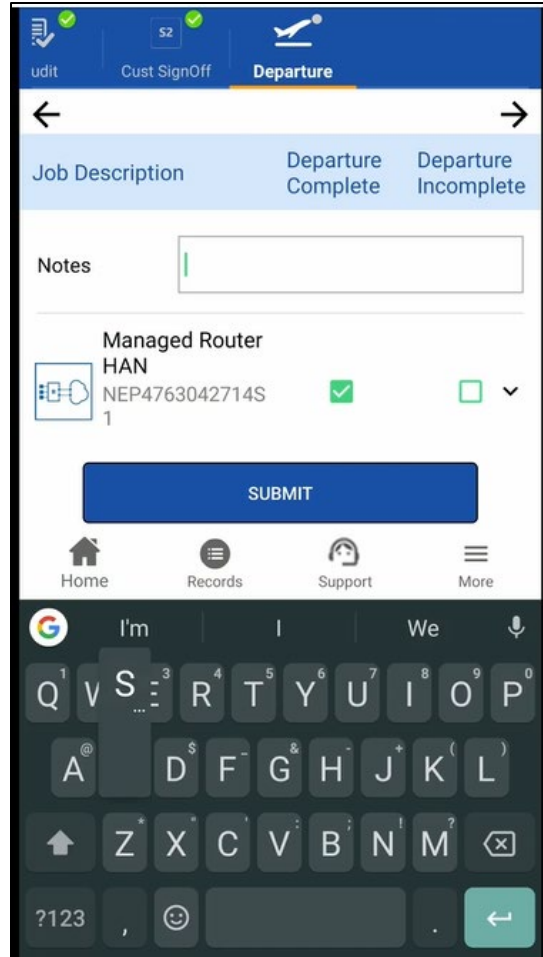


Figure 91: Departure complete notes

At this point, your installation information is stored locally on your smart device and data will automatically upload to the Records page. OASIS. You will be automatically redirected to the Records page.

Viewing installation records

The Records screen includes a menu of the different steps in the installation process. **Data will upload automatically** and its progress can be viewed on this page.

To review all the records, click **Expand All** as shown in [Figure 93](#).

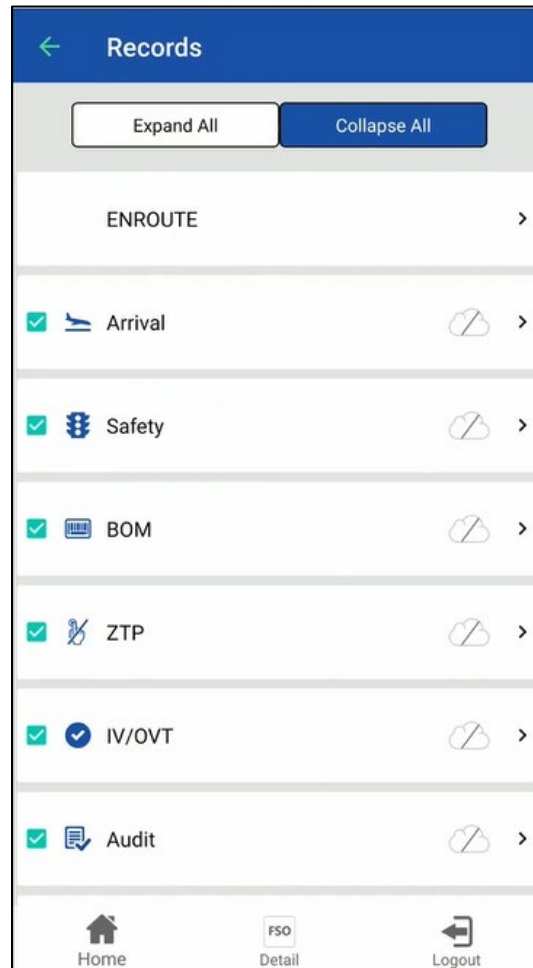


Figure 92: Records menu

Note: The check marks (✓) indicate you have visited the step. The white clouds with lines through them (☁/) indicate that the step data has not yet been uploaded to the Hughes server. OASIS removes the line from the cloud (☁) once the data has been uploaded.

