

Stryker iBed® Wireless after-hours support documentation template

Hospital:

Point of contact:

Email:

Phone:

Issue as described (Single bed/location, single third-party outage, complete outage – if complete or single third party, mark as high importance):

Date/time of contact:

Bed serial number:

Footboard serial number (only for InTouch & ProCuity bed models):

IP address:

MAC address:

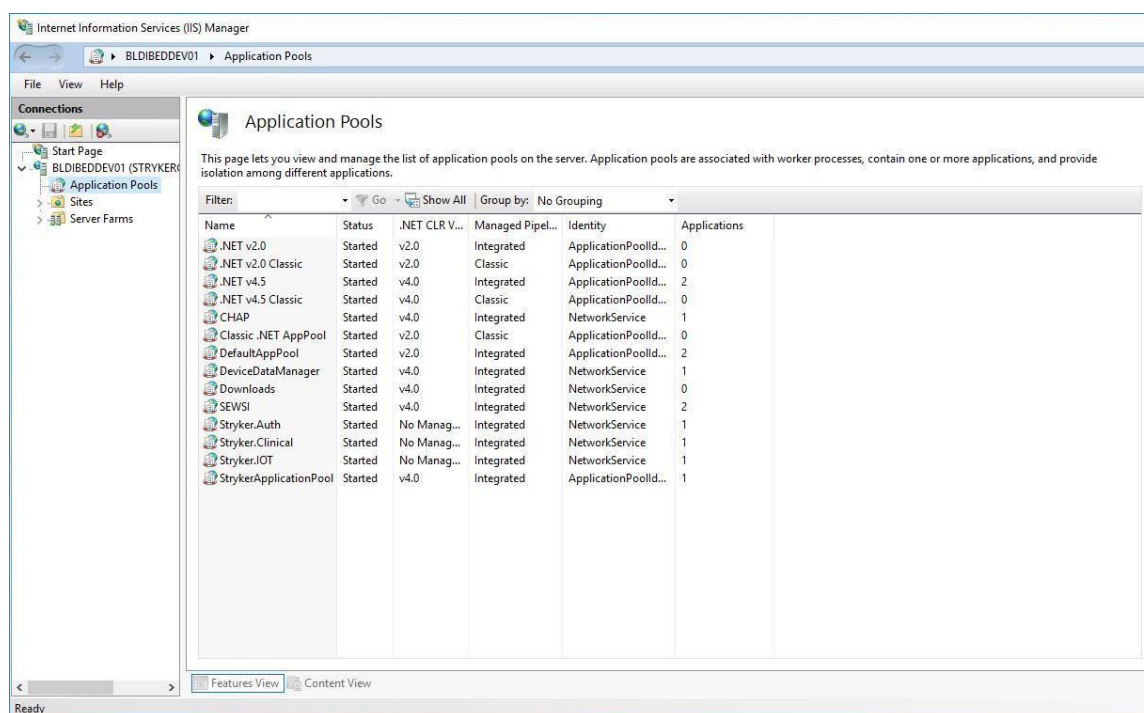
Room number/Patient position:

Locator BBID:

Troubleshooting steps performed/instructed

Verifying Stryker application pools are running in IIS Manager

1. Login to Stryker iBed Server
2. Click the Search button and type “IIS Manager” and click Enter to open
3. In Connections pane, click the drop-down arrow next to the server name to expand items
 - a. Click Application Pools
4. Verify that all Application Pools are Started:



Stryker Wireless bed triage

The Stryker iBed Wireless system requires both wireless connectivity as well as a location (provided either via an iBed locator or Secure Connect) to be able to communicate with systems wirelessly. This document walks through verifying the bed is connected to both Wi-Fi and a locator to function wirelessly. See table below for next steps if either icon shows disconnected.

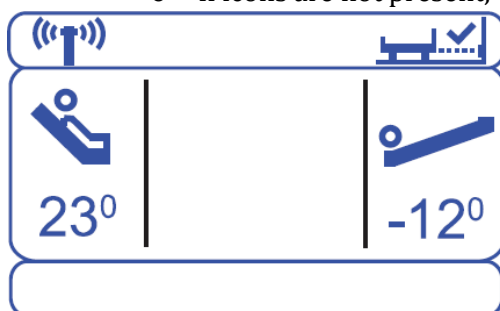
No connection to the wireless network	<ol style="list-style-type: none"> 1. Power cycle or perform a soft reset of the product and wait two minutes <ol style="list-style-type: none"> a. If the footboard wireless icon shows a connection go to step 3 b. If the footboard wireless icon does not show a connection go to step 2 2. Move the bed to a different area of the hospital and see if it can connect <ol style="list-style-type: none"> a. If the footboard wireless icon shows a connection, there may be an issue with signal strength in the room the bed would not connect in. Contact networking and go to step 3 b. If the footboard wireless icon does not show a connection, pull bed from service, and troubleshoot wireless radio 3. Verify proper operation before you return the bed to service
No connection to the iBed Locator / Secure Connect	<ol style="list-style-type: none"> 1. Verify the bed is facing the iBed Locator / Secure Connect and that Line of Sight is not obstructed 2. Move the product to another iBed Locator / Secure Connect <ol style="list-style-type: none"> a. If the product connects, replace the batteries in the locator / ensure the Secure Connect power cord is plugged in and the battery switch is turned ON / troubleshoot locator or Secure Connect

