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OASIS User Guide

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Chapter 1

Introduction

Scope and audience

This document explains how to use the Onsite Accelerated Service Installation System (OASIS) app when performing an install. It is written for professional installers who use the app on their smart device to facilitate their duties during a site visit.

Even though the app is designed to be intuitive, 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 user-friendly, step-by-step process for the installer to follow from site arrival to site departure.

It is available as a download from the Hughes Installation Portal (https://dwayinstalls.hns.com). That site also provides access to a detailed list of supported smart devices, technical support, and other technical information about the app.

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

Note: The term **workflow** is used throughout this guide to describe each step of the installation process (e.g., Arrival workflow, Departure workflow, Pre Sign workflow, Sat Info workflow).

Installing OASIS

OASIS is only available from the Quick Actions section of the Installation Portal. 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).

Click the **OASIS Mobile App Download** link in the Installation Portal to launch the OASIS download page, then click **Download** to download and install the app on your device (Figure 1 on page 6). *For Android devices, check your settings to make sure apps from unknown sources are allowed.* The version number shown in Figure 1 might not match the current version of the app.

Note: Make sure you delete any previous versions of the app from your device before installing a new version.

Click the Help icon ( ) next to the OASIS download link to launch a help document that gives a list of currently supported smart devices, version update notes, and device-specific guidelines. Click the YouTube icon ( ), also next to the link, to launch a video tutorial that shows how to complete an order in OASIS.

In order 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.

Note: The app consumes approximately 15 MB of space but Hughes recommends your device has at least 100 MB of free space to accommodate the photos you will take during your installations.

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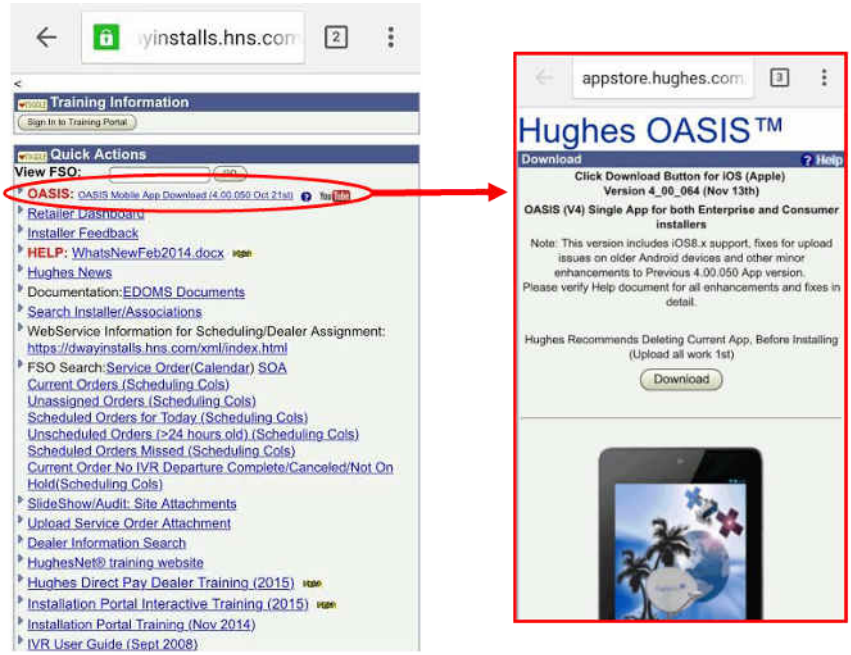

Figure 1: OASIS download link

Launching and logging into OASIS

Your smart device must be connected to the Internet the first time you log into OASIS so the app can verify your installer account and synchronize your field service orders (FSOs). Once you have connected your smart device to the Internet:

1. Tap the OASIS icon to launch the app. A splash page displays for a few seconds while the app loads.
2. The User Login page appears. Enter your username and password in their respective fields, then click **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). You need to reset your password for the Installation Portal and log into the portal via a web browser before re-logging into OASIS.

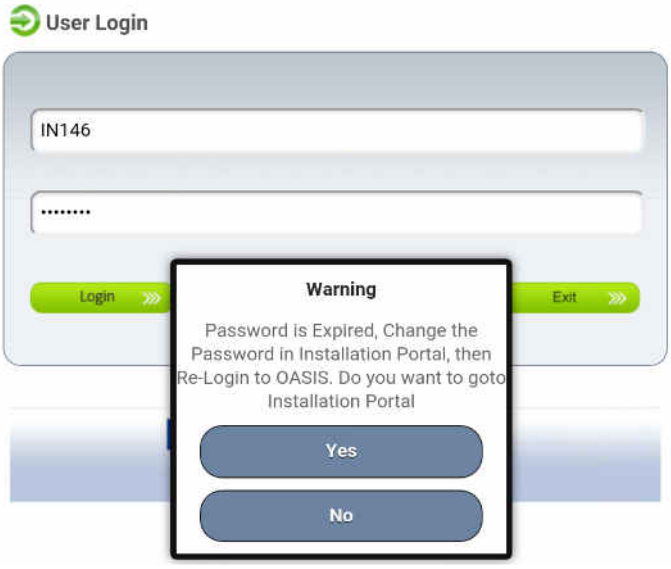

Figure 2: Login password reset error message

   OASIS remembers your username between logins, but you will need to re-enter your password. If OASIS crashes and you re-launch it within 10 minutes, the app will automatically log you in again.

   Note: You can leave the app unattended for up to 2 hours before it automatically closes.

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

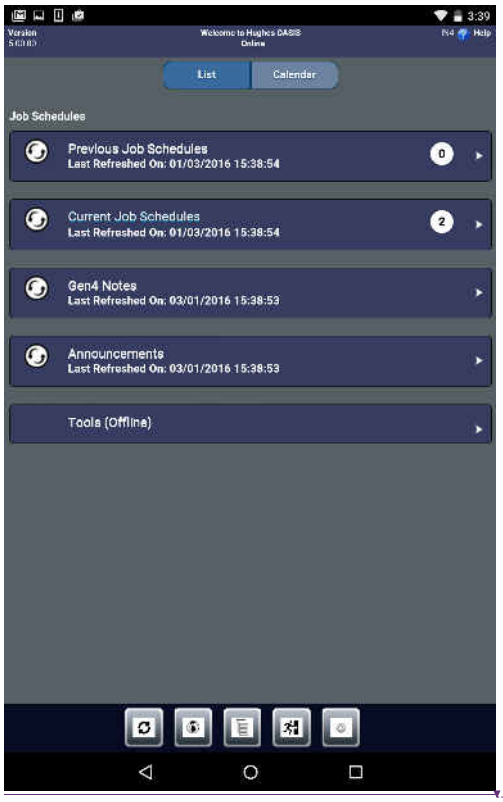

Figure 3: OASIS homepage – list view

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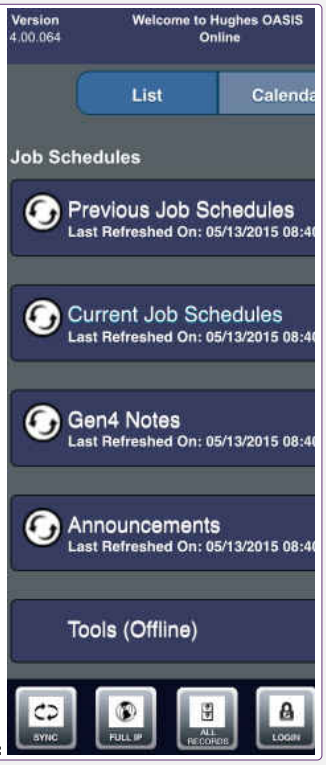


OASIS homepage

The OASIS homepage (Figure 3 on page 8) contains menus for previous jobs, current jobs, current HughesNet Gen4 notes, announcements, and offline tools. Tap a menu to expand it. Tap the refresh icon ( ) to refresh a specific menu. 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.
- Gen4 Notes – Shows current news pertaining to HughesNet Gen4. Identical to the Gen4 notes on the Installation Portal.
- Announcements – Shows current news pertaining to HughesNet and OASIS. Identical to the announcements on the Installation Portal.

- Tools (Offline) – Shows a selection of tools you can use offline without affecting your work order. These include checking satellite information, capturing GPS coordinates, checking line of sight (LOS), testing satellite modem connectivity, and pointing an antenna, as seen in Figure 4.

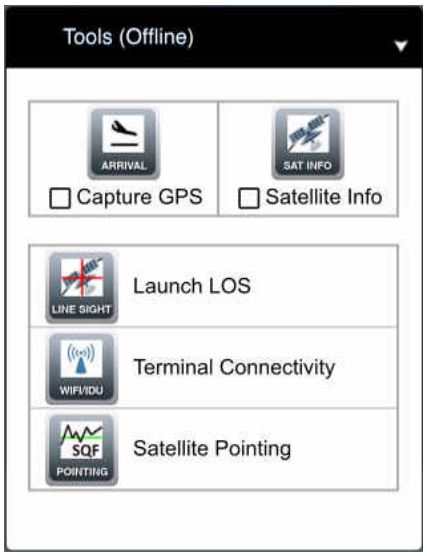
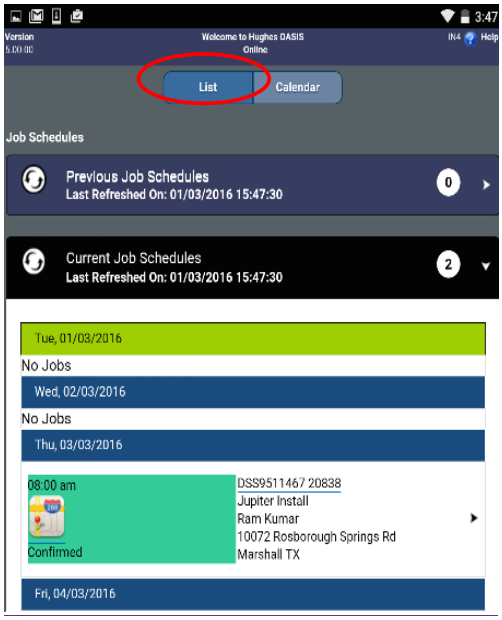


Figure 4: OASIS homepage – offline tools

Figure 5 shows an expanded Current Job Schedules menu.

By default, the homepage displays a list view of these items. If you tap **Calendar** at the top right of the screen, the app switches to a calendar view that shows a timeline of your upcoming installations.



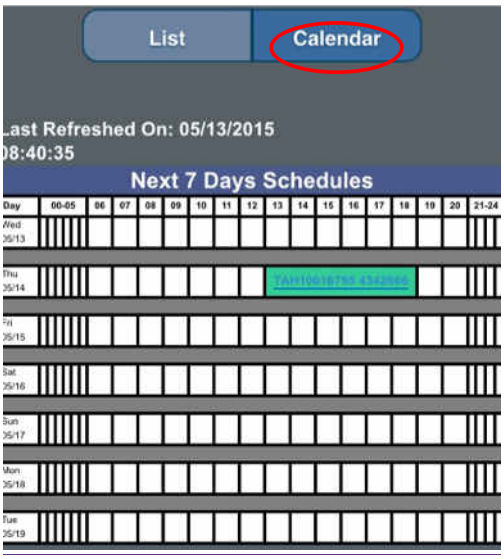


Figure 5: OASIS homepage – Current Job Schedules menu

The homepage automatically synchronizes if you are connected to the Internet. If you are using a 3G or 4G connection, you must manually synchronize your device by tapping the Sync icon at the bottom left of the homepage (see Figure 6).