In case of error, a manual upload can still be completed. To manually upload the information to the Hughes servers:

1. Click **Submit Data to Server** to upload the information to the Installation Portal, as shown in [Figure 94](#).

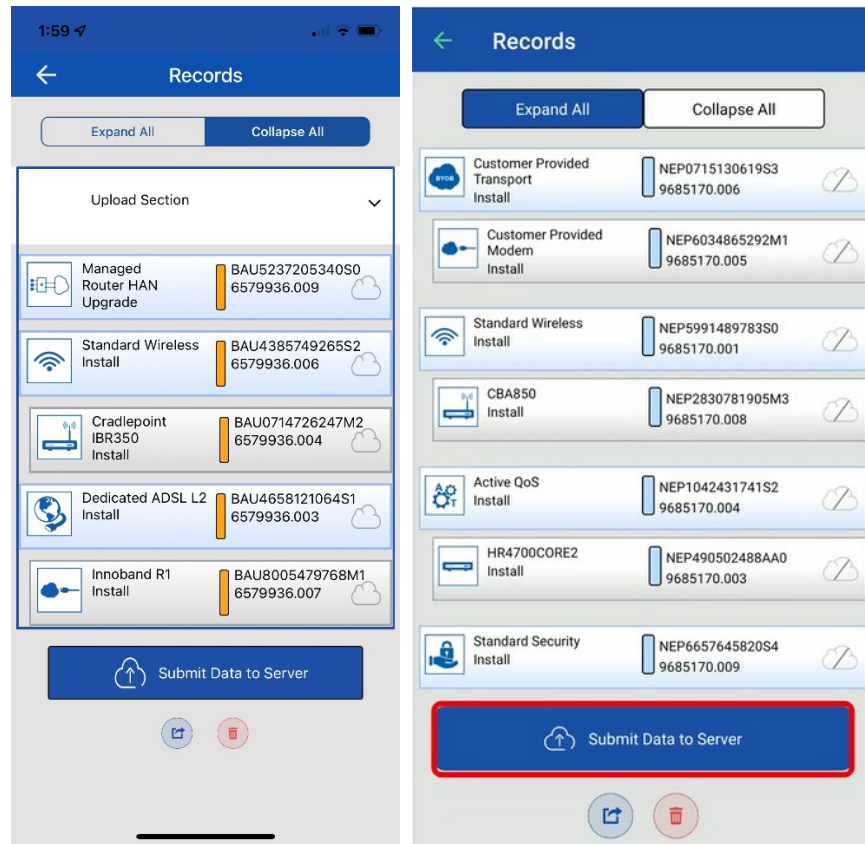


Figure 93: Submit data to server (iOS and Android)

2. Tap **Ok** on the **Success** pop-up message that appears.

Once the records are uploaded, the cloud icons turn green, as shown in [Figure 95](#).