	<p>b. If the product does not connect, troubleshoot the IR module on the bed</p> <p>3. Verify proper operation before you return the bed to service</p>
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S3 3002 & 3005 Med-Surg:

Check iBed locator and wireless Connection status on the bed:

- On the main home screen of the footboard, view the icons in the upper left- and right-hand corners of the display
 - If icons are not present, verify bed is wireless model and option is turned on



- The upper left-hand corner shows the wireless connectivity status, the less bars around the antenna icon the lower signal
- The upper right-hand corner shows the iBed Locator connectivity status, it will be either connected or disconnected

	This icon means the iBed Locator is connected.
	This icon means the iBed Locator is not connected.
	This icon means the Network is connected.
	This icon means the Network is not connected.

Retrieving bed's IP address, MAC address, and iBed Locator BBID information from the bed's Maintenance Menu:

- Refer to 3005-109-002 Maintenance Manual for an in-depth guide to the Maintenance Menu
 - Within the Maintenance Menu, select the "Connectivity Info" option
 - Use the arrow buttons to navigate down through the Connectivity Info page to collect the IP Address, MAC address, and iBed Locator ID (BBID) information

InTouch® FL27 ICU:

Check iBed locator and wireless Connection status on the bed:








* If icons are not present, verify bed is wireless model and option is turned on

- The following figure displays the InTouch home screen icons and their definitions



Figure 20: Patient information

	Name	Function
A	Patient ID	Displays patient name and date admitted
B	Weight	Displays patient weight
C	Height	Displays patient height
D	BMI	Displays the patient's body mass index (BMI)
E	Braden Scale for Predicting Pressure Sore Risk ¹	Displays the patient's last Braden Scale score and the time and date the score was recorded. Tap the pencil to enter the Braden Scale menu.
F	Unit/Rm	Tap the pencil to enter unit/room number
G	Configure privacy	Configures the visibility of patient information displayed on the Patient Information screen
H	Patient note	Tap the pencil to enter patient notes
I	Wi-Fi (Optional)	View the Wi-Fi connection status (Figure 96 on page 89)
J	iBed Locator (Optional)	View the iBed Locator connection status (Figure 98 on page 90)

	iBed Locator is connected
	iBed Locator is not connected
	Wireless Network is connected
	Wireless Network is trying to connect/not connected
	Wireless module not detected
	Call maintenance
	Support surface call maintenance

- Figure I and J show the wireless connectivity information

- Press the Wi-Fi icon

Viewing the Wi-Fi connection status (optional)

Note: iBed Wireless must be installed and configured in order to view this option.

To view the Wi-Fi connection status, tap **Wi-Fi** (see [Main menu: Options on page 80](#)) or tap the Wi-Fi connectivity icon at the bottom of the touch screen.

Wi-Fi ON displays the connection status of the wireless network.

To configure the Wi-Fi option, see the **InTouch** maintenance manual.

To return to the **Options** screen, tap **Back** (Figure 96 on page 89).



- The IP and MAC address can be retrieved from this screen as well
- Press the iBed locator icon

Viewing the iBed Locator connection status (optional)

Note: The iBed Locator must be installed and configured in order to view this option.

To view the iBed Locator connection status, tap **iBed Locator** (see **Main menu: Options** on page 80) or tap the iBed Locator connectivity icon at the bottom of the touch screen.

Locator ID: Displays the iBed Locator ID.

Battery Status: Indicates the charge left in the iBed Locator battery.

Note: Replace the iBed Locator batteries as necessary.

If the iBed Locator is not connected, a red X appears next to the iBed Locator connectivity icon, no Locator ID is displayed, and the **Battery Status** field displays **Not Connected** (Figure 97 on page 90).

To return to the **Options** screen, tap **Back** (Figure 97 on page 90).



Figure 97: iBed Locator Information (not connected)

If the iBed Locator is connected, a green check mark appears next to the iBed Locator connectivity icon, a valid Locator ID is displayed, and the **Battery Status** field displays **Good** or **Low**, depending on the battery charge (Figure 98 on page 90).

To return to the **Options** screen, tap **Back** (Figure 98 on page 90).