Note: Your device might take up to 30 seconds to manually synchronize. *Do not interfere with the app during the synchronization process.*

Figure 6: OASIS homepage – bottom icons

The rest of the icons in Figure 6 perform the following actions.

- Full IP – Opens the Installation Portal.
- All Records – Shows your work submission status.
- Login – Takes you back to the login page, where you can log out of the app. You can also use this to change your password if you already changed it in the Installation Portal.

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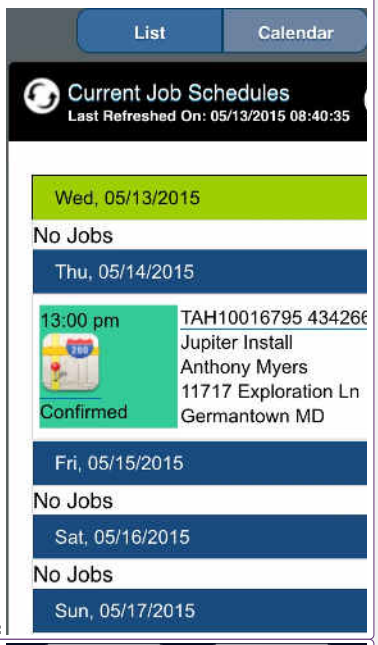

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- Config – Shows user configuration options. For example, you can change how often the app synchronizes and how many days are shown in your schedule.

Beginning an install

In either the list or calendar view of the OASIS homepage, click the link for a particular FSO to begin working on it. This launches the FSO Details workflow (Figure 7).

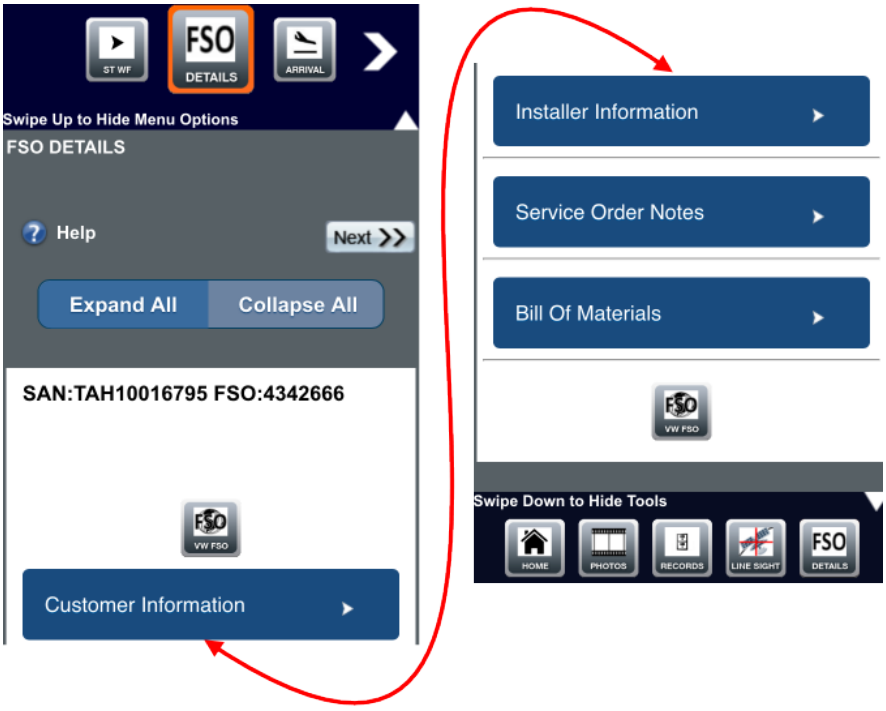

Figure 7: FSO Details workflow

This workflow contains all the pertinent information about your currently selected job. The information contained in this workflow is the same information you would see on your installation reference sheet (IRS).

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

- Customer Information – Shows the customer name, address, phone number, PIN, SAN, etc.
- Installer Information – Shows the dealer name, phone number, email, etc.

- Service Order Notes – Shows the satellite at which you will point, the plan the customer is receiving, etc.
- Bill Of Materials – Shows what equipment you should bring to the installation.

Workflow progression

You should always tap the **Next** button (Next >>) to proceed to the next workflow if you are following the step-by-step OASIS sequence. For example, once you have completed reviewing the details of your FSO in the FSO Details workflow, you should tap **Next** to proceed to the Arrival workflow – the next workflow in the OASIS sequence.

Note: The **Next** button will not appear until you have completed the workflow.

As you continue through OASIS, the navigation bar shown in Figure 8 will remain at the top of the screen (unless you choose to hide it). Your current workflow is highlighted in orange, your previous workflow is shown on the left, and the next workflow in the sequence is shown on the right. Tap the arrow on the left or right of the navigation bar to scroll to the previous or future workflows, respectively.

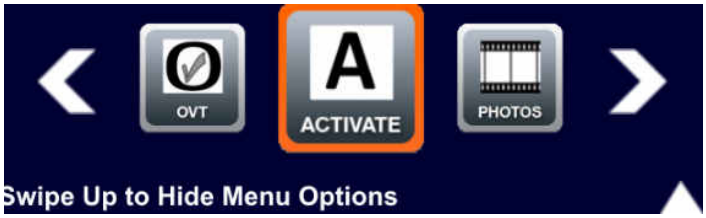

Figure 8: Navigation bar

The toolbar shown in Figure 9 will remain at the bottom of the screen as you progress through the app (unless you choose to hide it).

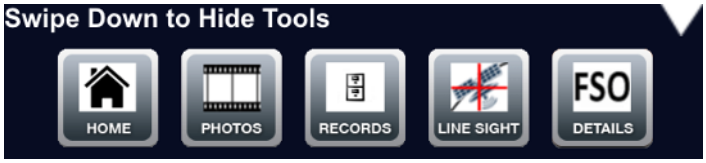

Figure 9: Tools bar

Tapping an icon does the following.

- Home – Navigates back to the OASIS homepage and syncs any orders you have if you are connected to the Internet.
- Photos – Navigates to the Photos workflow, allowing you to take a photo before returning back to workflow you were completing.
- Records – Shows the status of completed steps in your current work order. Also shows information about completed orders.

- Line Sight – Navigates to the Line of Sight workflow, which allows you to check LOS with the satellite before returning to the workflow you were completing.
- VW FSO – Navigates to the FSO Details workflow.

All workflows in OASIS have a built-in help menu. Tap the help icon ( ) to access this menu.

The Terminal icon (Figure 10) is available in several workflows. Tap the icon at any point during the installation process to launch the terminal user interface in your mobile device's web browser.

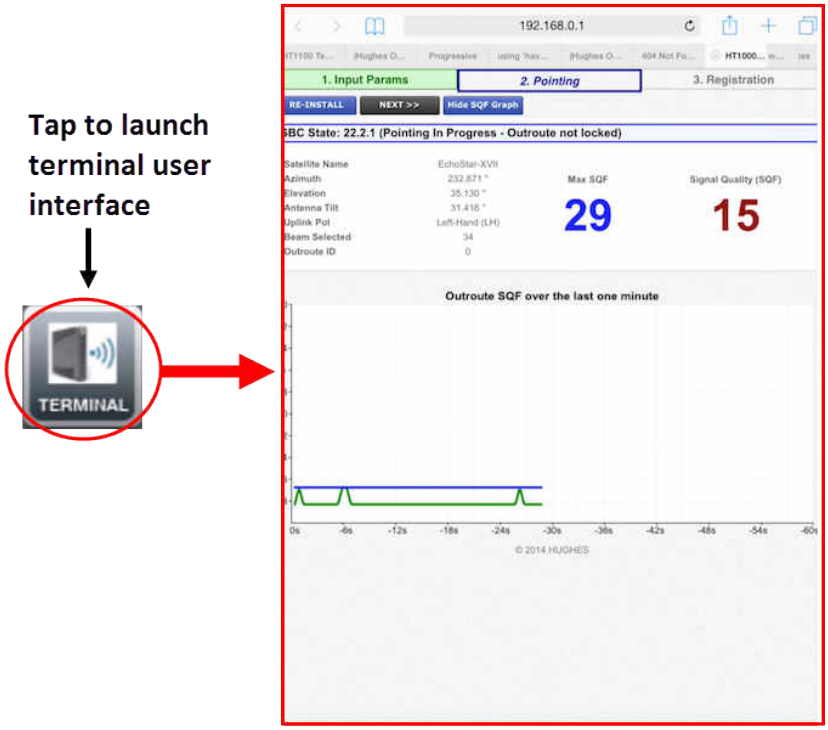

Figure 10: Terminal icon used to launch terminal user interface in web browser

Backing up attachments

At any point during the installation, you can back up any attachments you have (i.e., pictures and signatures). This prevents data loss in the event of an app crash; or, if you do not have a stable enough connection to upload the attachments to the

Installation Portal at the end of an installation, this allows you to save the attachments and upload them at a later time when you have a better connection.

To export your attachments to the photo gallery on your smart device:

1. In the bottom toolbar, tap the Records icon (circled in Figure 11) to navigate to the Records workflow.

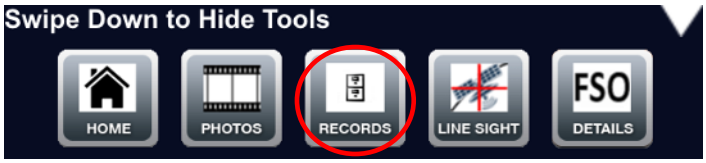

Figure 11: Records icon in bottom toolbar

2. In the Records workflow (Figure 12), scroll to the bottom of the page and tap **Export Attachments**.

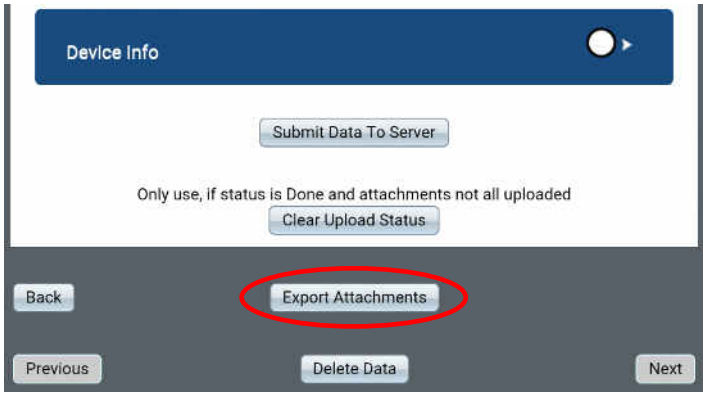

Figure 12: Export Attachments button

3. OASIS exports all the attachments for your current FSO to a folder in you photo gallery named, `OASIS_<FSO number>_<SAN>_<Timestamp>`.

Troubleshooting

Before contacting Hughes, read the troubleshooting information in Appendix B – Troubleshooting on page 63. If the solution to your problem is not given there, call Hughes Installer Support at 1-866-259-9444

Alternatively, contact Mobile-App-Issues@hughes.com or click the **Installer Feedback** link on the Installation Portal to access the Installer Feedback submittal form (Figure 13). To fill the form:

1. Select *Mobile App Issues* from the *Subject* drop-down (circled in Figure 13).
2. In the *Message* textbox, describe the problem you encountered with OASIS.
3. Fill out the remaining required fields, and as many of the optional fields as you can.
4. Click **Submit**.

Figure 13: Installer Feedback submittal form on Installer Portal

Chapter 2

Arriving at the site

Arrival workflow

The Arrival workflow takes the place of a phone call to the interactive voice response (IVR) system.

Launch the workflow after arriving at the customer site, introducing yourself to the customer, explaining to them how the installation will progress, and determining suitable locations for both the satellite modem and the antenna.