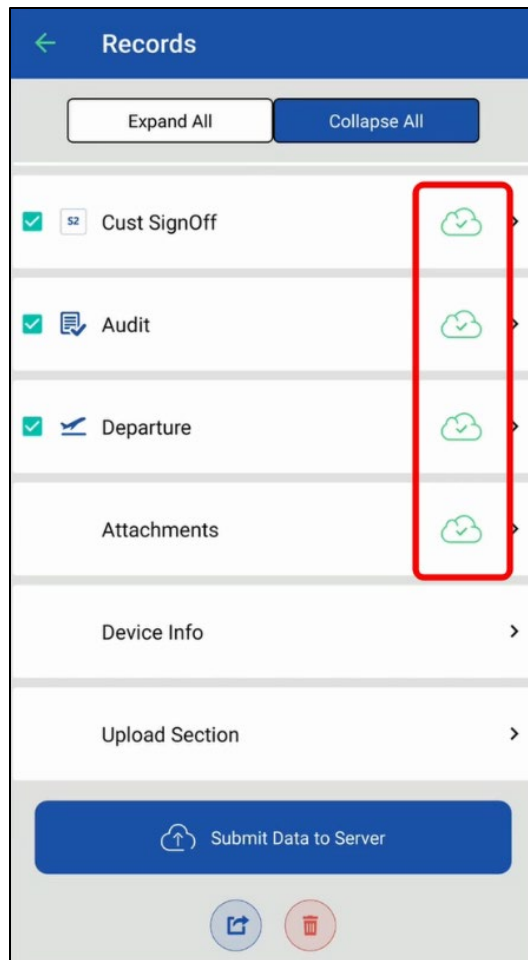


Figure 94: Records uploaded successfully to portal

Return to the OASIS homepage and expand the work order. Verify that the order is marked Completed and the cloud icon is green, as shown in [Figure 96](#).

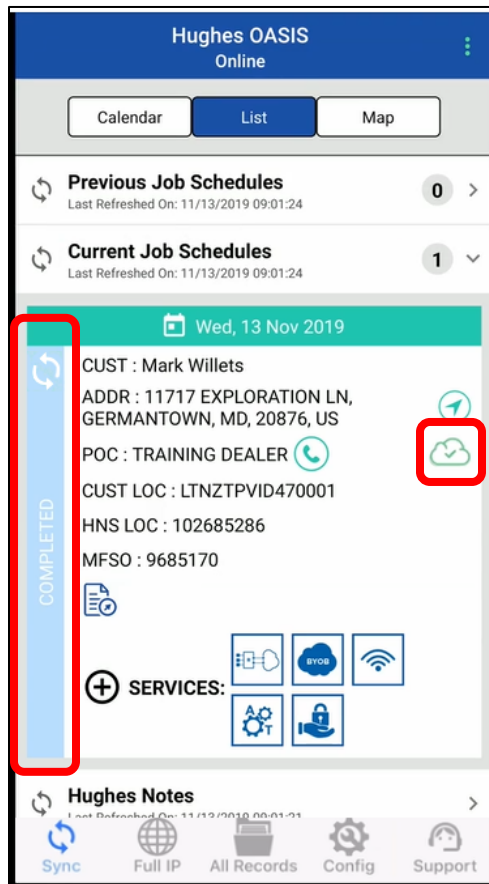


Figure 95: Work order completed

Verifying data has uploaded to the Installation Portal

Note: It is best to have a stable wireless connection to perform the steps in this section.

The FSO you just completed is highlighted in blue on the OASIS homepage under the Current Job Schedules menu, as shown in [Figure 96](#).

To verify all the data has been received by Hughes:

1. Tap the Full IP icon on the bottom toolbar of the OASIS homepage. This launches the Installation Portal in your smart device's web browser.
2. In your calendar of upcoming installations, tap the link for your current FSO, as shown in [Figure 97](#).