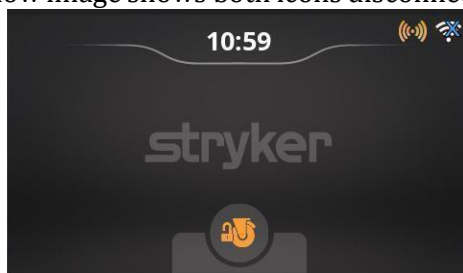


- The Locator ID on this screen is also known as the BBID

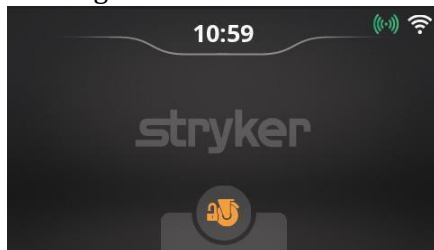
3009 ProCuity®

Check iBed locator and wireless Connection status on the bed:

- On the main home screen of the footboard, view the icons in the upper right-hand corner of the display
 - If icons are not present, verify bed is wireless model and option is turned on
- The icon to the left shows the connectivity status for the wireless locator / Secure Connect
 - Orange icon means bed is not connected to locator / Secure Connect
 - Green icon means bed is connected to locator / Secure Connect
- The icon to the right shows the status of the bed's connectivity to the wireless network
 - A blue X over the Wi-Fi icon means the bed is not connected to Wi-Fi
 - An antenna icon with radiating bars to signify current signal strength means the bed is connected to Wi-Fi
- The below image shows both icons disconnected:



- The below image shows both icons connected:



Verifying subscriptions for 3rd party in Stryker iBed server

1. Login to Stryker iBed Server
2. Open iBed Server Tools
 - a. Right Click > Run as Admin
3. Click Subscription List Tab
 - a. Each 3rd Party requires a server subscription (Device ID begins with 5212) as well as a subscription to each individual bed (Device ID = serial number of bed)
 - i. Can verify which third party subscription is for in Subscriber URL field (contains IP or host name of server that is subscribing to Stryker iBed Server)
 1. In example below, line 1 is the server subscription from DDM. Lines 2 and 3 are bed subscriptions from DDM
 - ii. If subscriptions are missing, instruct to verify 3rd party server is working properly as Stryker does not control incoming subscriptions outside of DDM
4. For integrations with Stryker systems (Vision, Smart Equipment Management) or integrations utilizing Iguana (Epic or other EHR integrations, new 3rd party integrations) we will need to verify we have a DDM subscription to the server and beds
 - a. If DDM subscriptions are missing, instruct to Verify DDM Application Pool is running in IIS (refer to Verifying Stryker Application Pools are Running in IIS Manager)
 - i. Example of DDM subscriptions in image

Stryker iBed Server Tool - [Server Data]

View Edit Verification Diagnostic Info DDM Subscribers About Exit

Server Web Service URL

Connected Device(s) Total Device(s)

Connected Device URL List **Subscription List** Debug Devices Device Location List Client Diagnostic Info

		Device ID	Subscription ID	Create Time	Last Renew Time	Subscriber URL
1		5212-500-005_00000	5212-500-005_00000_c8901054-4376-4290-958e-aeef83274d7a	8/10/2021 11:11:04 AM	8/10/2021 11:11:04 AM	http://10.50.114.37/DeviceDataManager/DataManager.svc
2		3000-000-000_U08615	C3000-000-000_U086152287099559	8/10/2021 10:51:05 AM	8/10/2021 10:51:05 AM	http://10.50.114.37/DeviceDataManager/DataManager.svc
3		3000-000-000_U08615	C3000-000-000_U086152598051400	8/10/2021 11:01:06 AM	8/10/2021 11:01:06 AM	http://10.50.114.37/DeviceDataManager/DataManager.svc

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Refer to these Maintenance Manuals
3005-109-002/3009-109-002/3006-609-002/2141-309-002

Verifying Stryker channels are running in Iguana

1. Login to Stryker iBed Server
2. Click Iguana link on desktop to open Iguana dashboard
 - a. If there is not a link, open a browser and navigate to localhost:6543
 - b. Default username and password is prepopulated, just click Login
3. You will see the channels in the main view
 - a. Verify channels are Started (green icon = running, red icon = stopped due to error, yellow = attempting to connect, white = not started)
 - b. If any channels are not running or stopped due to error, restart them by clicking Start



The screenshot shows the Iguana dashboard interface. At the top, there is a navigation bar with links for DASHBOARD, LOGS, SETTINGS, HISTORY, and HELP. A warning message is displayed: "WARNING: Email notification settings have not been configured. To configure or disable email notification, go to the Settings > Email Notification page." Below the warning, the dashboard displays a table of channels. The table has columns for START/STOP, TYPE, CHANNEL NAME, LAST ACTIVITY, ERRORS, and QUEUED. The channels listed are:

START/STOP	TYPE	CHANNEL NAME	LAST ACTIVITY	ERRORS	QUEUED
STOP	LLP -> (TRANS)	ADT_INBOUND	--	--	0
START	QUE -> (LLP)	HOURLY_OUTBOUND	--	1	2
START	QUE -> (LLP)	QSU_OutBound_SysBedStandard	--	1	2
START	LLP -> (TRANS)	OUTBOUND_MOBILEHEARTBEAT	--	--	0
STOP	HTTPS -> (QUE)	BBJSON_Process	--	--	--

Verifying Stryker iBed® server services are running

1. Login to Stryker iBed Server
2. Open a Run Prompt (Windows Key + r)
 - a. Type services.msc to open Services panel
3. Verify the following services are running (if not, start them):
 - a. StrykerSEWSIHeartbeatService
 - b. StrykerMaintenanceService
 - c. StrykerDiagnosticService
 - d. World Wide Web Publishing Service

Example triage flow

Customer Inquiry: Stryker Medical wireless outage

Step 1: Determine outage scope (complete outage, single application, specific beds/location)

Is this an issue with a single bed or location? Is this impacting all wireless systems or just one? What system is impacted?

Step 2a: Complete outage

- Instruct to Verify Stryker services are running on server (refer to Verifying Stryker iBed Server Services are Running)
- Instruct to Verify Application Pools are running on server in IIS Manager (refer to Verifying Stryker Application Pools are Running in IIS Manager)
- Instruct to Verify beds are connected to server (refer to Verifying Beds are Connected to Stryker iBed Server)
 - If not, check with network team

Step 2b: Single application

- Instruct to Verify we have subscriptions in subscription list tab of server for that subscriber (refer to Verifying Subscriptions for 3rd Party in Stryker iBed Server)
- If Stryker system (Vision, Smart Equipment Management, etc):
 - Verify services on downstream server are running (Vision) (refer to Verifying Stryker Vision Services are Running)
 - Verify channels are started in Iguana (Verifying Stryker Channels are Running in Iguana)

Step 2c: Specific bed/location

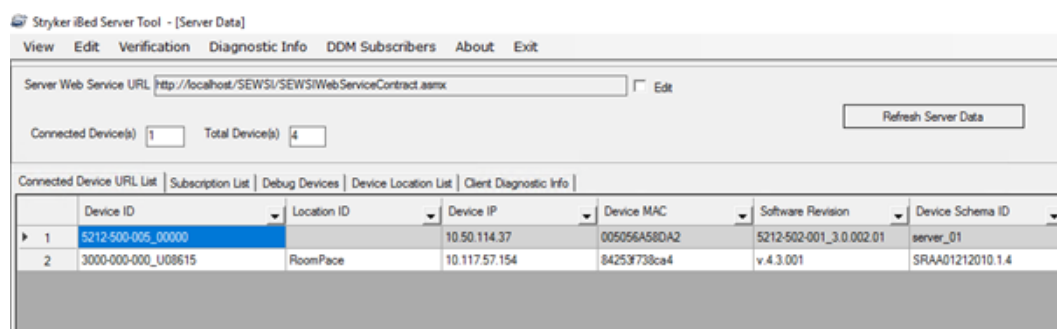
- **Triage at bedside:**
 - Ensure both wireless and locator icon show connected (refer to Stryker Wireless Bed Triage)
 - If wifi disconnected (602 error):
 - Reboot bed and check in 5 mins
 - Pull bed from service and see if it connects elsewhere
 - If so, likely a signal strength issue in previous room
 - If not, contact service for troubleshooting bed
 - If locator disconnected (check icon after each step):
 - Ensure head of bed is facing locator
 - Ensure line of sight between bed and locator is not obstructed
 - Ensure brake is set
 - Replace batteries in locator
 - If still not connected, contact service to troubleshoot locator/bed
 - Document info for service
 - Serial Number
 - Room Number/patient position

- If both icons show connected:
 - Document info for TSA team (refer to Wireless After-Hours Support Documentation)

Step 3: Log investigation in Stryker email template and send to specified address

Verifying beds are connected to Stryker iBed Server

1. Login to Stryker iBed Server.
2. Open iBed Server Tools.
 - a. Right click > Run as Admin
3. Verify Connected Devices field > 0.
 - a. If connected Devices is a lot less than Total Devices, we may have troubles communicating with some beds. Contact network team to assist.



Verifying Stryker vision server services are running

1. Login to Stryker Vision Server
2. Open a Run Prompt (Windows Key + r)
 - a. Type services.msc to open Services panel
3. Verify the following services are running (if not, start them):
 - a. All services that start with Stryker
 - b. World Wide Web Publishing Service