To determine a suitable location for mounting the antenna, use the information provided in the appropriate site preparation and mount installation guide, depending on the type of installation you are performing. Once you have found a location:

1. Tap **Arrival on Site** in the Arrival workflow. A textbox appears (Figure 14).

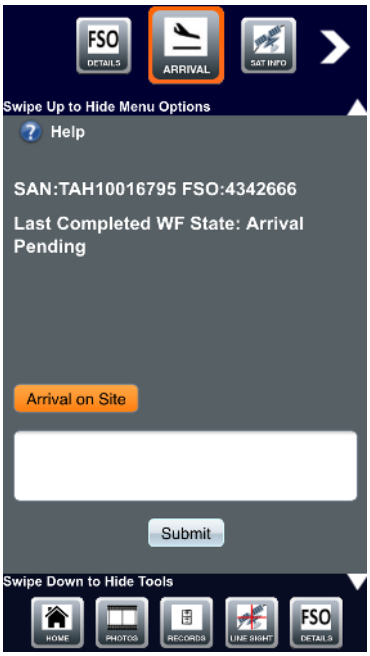

Figure 14: Arrival workflow – entering notes

2. In the textbox, enter any notes about the installation location (e.g., a very long driveway), 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.

3. On the screen that launches, tap **Capture GPS** (Figure 15) to determine the latitude and longitude of the antenna location.

   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/fractional minutes format. *OASIS tracks if you manually enter GPS coordinates.*

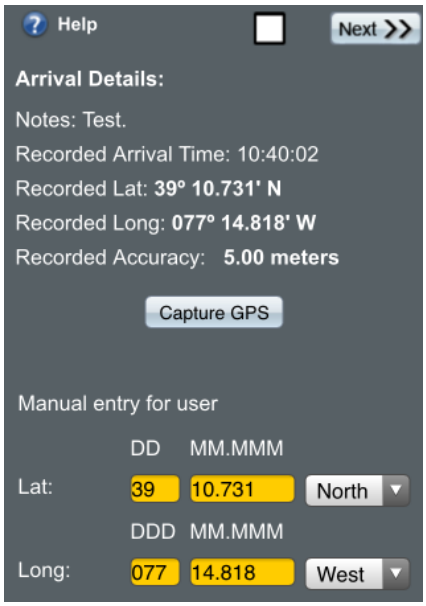

Figure 15: Arrival workflow – capturing GPS coordinates

4. Tap **Next**.
5. A verification pop-up message appears (Figure 16). Verify the customer information it shows, then tap **Yes** to proceed to the next workflow – Sat Info.

   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.

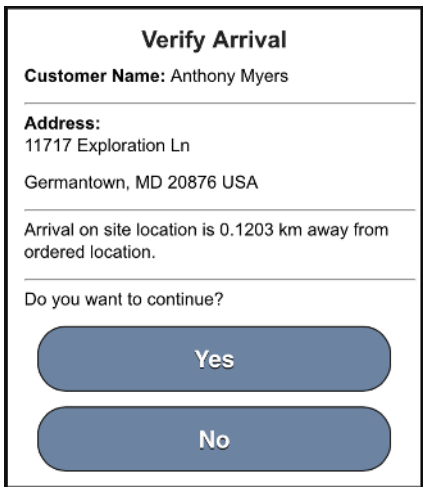

Figure 16: Arrival workflow – verification

Sat Info workflow

The Sat Info workflow displays the satellite name, location, latitude, longitude, azimuth, elevation, and tilt angle based on your arrival coordinates (Figure 17). The satellite's polarization, beam, and outroute will fill in later in the process.

Figure 17: Sat Info workflow

You can use the information provided on this screen to manually check for LOS using an inclinometer compass.

Tap **Next** to proceed to the next workflow – Line of Sight.

Switching satellites while offline

In the event you must switch from a JUPITER to SPACEWAY installation order and do not have wireless Internet connectivity, you can utilize the Switch Workflow feature present inside the Sat Info workflow. *This feature only works if you are operating OASIS in offline mode.*

Prior to initiating the switch in OASIS, you *must* call Hughes Pre-Install Support to initiate the switch in the Installation Portal. Hughes will provide you with new SPACEWAY parameters to input in OASIS. When you once again have access to the Internet, OASIS will resynchronize the order information.

To initiate the switch in OASIS:

1. Tap **Switch Workflow** in the Sat Info workflow (circled in Figure 18).
2. A warning message displays. Read it carefully, then tap **Ok** only if you are sure you want to switch satellites.

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Deleted: on the warning message that displays.

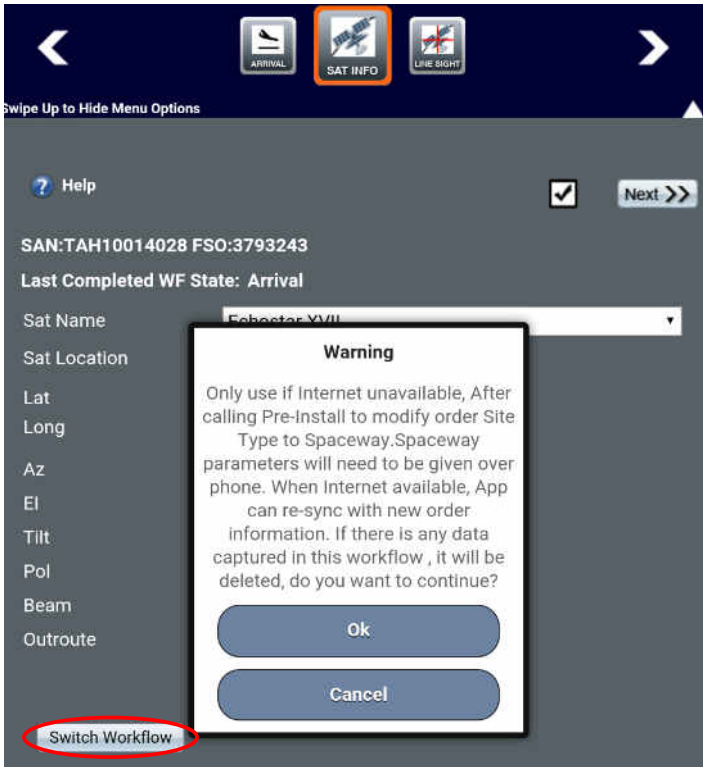

Figure 18: Switching satellites while offline

If you accidentally switch satellites and need to switch back:

1. Tap **Switch back to Original** (circled in Figure 19).
2. A warning message displays. Read it carefully, then tap **Ok** only if you are sure you want to switch back to the original satellite.

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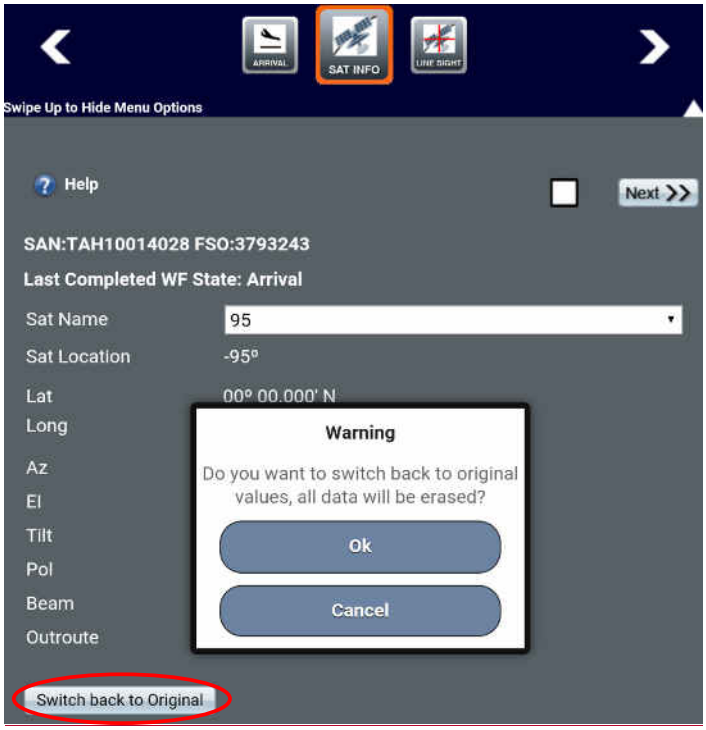

Figure 19: Switching back to original satellite

Line of Sight workflow

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

Upon progressing to the Line of Sight workflow, OASIS automatically launches your smart device's built-in camera and places a crosshair overlay on the image (Figure 21). If it does not, tap **Launch LOS**. To find LOS to the satellite:

1. While holding your smart device horizontally, orient the onscreen compass until the needle lines up with the correct azimuth reading. As shown in Figure 20, the compass needle and the vertical line turn green when your device is oriented correctly.

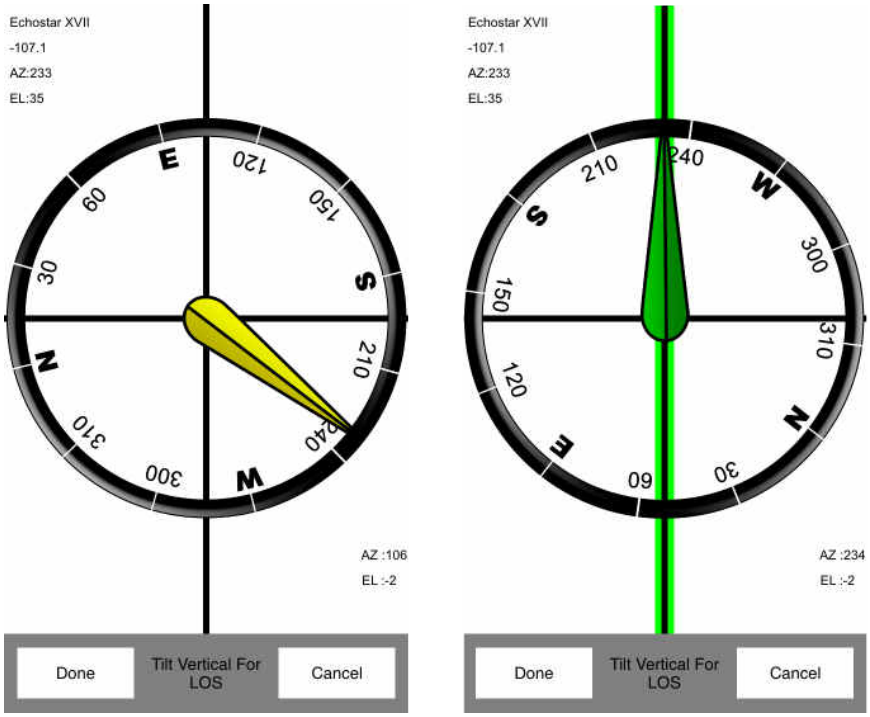

Figure 20: Line of Sight workflow – azimuth

2. Tilt your device vertically to launch the LOS feature.
3. Carefully maneuver your smart device until the red cross (which represents the direction you are currently pointing) lines up with the yellow crosshair (which represents the location of the satellite).

The yellow crosshair will turn green when you are within 5° of exact alignment with the satellite, as seen in Figure 21.

4. Make sure nothing blocks the LOS. The LOS must be free of obstructions, such as plants, trees, buildings, or other structures.

   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.

   Ask the customer if they have any plans (such as landscaping) that might obstruct the satellite signal at some time in the future.

   If anything blocks the LOS, you must find another installation location.