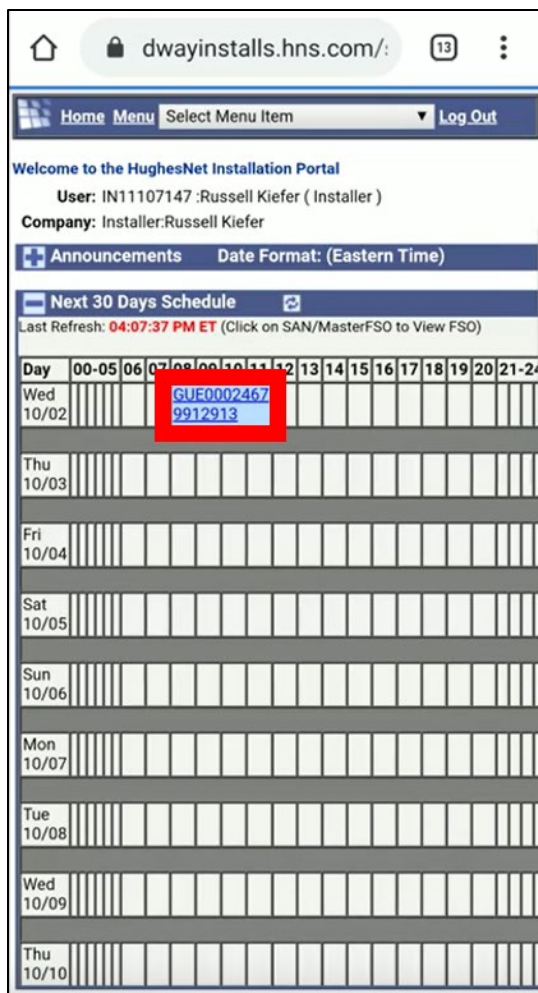


Figure 96: Select FSO from Installation Portal

3. On the page that launches, tap **OASIS WorkFlow Summary**, as shown in [Figure 98](#).




Figure 97: FSO page on Installation Portal

4. The OASIS Workflow Summary page launches, as shown in Figure 99.



Figure 98: OASIS Workflow Summary page

5. Verify all the data in your FSO has been uploaded and is correct.
6. Return to the FSO page shown in [Figure 98](#) on page 84.
7. Tap the camera icon () to launch the Site Photo Quality Audit page.
8. Check to make sure all your photos uploaded correctly.

Once you have verified all the FSO data has been uploaded to the Hughes servers, you can delete the local data from your smart device to free storage space.

Deleting local files

Closed order data that is older than 30 days will be deleted automatically. To change this setting, go to the Config section of OASIS, select Auto Delete Orders, then select to turn the feature on or off.

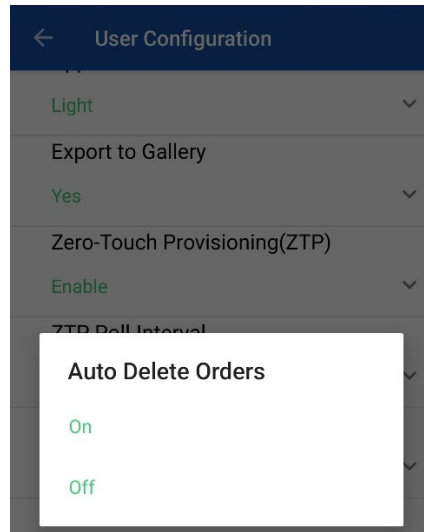


Figure 99: Auto Delete Orders

To manually delete the local data of the FSO you just completed from your wireless device, follow the steps below. Hughes recommends you clear all FSO data weekly to maintain optimum OASIS performance.

Note: Only delete the data after you have confirmed it has successfully uploaded. Once it is deleted, you cannot get it back.

To delete FSO data from your wireless device:

1. Tap the Records icon in the bottom toolbar of the OASIS homepage, as shown in [Figure 101](#).

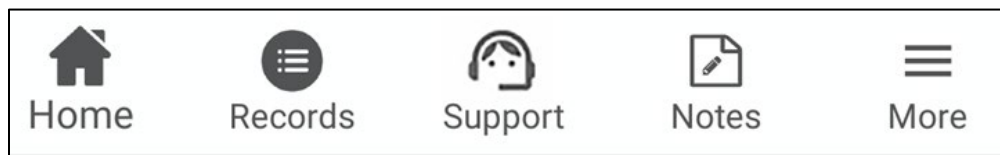


Figure 100: Records icon on bottom toolbar

2. On the All Record page, select the FSO you want to delete by checking the green box next to it.
3. Tap the three green dots on the top-right of the screen, as shown in [Figure 102](#).

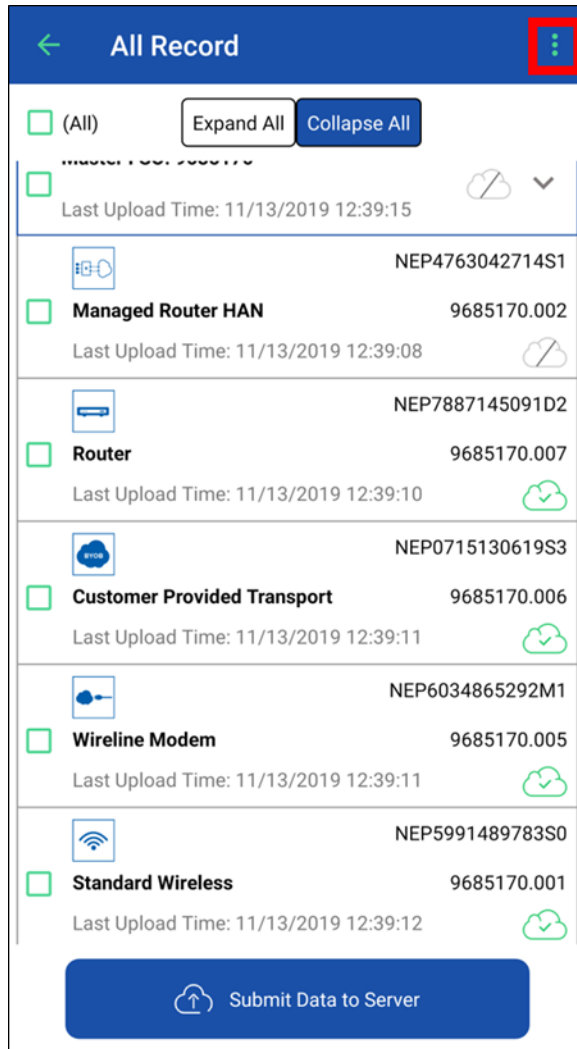


Figure 101: All Records page

A menu appears, like the one shown in [Figure 103](#).

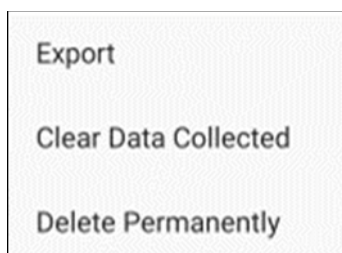


Figure 102: Data menu

4. Select **Delete Permanently**.

OASIS troubleshooting

Install support is equipped to handle the more common OASIS issues, such as accessing the app or viewing orders, but some problems (such as photo errors or app crashes) may require further investigation. If your issue cannot be resolved in real time, report it to mobile-app-issue@hughes.com so the OASIS application development team can review it.

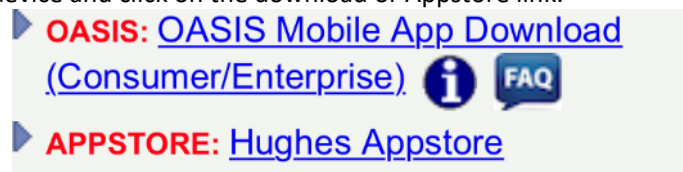
Keep in mind, many installation errors may be the result of a backend system issue and not a problem with the app itself. For example, an SBC file upload error, pointing error, or activation error is more likely an issue with the terminal or installation systems than the OASIS app itself.

If you have an unresolved OASIS issue, complete the FSO(s) to the best of your ability with the OASIS functions that do work. If OASIS is not operational at all or your mobile device dies, you can complete the FSO(s) without OASIS by using the installation steps in the terminal LUI (192.168.0.1 → Install).

Training on a non-OASIS installation is available [here](#). Other resources, such as a full OASIS user guide and training videos, are available in the [Installation Portal](#).

Installing or re-installing the OASIS app on your mobile device

1. To download the OASIS app, navigate to the Installation Portal (<https://install.hughes.com>) with your mobile device and click on the download or Appstore link:



2. Recommended devices: OASIS supports Android and iOS platforms. Hughes recommends more popular models, but any Android/iOS device should work well if meets the minimum requirements. Check the Installation Portal home page notes for updates on the recommended operating system (OS) version and specifications.