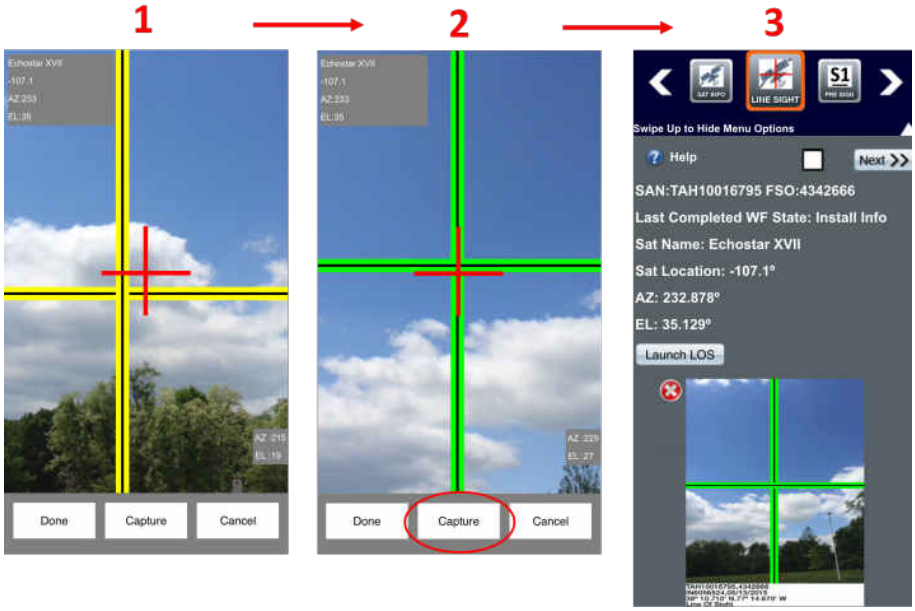

Figure 21: Line of Sight workflow – elevation

5. Tap **Capture** (circled in Figure 21) to take a screenshot of the LOS measurements. If possible, include the antenna feed arm in the photo as a point of reference.

   OASIS records the required LOS information (satellite name, satellite location, and Az/El measurements).

6. Tap **Next** to proceed to the next workflow – Pre Sign.

Pre Sign workflow

The Pre Sign workflow (Figure 22) coincides with the site survey review you must perform with the customer. During the review, tell the customer about the dish location you have chosen, the type of mount you will use, any additional charges (e.g., wireless routers, cosmetic moldings), and so on.

Figure 22: Pre Sign workflow

Once you have the customer's approval, proceed with the Pre Sign workflow:

1. Select the type of antenna mount from the *Mount Type* drop-down.
2. Select the location of the antenna from the *Dish Location* drop-down.
3. *(Optional)* Tap the Installation Extras icon ( ) to create space for optional items. Enter the item's description, cost, and applicable tax in the text boxes that appear. Tap the delete icon ( ) to remove an item.
4. Tap the Customer Signature icon (circled in Figure 22 on page 25).
5. The customer must sign and type their name in the screen that displays (Figure 23). This signifies their approval of the antenna location, mount type, and extra charges.

   Alternatively, you can take a picture of a piece of paper the customer has signed. To do this, tap **Take photo**.

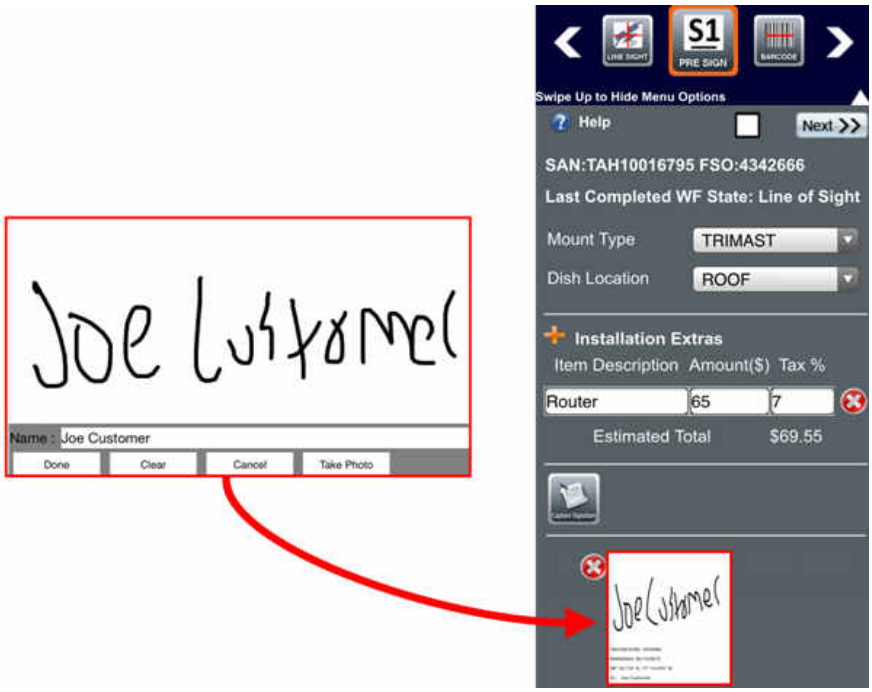

Figure 23: Pre Sign workflow – customer signature

6. Tap **Done**. OASIS navigates back to the Pre Sign workflow, where the customer's signature now appears (Figure 23). The signature is saved as an attachment on the FSO.
7. Tap **Next** to proceed to the next workflow – Barcode.

Barcode workflow

The Barcode workflow (Figure 24) requires you to scan the serial numbers (S/Ns) or part numbers (P/Ns) of the materials you use in your installation (e.g., antenna, mount, power supply).

Note: If your smart device does not have a rear autofocusing camera with a resolution of 5 megapixels or better, you will have a hard time successfully scanning the barcodes. If scanning the barcodes does not work, you must manually input them.

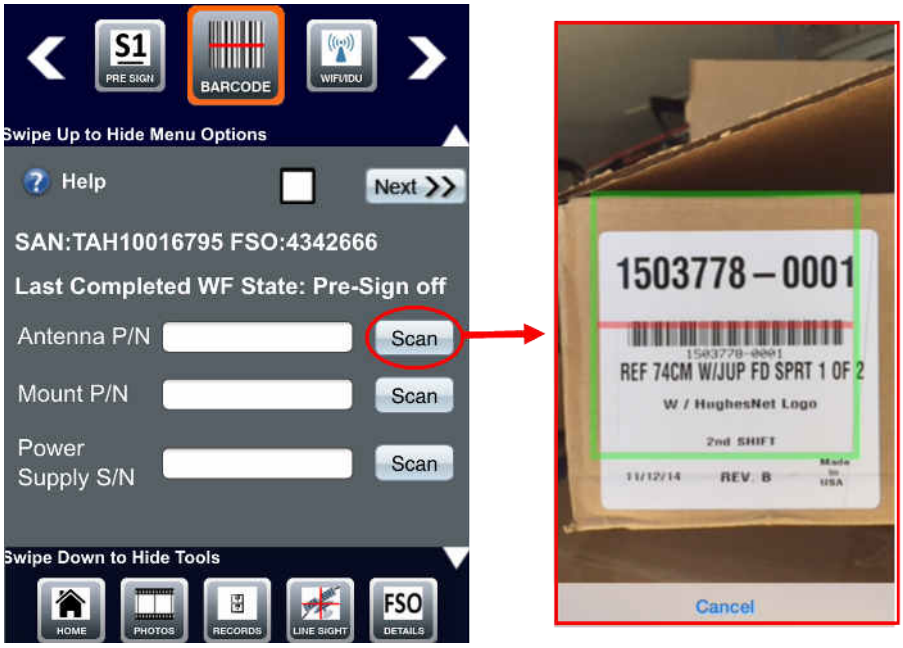

Figure 24: Barcode workflow

To scan a barcode:

1. Tap **Scan** (circled in Figure 24 on page 27) next to the item for which you need a serial/part number. Your device's camera launches.
2. Center the barcode within the red crosshair that appears on the screen. Ensure your smart device focuses on the barcode. See Figure 24.
3. The serial/part number for the item will automatically update in the workflow if the scan is successful.
4. Repeat this process for each item.
5. Ensure the serial/part numbers OASIS collected are accurate.

Comment [ESV1]: The new image capture overlay uses crosshairs instead of a box. Need new screenshot from Mahesh.

Deleted: green square overlay

Deleted: , so the entire barcode is covered with the red line

To add information from additional parts:

1. Tap the Others menu to expand it (Figure 25 on page 28).
2. Fill each of the fields in the menu based on the type of part.
3. Tap **Save**.
4. Repeat this process for each additional item. When an item is saved, it will appear in a table like the one shown in Figure 25.

   Note: Tap a row on the table to modify the item within it. Tap the delete icon ( ) to delete an item from the table.

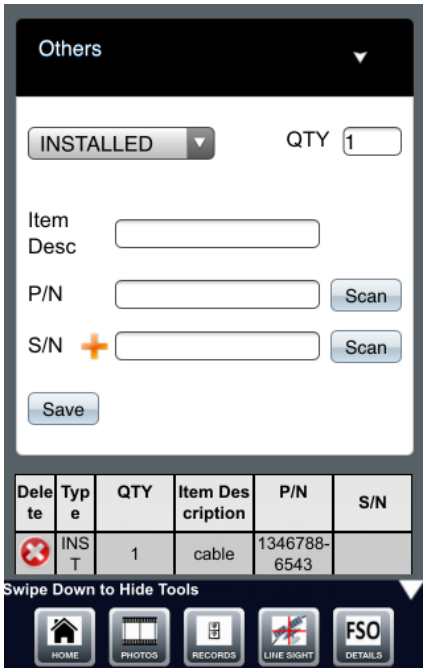

Figure 25: Barcode workflow – additional parts

Antenna installation

At this point, you must install the antenna mount, antenna, and satellite modem.

Refer to the appropriate site preparation and mount installation guide, depending on the type of installation you are performing, for additional information on preparing the installation site and assembling the antenna mount.

Refer to the appropriate antenna installation guide and satellite modem guide for additional information on assembling the antenna and configuring the satellite modem you are installing.

Once you have successfully installed the antenna mount, antenna, and satellite modem, proceed to Chapter 3 – Pointing the antenna.

Chapter 3

Pointing the antenna

You can only use the pointing functionality of OASIS during JUPITER installations. As such, all of the content in this chapter, with the exception of Setting up the Wi-Fi device, only pertains to JUPITER installations.

To point the antenna during SPACEWAY installations, you must launch the satellite terminal's user interface from your smart device's Internet browser, then proceed as you normally would if using a laptop. In both types of installations, you must first configure a wireless router to work with the satellite modem by following the procedure in Setting up the Wi-Fi device.

Setting up the Wi-Fi device

To use OASIS to point the antenna during a JUPITER installation, you first need to configure a wireless router to work with the satellite modem. The instructions provided are specifically for the Netgear N150 Wireless Router model WNR1000v2. The default settings were used and should work with most routers. You may need to consult your router manufacturer if you cannot access the satellite modem. Hughes provides a list of recommended routers on the Installer Portal.

Perform the following steps to set up the wireless router to work with the satellite modem and your smart device. Do not use the Netgear setup disk. The initial setup must be performed on a computer with an Ethernet port so the wireless router can be wired to the computer. This process only needs to be performed once. After the process is complete, the Netgear router can be used with any smart device.

To set up the router:

1. Plug the wireless router into power.
2. Plug in an Ethernet cable from any LAN port to the Ethernet port on a laptop or computer, as shown in Figure 26.

Figure 26: Ethernet connection to wireless router

3. Access the wireless router's built-in web server by entering 192.168.1.1 in the URL field of an Internet browser on your laptop.
4. Log in to the Netgear router with the following credentials:

   Username: `admin`

   Password: `password`

   Note: Other routers may use different values.
5. Click **Wireless Settings** on the left side of screen.
6. Change the SSID to `HughesOASIS`.
7. Click **Apply**. The router may ask you to enter your username and password again. Use the same as above and click **OK**.
8. Disconnect the Ethernet cable from the laptop.

Connecting your smart device to the satellite modem

You now need to connect your smart device to the satellite modem via the wireless router. To do this:

1. Plug the Ethernet cable from the satellite modem into the WAN port on wireless router, as shown in Figure 27.

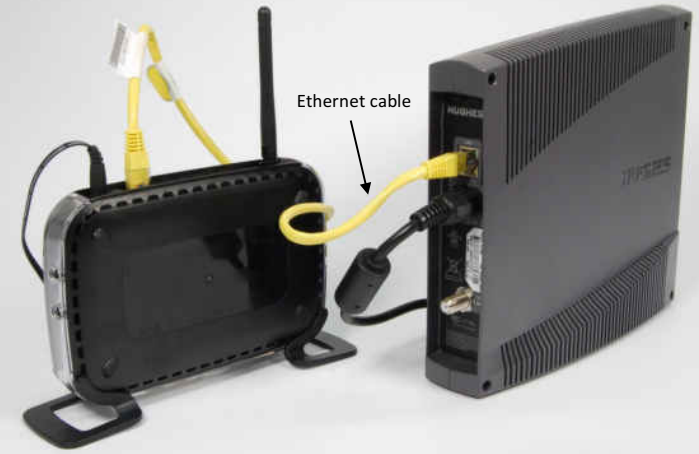

Figure 27: Connecting the satellite modem and Wi-Fi router

2. Ensure both devices are plugged in and powered on.
3. In the settings of your smart device, select `HughesOASIS` as your SSID. You set this SSID in step 6 of Setting up the Wi-Fi device.

WIFI/IDU workflow

1. Proceed to the WIFI/IDU workflow OASIS. Figure 28 shows the workflow icon.

   The app will automatically initiate a connection to the satellite modem. If it does not, tap **Initiate IDU Connection** to force the app to retry.

2. OASIS will indicate `Ping at <time>: Successful` when your device successfully connects to the satellite modem (Figure 28).

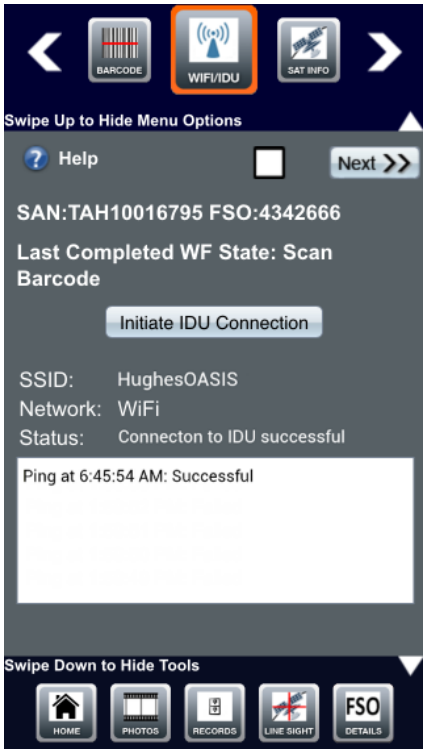

Figure 28: WIFI/IDU workflow

3. Tap **Next** to proceed to the next workflow – Sat Info.

Sat Info workflow

The second Sat Info workflow (Figure 29) sends latitude and longitude information to the satellite 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.

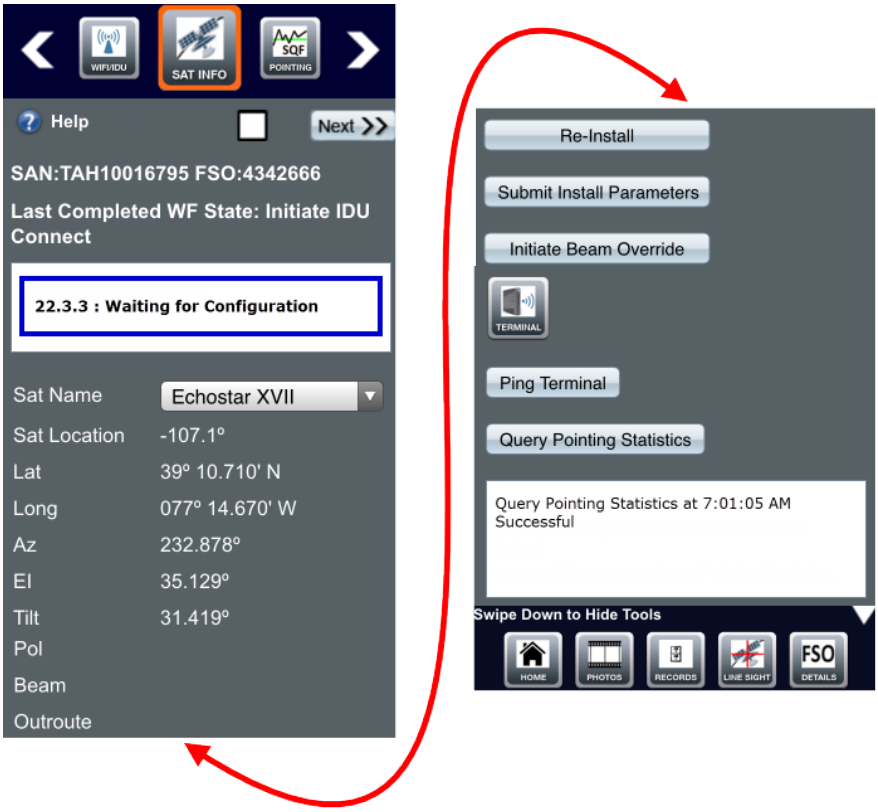

Figure 29: Sat Info workflow

The *Pol*, *Beam*, and *Outroute* fields may have values, but these are the default values. To calculate the correct values for pointing:

Note: OASIS may take some time to respond during the following steps. Follow the logs at the bottom of the workflow to check the app's progress.

1. Tap **Submit Install Parameters** (Figure 29).
2. Tap **Yes** on the pop-up warning message that states, `Do you want to start install?`

3. Tap **Ok** on the success message that states, `Pointing in progress.`
4. OASIS populates the *Pol*, *Beam*, and *Outroute* fields once the satellite modem calculates the correct values.
5. *(Optional)* If you want to choose a beam manually:
   a. Tap **Initiate Beam Override**.
   b. Select the specific beam.
   c. Tap **Submit**.
6. Tap **Next** to proceed to the next workflow – Pointing.

Note: Figure 30 shows the text of a common error some installers encounter when performing this step. If you encounter this error, it means the satellite modem is plugged into the antenna. You must unplug the modem from the antenna.

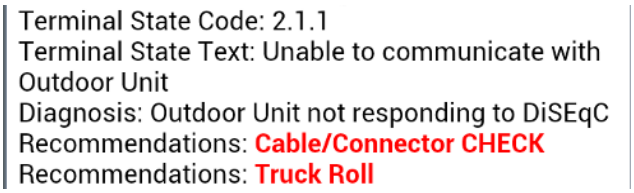

Figure 30: Error when entering satellite information

Pointing workflow

The Pointing workflow (Figure 31) aids you in pointing the antenna by showing the signal quality factor (SQF). It effectively replaces the DAPT tool. It displays the:

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

The workflow also includes a graph that shows how the SQF value has fluctuated over time, with markings for the peak SQF, the target SQF, the current SQF, the average SQF, and the locking threshold.

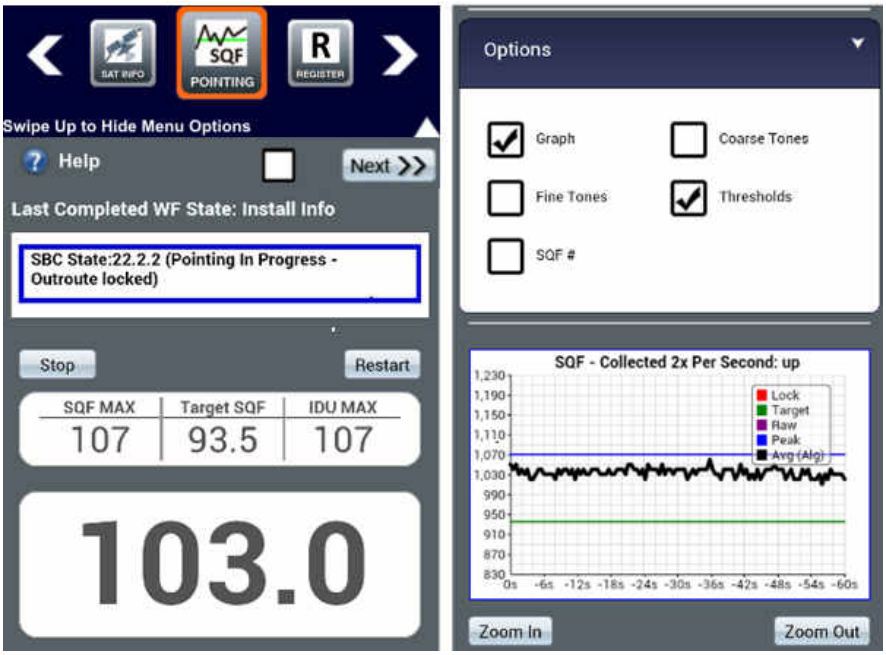

Figure 31: Pointing workflow

Audio options for pointing include (Figure 31):

- Coarse Tones – Reproduces the 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:

1. Wait for the SQF reading to settle on a value, then use the appropriately sized wrench for the specific antenna (found in the manual specific to that antenna) to adjust the antenna azimuth and elevation, as shown in Figure 32. Continue until you achieve the highest possible SQF value.

Note: If you have *Coarse Tones* selected in OASIS, your device will mimic the sounds of the DAPT (i.e., the tone from you device will be louder and the cadence will quicken as the beacon is acquired).

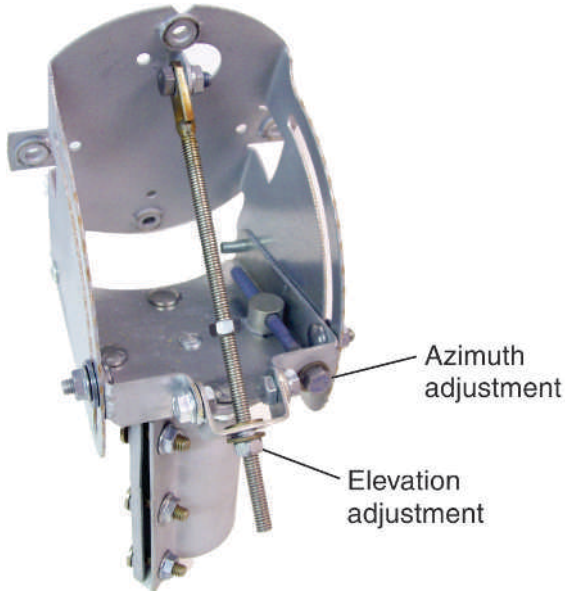

Figure 32: Adjusting the antenna position

NOTICE

You *must* use the adjustment mechanism for azimuth adjustments. Do *not* attempt to point the antenna manually by pulling on the antenna reflector or the feed support structure. This can cause permanent damage to the antenna.

2. 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.

3. When you are done pointing, make sure all outdoor cable connections are weatherproofed with dielectric grease and securely tightened, as shown in Figure 33. Depending on your installation environment, additional weatherproofing may also be needed, as shown in Figure 34 on page 39.

   Note: If you use any cable ties, they must be resistant to ultraviolet rays.