Important Tips

- **Do** sync your device every morning when you have a good Wi-Fi or LTE connection, before leaving for your first order. To do this, press the “Sync” button on the OASIS home page. Syncing multiple times throughout the day is good practice.
- **Do** enable cookies in your device’s default browser settings. Cookies are required for certain OASIS functions to work properly.
- **Do** review your app’s configuration by navigating to “Config” on the OASIS home page. This allows you to configure things such as sync intervals and photo settings.
- **Do** update your mobile device’s OASIS permissions for access to GPS (for coordinate capture), photo access, push notifications, etc.
- **Do** report any issues you have with installation or the OASIS app by responding to the “Did you have any installation issues with this site?” question at the end of every FSO. You can also report

any OASIS issues or give suggestions for improvement to your dealer/distributor, or to Hughes directly by emailing mobile-app-issue@hughes.com.

- **Do** review OASIS home page announcements, notes, and push notifications for installation and OASIS updates.
- **Do** update to the most recent OASIS app version whenever possible.
- **Don't** allow old records to pile up, as it can cause the OASIS app to become slow or crash. Clean out old records by going to "All Records" on the OASIS home page and deleting completed FSOs that have a green cloud and check-mark next to them (this indicates the FSO data was successfully uploaded to the Installation Portal). We recommend you do this at least once a week.
- **Don't** close the app if you want GPS tracking to keep running. The app needs to be running in your device's foreground or background to track your location (e.g., when using enroute).

Common Issues & Questions

iOS Certificate Issue ("Untrusted Developer" error)

1. On your iOS device, go to: Settings → General → VPN & Device Management
2. Select the "Hughes Network Systems, LLC" option in the Enterprise App section and tap on the option "Trust Hughes Network Systems" to validate the certificate.

Password expired error. How do you reset your password in OASIS?

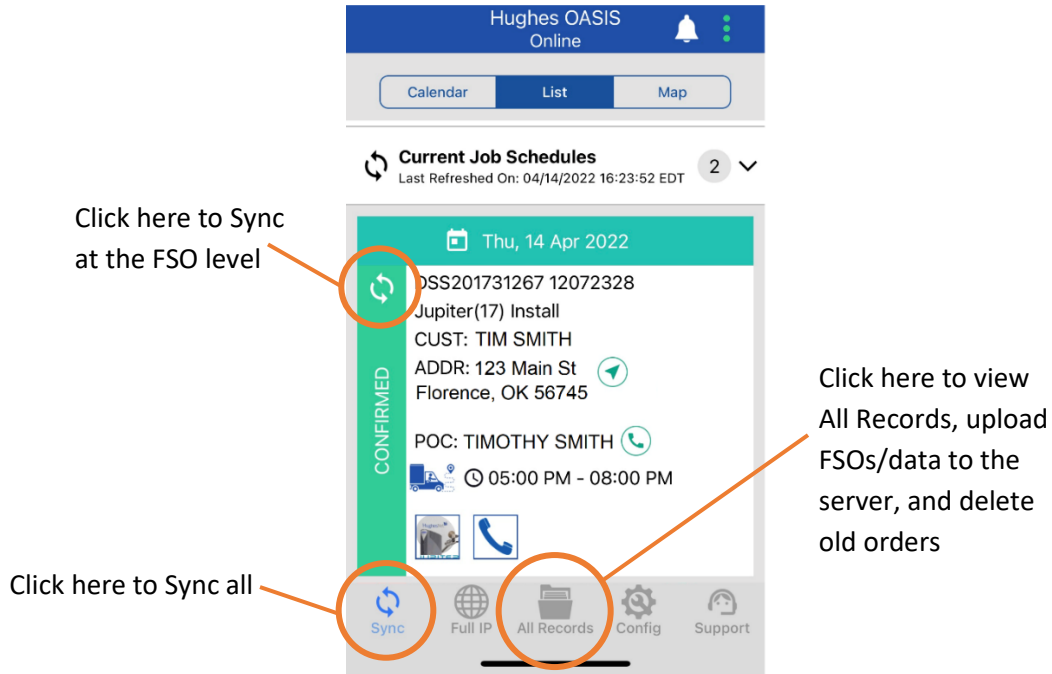
1. OASIS and the Installation Portal share the same credentials and authentication process. If your password has expired, log in to the Installation Portal (<https://install.hughes.com>) and try to log in using your old password. The Installation Portal will prompt you to reset your password.
2. If your password is lost/forgotten, use the "Forget Password" link on the Installation Portal login page or the OASIS login page to reset the password. Once the password is reset, try the updated password in OASIS.