NOTICE

Hughes 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.

Figure 33: Hughes-approved IFL cable connector

Figure 34: Hughes-approved IFL cable connector with additional weatherproofing

4. Tap **Next** to proceed to the next workflow, Register, found in Chapter 4 – Registering and activating the satellite modem.

Chapter 4

Registering and activating the satellite modem

You can only register and activate a satellite modem via OASIS during JUPITER installations. As such, all of the content in this chapter, with the exception of the OVT workflow, only pertains to JUPITER installations.

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

Register workflow

The Register workflow (Figure 35) allows you to perform the satellite modem's registration procedure.

Figure 35: Registration workflow

To register the satellite modem:

1. Tap **Initiate Registration** (circled in Figure 35 on page 41).

   As the registration process progresses, the current satellite 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.

2. When the satellite modem successfully registers, a success pop-up message appears (Figure 36). Tap **Ok**.

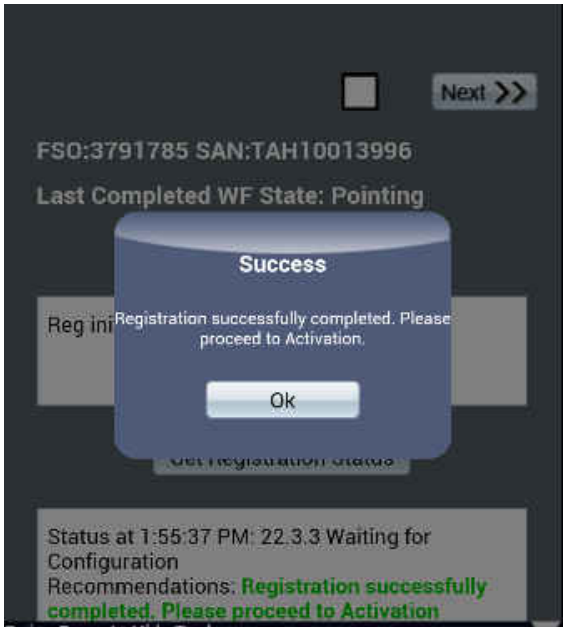

Figure 36: Registration successful

3. Tap **Next** to proceed to the next workflow – OVT.

OVT workflow

The OVT workflow allows you to launch the onsite validation tool (OVT) from OASIS.

1. Tap **Open OVT** (circled in Figure 37) to launch the Installation Portal in your smart device's web browser. OASIS will automatically log you into the portal.

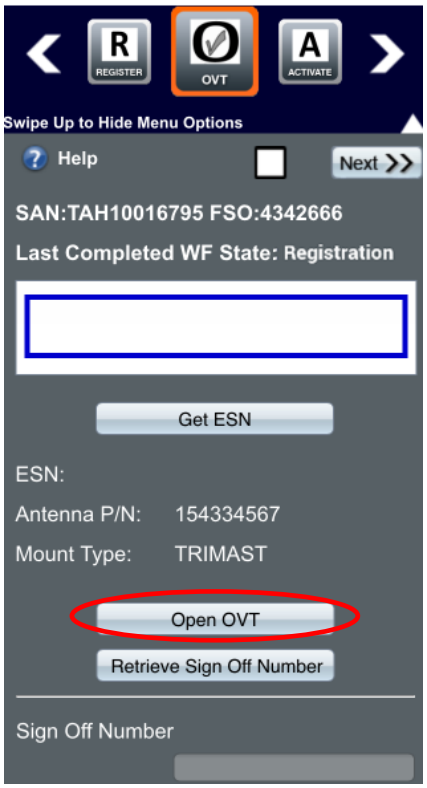

Figure 37: OVT workflow

2. OASIS automatically fills the fields on the OVT pre-collection page (Figure 38). Tap **Launch OVT** to open the validation tool.

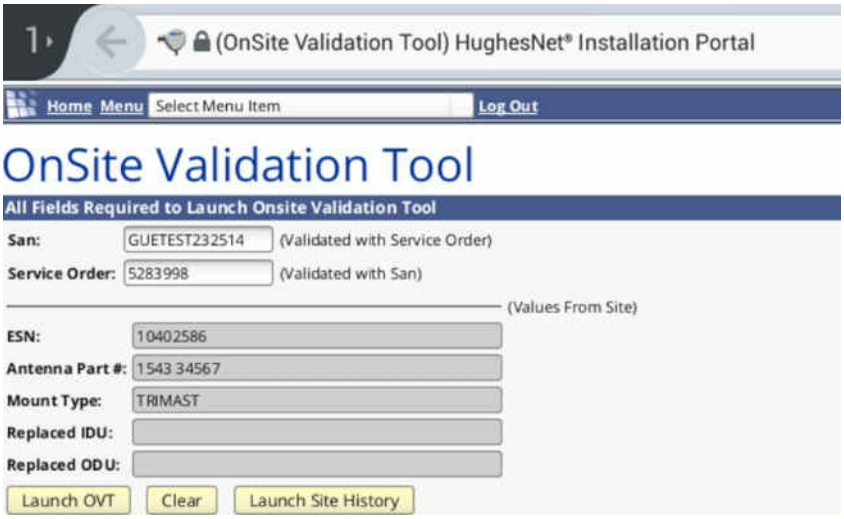

Figure 38: OVT pre-collection page

3. OASIS automatically fills the fields in steps 1, 2, and 3 on the first page of OVT (Figure 39) if you already entered the information into the app. If the information does not automatically fill, you need to manually enter it.
4. Tap **Proceed**. OVT will begin to test the satellite connection.

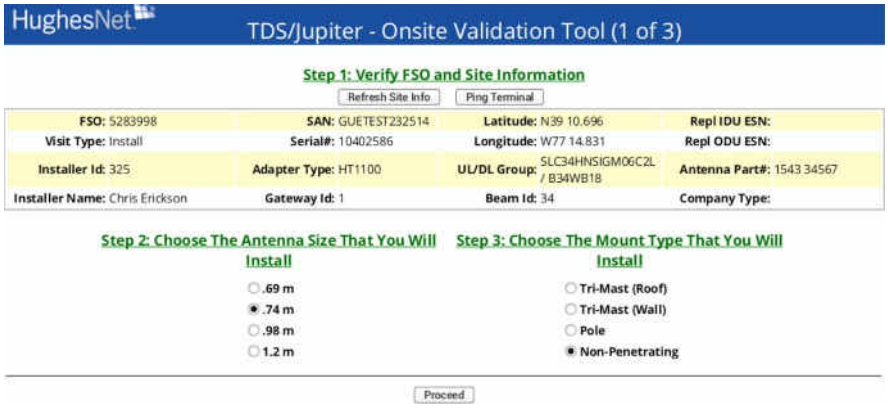

Figure 39: OVT page 1

5. The OVT results page launches (Figure 40). Perform any recommended actions listed in the *Recommended Action* box.
6. Tap **Signoff** (circled in Figure 40).

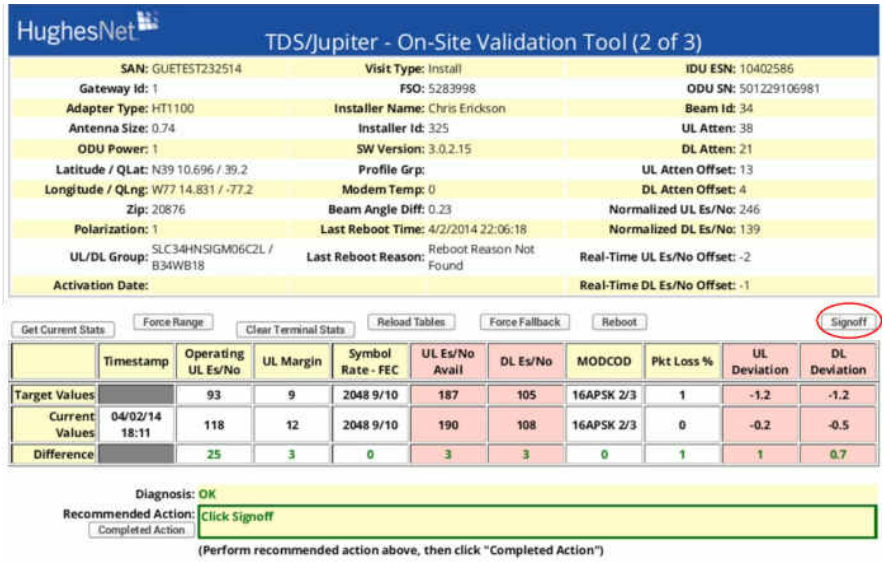

Figure 40: OVT page 2

7. On the page that launches (Figure 41 on page 46), select any installation problems or extra actions performed during the installation.

   In the *Provide Installation Details Below* textbox, type any additional notes you have. *You must enter text insider 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).

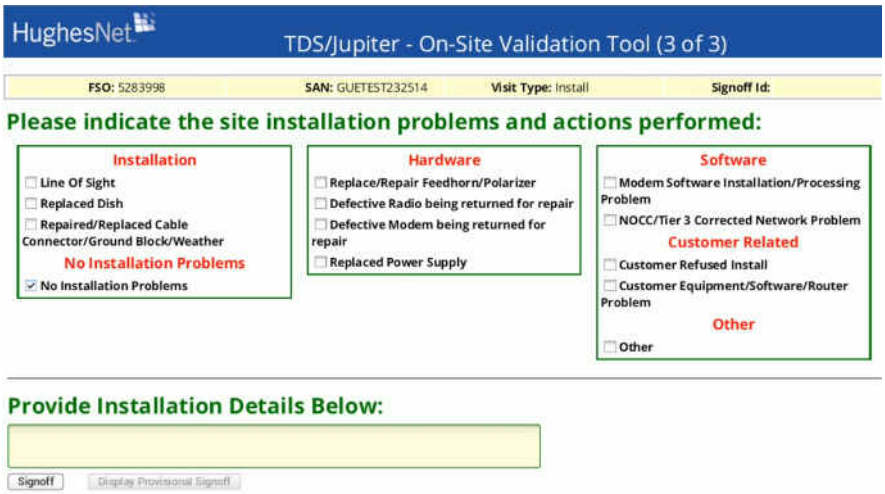

Figure 41: OVT page 3

8. Tap **Signoff**.
9. The signoff number displays at the top of the OVT page.
10. Return to OASIS.
11. Tap **Retrieve Sign Off Number** to pull the number from OVT (Figure 42).

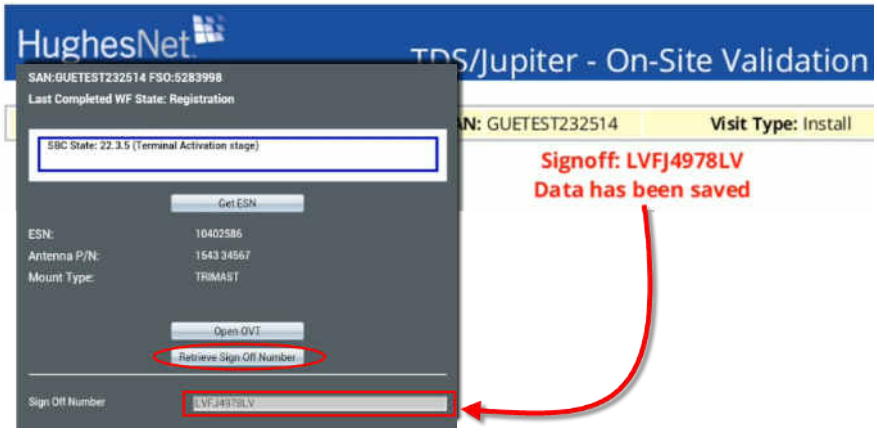

Figure 42: OVT workflow – signoff number

12. Tap **Next** to proceed to the next workflow – Activate.

Activate workflow

The Activate workflow (Figure 43) allows you to activate the satellite modem.