Trouble logging into OASIS. "Invalid token - token not found" error.

1. For any Dish Installers login issues, call 888-332-3474 and select option 3 (Mobility Support Desk). If calling after 5 pm, call 303-723-2222 for the IT Support Group.
2. Make sure you have Internet connectivity.
3. Make sure the Installation Portal is operational by logging in via a web browser from same device. If your password has expired, reset it following the steps mentioned in #2.

Sync/Upload is taking a long time

1. Sync the OASIS application with a good Internet connection (ideally Wi-Fi) before leaving for your first work order each day.
2. If any information is missing on the FSO steps/screen, go back to the home screen and sync on the FSO level.
3. Go to All Records and make sure to upload all the data to the server and then delete any old, completed FSOs.



Unable to see an FSO in my OASIS app.

- OASIS will not sync orders that are closed/completed or canceled. Make sure the order has a status of “In Progress.”
- OASIS will only sync orders with a tentative or confirmed scheduled date. OASIS will not sync orders with past scheduled dates, so make sure the FSO has been scheduled for the current date or a future date.
- Make sure the FSO is assigned to the same installer ID that is being used for OASIS. Check with the technician’s Dealer/Distributor for further help if any reassignment or rescheduling needs to be done.
- If you are looking for an order that is scheduled more than 7 days in the future, go to the Config menu in OASIS and change the scheduled days from the default (7 days) to up to 1 month.

Enroute function is not working.

- Enroute requires adequate cellular or Wi-Fi service on your device. If the Enroute button is grayed out, or you receive an error upon attempting Enroute, you may not have adequate service.
- You can only enroute to 1 FSO at a time.
- Enroute provides a default travel time to the customer’s location based on your current location, but you can select a more accurate enroute time if needed.

I am using an Android device and am having issues with its GPS functionality in OASIS.

- Make sure you have location services turned on and “high accuracy mode” is enabled in the mobile settings.

GPS not capturing arrival on site or GPS capture is not accurate.

- This may be due to poor cellular service. Make sure GPS location permissions are turned on in device settings and try to capture GPS location again. In the worst-case scenario, use the ordered lat/long (default in OASIS) to activate service, and then correct the lat/long later (if needed) after HughesNet service has been activated.
- On occasion, the GPS coordinates captured may be significantly different from the lat/long expected from the order. When this happens, you will receive a pop-up message to confirm you are at the correct location. The captured lat/long from your device is typically more accurate than the ordered lat/long, so if you confirm the order is for the correct customer, then use the lat/long you captured in OASIS.

The LOS (Line of Sight) tool in OASIS is not functioning properly (e.g., the crosshairs are not moving correctly).

- LOS interacts with native compass inside the device. Your device model must have a compass sensor built in (most modern phones do).
- Compass can freeze in some exceptional cases. Recalibrating or lightly shaking the device can sometimes help the compass needle reset and work much better.

Part number is missing from the bill of materials (BOM step), or there's an error capturing serial number.

- This is likely a configuration issue in Hughes' system. Continue with the installation and report the issue to Hughes. You can also include a comment in the "Did you have any installation issues with this site?" question at the end of every FSO.

My device is not able to correctly scan barcodes.

- Your device must have a rear-facing camera with at least 5-megapixel resolution and autofocus. If your device is unable to scan a barcode, you are still able to enter the part number or serial number manually.

Unable to connect to the terminal (Wi-Fi or IDU step has status of "Connection to IDU Failed," or OASIS fails to ping the terminal or query pointing statistics on the Sat Install step)

1. Go to your device's Wi-Fi settings to ensure you are connected to the modem's Wi-Fi network.
2. Go to the Sat Install step and tap on the terminal icon. You will see a pop-up message "Terminal (IDU) is Unavailable, do you want to continue?" Tap "Yes." This will launch a browser on your phone and will try to connect with the terminal's LUI. After the browser connects and displays the LUI, go back to the OASIS app. You should now be able to connect with the terminal.

SBC file upload errors.

- Please report any SBC file upload errors to Install Support and notate it in OASIS upon FSO completion

Unable to load a photo or am having other problems on the photo screen of OASIS

- If you have already completed the Departure workflow, OASIS will lock some features. You need to re-arrive on same site to capture the photos. If you have multiple old FSOs stored on your device, this could cause memory issues with the app. Ensure all old FSOs are uploaded to the Installation Portal, then delete/clear them all from records screen.

iOS camera doesn't launch.

- OASIS likely doesn't have permission to access the camera. Open the iPhone's Settings app. Scroll down to "HughesOASIS" settings. Give OASIS permission to access "Photos" and "Camera" by turning ON the toggle button.

Loading on photo screen after taking a picture.

- Photos might be set to too high of a resolution. Close OASIS (ensure it's not running in the background) Open OASIS again and then open the Config screen. Change photo resolution to minimum. Save the settings, and then continue from photo screen for the job.

I am receiving a warning that a photo is "Not Qualified" and may fail photo audit.

- The photo is failing an automatic check. OASIS uses artificial intelligence (AI) to help ensure good photo quality (e.g., not blurry) and subject matter classification (i.e., is the photo similar to a database of other "good" photos). This technology is not necessarily intended to judge installation quality. It is possible that a photo may pass AI but fail a human-reviewed photo audit, and vice versa. If you receive the "Not Qualified" error but believe the photo is good quality and would pass an installation audit, then tap "Proceed" to keep the photo. Otherwise, try to re-capture the image for a better photo.

OASIS is not showing the FSO that was previously completed (data loss)

- Look for FSO in both previous schedules and then check if it's listed in the All Records screen. All Records lists all of your saved FSOs. If any FSO was deleted from the All Records page by accident, it is not possible to recover it.
- Popular safeguards: 1) Log in to the Installation Portal before deleting any FSOs from records to ensure all data was uploaded; 2) Export photos and signatures to your device's photo gallery just in case there is data loss; 3) Keep All Records clean by deleting old completed FSOs that have been successfully uploaded, as storing too many old FSOs may cause strange data issues.

Issues uploading FSO information (attachments) to the Installation Portal

- Make sure you have a stable and strong Internet connection (i.e., not 3G or 4G). Make sure the Installation Portal is operational by logging in via a web browser. Try to resubmit your upload. In the OASIS FSO workflow summary page, tap Clear Upload Status, and then tap "Submit Data to Server" to resubmit the FSO data.
- If you are trying to upload multiple FSOs at once, try instead to upload one at a time. If still failing, use the "Export Attachments" option from the All Records screen to save all the

attachments to the device gallery. Now, you can upload those manually through the Installation Portal, via a web browser. If issues with exporting, you can take screenshots of the individual attachment inside FSO and upload those screenshots manually to the Installation Portal via a web browser.

Lost data when I switched to a secondary login.

- OASIS stores the information of only one user at a time. Switching to another installer login will erase the previous user's data. OASIS warns you before it deletes the previous user's data.

OASIS is consuming a lot of my cellular data.

- Use a Wi-Fi network to upload attachments to preserve your cellular data.

Acronyms

B

BOM – Bill of material

F

FSO – Field service order

G

GPS – Global positioning system

I

IV – Installation verification

IVR – Interactive Voice Response

O

OVT – Onsite verification tool

Z

ZTP – Zero-touch provisioning

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