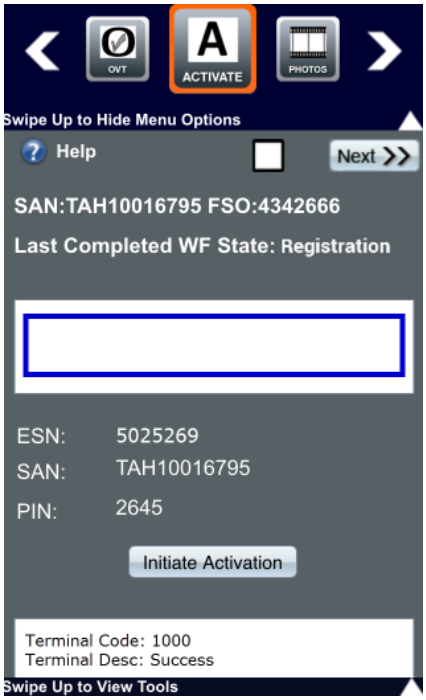

Figure 43: Activate workflow

To activate the satellite modem:

1. Tap **Initiate Activation**. The box below the button should show that the process was successful.
2. Tap **Next** to proceed to the next workflow, Photos, which is described in Chapter 5 – Taking photos.

Taking photos

At any point during the installation, you can take required photos by tapping the Photos icon in the bottom toolbar of OASIS (Figure 44). You can take photos whenever is convenient for you during the installation process. For example, you can take a photo of the satellite modem while you are setting up its wireless connectivity.

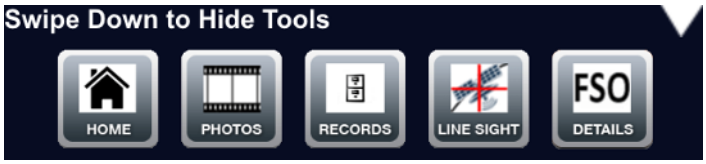

Figure 44: Tools bar

Photos workflow

The Photos workflow (Figure 46 on page 50) walks you through which photos you need to take before departing from the installation site. Each photo has a large, pill shaped button which, when you tap it, launches your smart device's camera (Figure 45 shows three examples). The colored outlines have the following meanings.

- Red outline – you still need to take the required photo.
- Green outline – you have taken the required photo.
- Gray outline – optional photo.

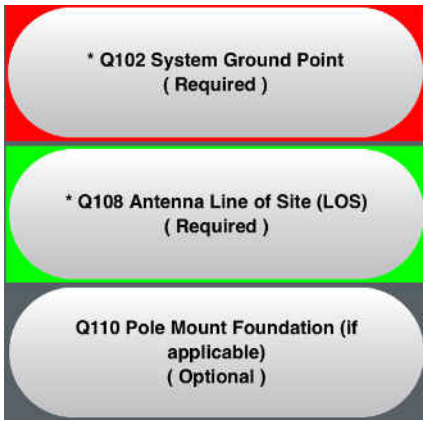

Figure 45: Photo select button examples

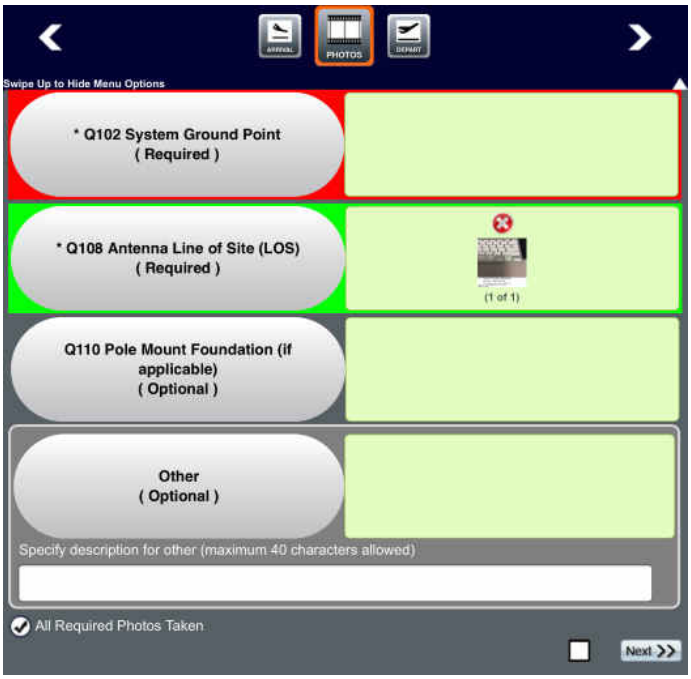

Figure 46: Photos workflow

To take a photo:

1. Tap the button of the item for which you need to take a photo. Your smart device's camera launches.
2. Take a photo of the item, then tap **Use Photo** if you are satisfied with the result. OASIS returns you to the main screen of the Photos workflow.

   Note: Make sure the picture clearly shows the correct item, is focused, and is well-lit.

3. A thumbnail of the photo you just took (shown in Figure 46) appears in the box next to the item. It is tagged with the SAN, FSO, installer ID number, time, date, latitude, and longitude.
4. Repeat this procedure for each required photo.
5. Tap **Next** to proceed to the next workflow, Accept, which is described in Chapter 6 – Departing from the site.

Accept workflow

The Accept workflow helps ensure the installation was completed successfully and the customer has no further issues to which you must attend.

Prior to proceeding in this workflow, you must perform service activation by navigating to `http://192.168.0.1/` on the customer's computer. On the website that launches, click **Service Activation** (Figure 47) and follow the steps it provides, then return to OASIS.

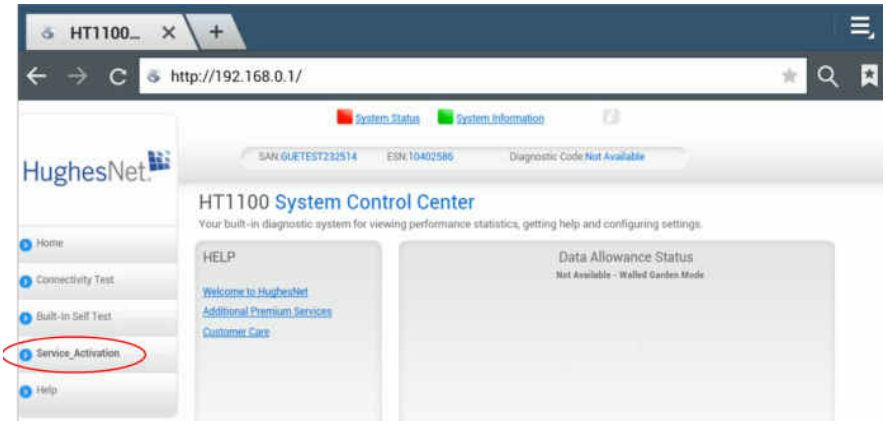

Figure 47: Service activation

To proceed with the Accept workflow (Figure 48 on page 52):

1. Walk the customer through the questions presented in the workflow. Have them answer *Yes* or *No* to each question.

Deleted: five

Deleted: . ... [1]

Figure 48: Accept workflow

2. Tap the Customer Signature icon (circled in Figure 48).
3. Have the customer sign and type their name in the screen that displays. This signifies their approval of the installation.

   Alternatively, you can take a picture of a piece of paper the customer has signed. To do this, tap **Take photo**.
4. Tap **Done**. OASIS navigates back to the Accept workflow, where the customer's signature now appears (Figure 48). The signature is saved as an attachment on the FSO.
5. Tap **Next** to proceed to the next workflow – Depart.

Depart workflow

The Depart workflow (Figure 49) offers a summary of the steps you have performed so far during the installation, including all pictures you have taken and signatures you have collected.

Important: Do not proceed with departure until you have taken all of the required photos of the installation.

Figure 49: Depart workflow

To proceed with departure:

1. Answer the three departure questions.
   a. Which machine did you use for activation? Your own PC or the customer's PC?

      Note: Most often, this should be the customer's PC.

   b. Did you need to use a bucket truck during the installation?
   c. Did you need to use a ladder taller than 28 ft during the installation?
2. Scroll down the screen and verify all the information listed is accurate.

3. If you have completed each workflow successfully and all the information is correct, tap **Departure Complete**. If you need to come back another day to complete the installation, tap **Departure Incomplete**.
4. A textbox appears for you to add any additional notes about the installation. Tap **Submit** after you have entered your notes. 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.

5. A warning pop-up message appears asking if you are sure you want to proceed. Tap **Yes** if you are sure you fully completed the installation.

   Important: Once you proceed beyond the Depart workflow, you cannot edit any information in the FSO. Make sure you have all the required information and have completed each step fully before proceeding.

6. OASIS launches the FSO Workflow Summary page.

FSO workflow summary

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

The FSO Workflow Summary page (Figure 50) provides a list of each workflow you completed. Tap any workflow menu to expand it and see additional details.

The check marks (☑) indicate you have visited the workflow. The white, empty circles (○) indicate that the workflow data has not yet been uploaded to the Hughes server. OASIS places a checkmark in these circles (☑) once the data has been uploaded.

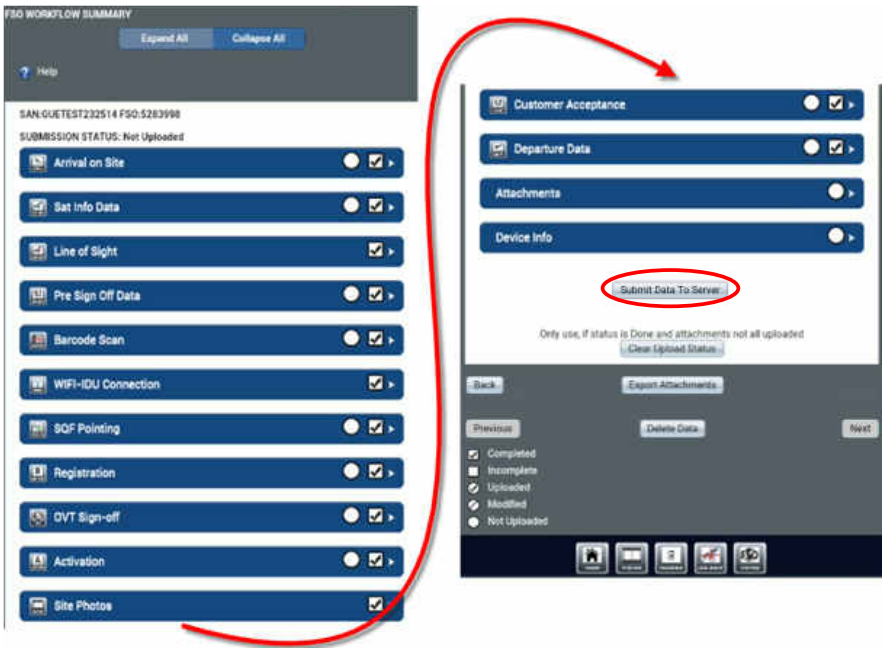

Figure 50: FSO workflow summary

To upload the information to the Hughes servers:

1. Tap **Submit Data To Server** (circled in Figure 50).
2. Tap **Ok** on the success pop-up message that appears.

Once you have successfully uploaded the data, tap the Home icon in the left corner of the bottom toolbar. This navigates you back to the OASIS homepage, where you will verify the data upload.

Verify data upload

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

The FSO you just complete is highlighted in blue on the OASIS homepage under the Current Job Schedules menu (Figure 51).

Figure 51: Current completed jobs

To verify all the data has been received by Hughes:

1. Tap the Full IP icon on the bottom toolbar (circled in Figure 51). 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 (circled in Figure 52).

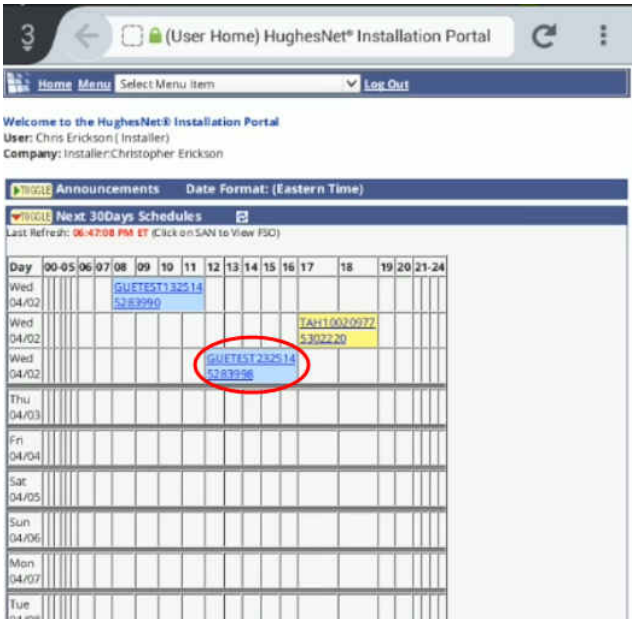

Figure 52: Select current FSO from Installation Portal calendar

3. On the page that launches, tap **OASIS WorkFlow Summary** (circled in Figure 53).

Figure 53: FSO page

4. The OASIS WorkFlow Summary page launches (Figure 54).

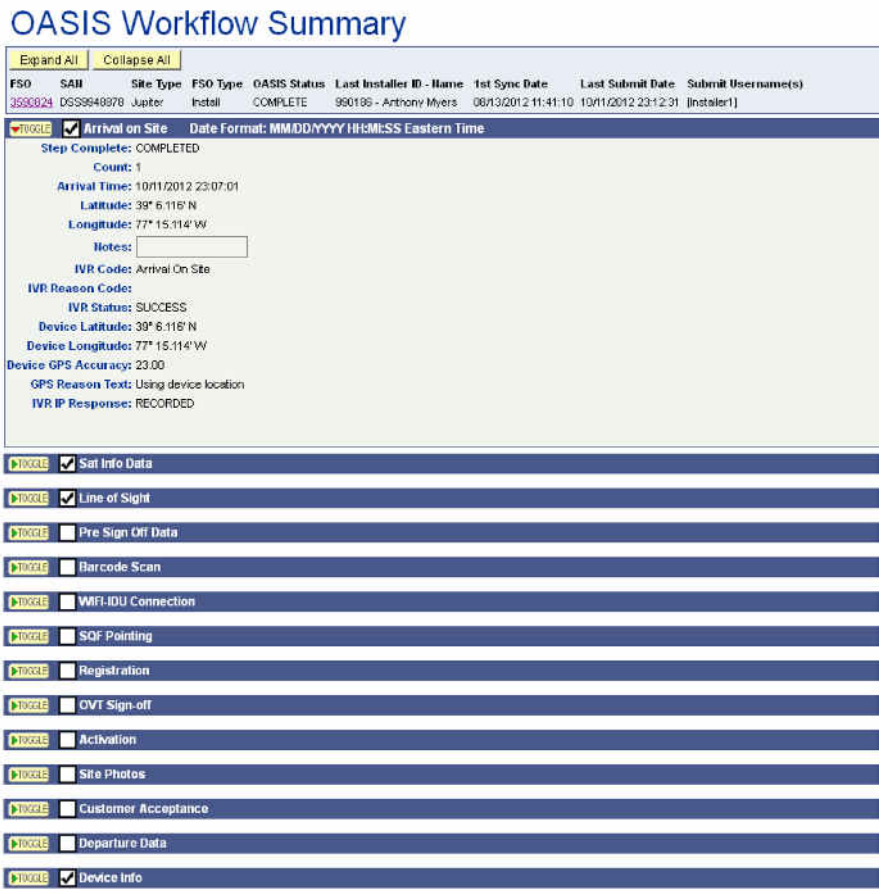

Figure 54: OASIS Workflow Summary page

5. Verify all the data in your FSO has been uploaded and is correct.
6. Return to the FSO page (Figure 53 on page 57)
7. Tap the camera icon ( ) to launch the Site Photo Quality Audit page.
8. Check to make sure all of your photos uploaded correctly (Figure 55 on page 59).

Figure 55: Verify photos

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

Delete local files

To delete the local data of the FSO you just completed from your wireless device:

1. Return to the OASIS app.
2. Tap the All Records icon (circled in Figure 56) in the bottom toolbar of the app's homepage.

Figure 56: All Records icon

3. OASIS launches the FSO Upload Status page (Figure 57).

Figure 57: FSO Upload Status page

4. Select the FSO you just completed, then tap **Delete Data**.
5. In the warning pop-up message that appears, tap **Yes** to verify you want to delete the data.

Appendix A

Performing repair orders

Installers can use certain workflows in OASIS to help with JUPITER repair orders.

Diagnosis workflow

The Diagnosis workflow (Figure 58) provides access to commonly used diagnostic options. It allows you to open OVT, ping the terminal, and see the work history of the site.

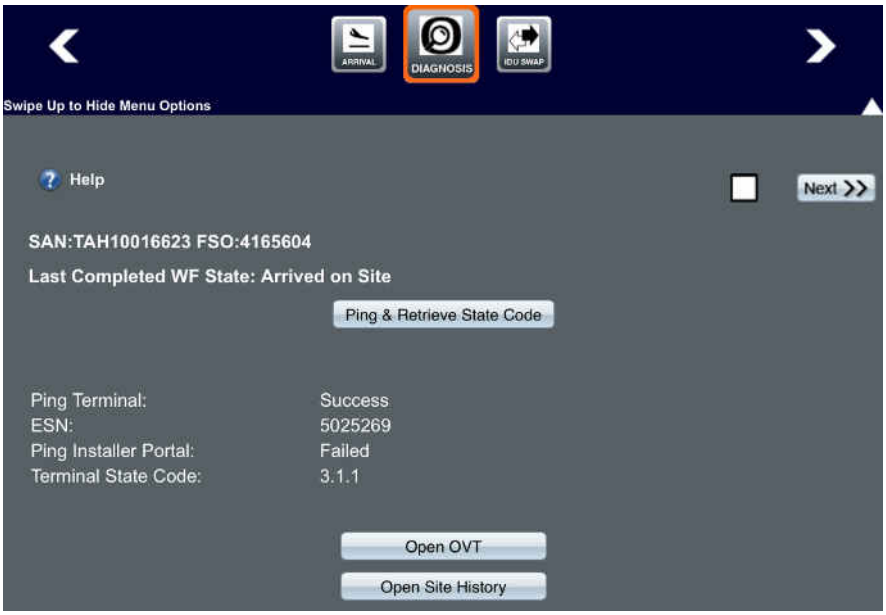

Figure 58: Diagnosis workflow

Tap **Ping & Retrieve State Code** to connect to the satellite modem and see its state code. If the satellite modem connection fails when you tap that button, a pop-up message informs you that you can retry the connection or skip the step (Figure 59 on page 62). Tap **Try Again** or **Skip this Step**, depending on what you want to do.

Note: Hughes tracks if you skip capturing the modem's state code.

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Figure 59: Diagnosis workflow – unable to connect to modem

IDU Swap workflow

The IDU Swap workflow is used to swap an activated satellite modem with a new one. To do this:

1. Replace the old modem with the new one
2. Make sure the new modem is connected to a router so you can access it wirelessly.
3. Tap **Initiate IDU Swap**
4. OASIS will ping the new terminal and establish a connection.

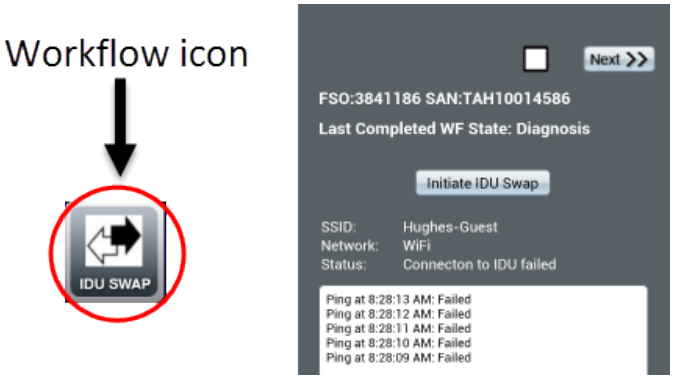

Figure 60: IDU Swap workflow

Appendix B

Troubleshooting

If you encounter an error with OASIS that you cannot resolve, check the frequently asked questions (FAQs) below to see if the issue has been previously encountered. If after reading the FAQs you still cannot resolve the issue, contact Hughes via one of the methods given in Troubleshooting on page 16.

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Make sure you have downloaded the most recent version of the OASIS app to your smart device from the Installation Portal. See Installing OASIS on page 5.

FAQs

1. **I am having trouble logging into OASIS or I am encountering a "token not found" error.**
   - Make sure you have Internet connectivity for each first login after downloading the app.
   - Make sure the Installation Portal is operational by logging in via a web browser.
   - Make sure your password has not expired. Passwords expire every 90 days. You must log into the Installation Portal via a web browser to change your password. Do not use special characters in your password.
2. **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 your settings.
3. **I am using an Android device and am having issues with touch functionality in OASIS. I am using an older version of the app.**
   - Touch issues are resolved in the latest version of OASIS. Please upgrade your app.
4. **I am using an iPhone 4/4s with iOS8 and am encountering problems with OASIS.**
   - OASIS no longer supports the iPhone 4/4s.
5. **I am 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 locks some features. You need to initiate the Arrival workflow again to regain access.
   - If you have multiple old FSOs stored on you device, this could cause issues with the app. Ensure all old FSOs are uploaded to the Installation Portal, then delete them from the app by following the procedure in Delete local files on page 60.

6. **I am having issues with uploading my 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 (see Figure 50 on page 55), tap **Clear Upload Status**, 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 all else fails, you can take screenshots of the FSO attachments and upload those screenshots manually to the Installation Portal using a computer.
7. **The LOS tool in OASIS is not functioning properly (e.g., the crosshairs are not moving correctly).**
   - Make sure your device's compass is correctly calibrated. If necessary, recalibrate it. The LOS tool relies on the compass to properly function.
8. **I 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.
9. **OASIS is consuming a lot of my cellular data.**
   - When manually uploading data to the Installation Portal, make sure your device is connected to a wireless network (i.e., not your cellular network).
10. **My device is not able to correctly scan barcodes.**
    - Barcode scanning in OASIS requires your device has a rear-facing camera with autofocus and at least 5 megapixels resolution.
11. **I cannot find the information for an FSO I previously completed but did not upload to the Installation Portal.**
    - Whenever you complete an FSO, you should export all of its attachments to the photos gallery of your smart device (see Backing up attachments on page 14) to safeguard against data loss.

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Did the customer accept the subscriber agreement during service activation?
Can the customer browse on their personal computer?
Did you help the customer configure their HughesNet email account?
Was the installation completed to the customer's satisfaction?
Was the equipment installed correctly, but an issue on the customer's end prevented them from using their personal computer to test the connection?

They should be able to answer *Yes* to everything but the last question, as seen in Figure 47.

1.