

# RP-VITA Pre-Installation Guide



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# RP-VITA Pre-Installation

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## Pre-Installation

There are a number of things that must be done before beginning the actual physical installation of the RP-VITA. These involve working closely with the customer's program director, nursing staff, IT staff and facilities personnel to gather the necessary materials and information to do a proper installation.

## Floorplan

The first important document to gather is the floorplan of the area that the RP-VITA is to be installed in. Floorplans should be available through the facilities department of the hospital. Floorplans can come in many different formats including electronic and hardcopy. The preferred format is the .DXF format which is typically available. Once a floorplan has been obtained it can be used to note the following critical information for the installation.

## *Operational Area*

Work with the hospital staff to determine the boundaries of the RP-VITA work area. This will serve as a guide when creating the RP-VITA's internal map and will limit the area where it can travel under autonomous navigation. Mark the boundary on the floorplan. Note: RP-VITA does not navigate elevators, stairwells and has limited ability to navigate areas with doors that are often closed. RP-VITA can be teleop (manually) driven OUTSIDE the mapped area. If this happens, and the physician ends the session, the RP-VITA may not know how to find its way back. It is therefore critical to correctly assess the places the physician will need to go. If too LARGE an area is selected (by being lazy and specifying everywhere) then the mapping process will be very lengthy and the risk of problems will be greater.

## *Dock Location*

Work with the hospital staff to determine the desired location of the RP-VITA's dock. Be sure to follow the guidelines in the *RP-VITA Dock Installation Instructions* document (MA-16312-XXX). Mark the location on the floorplan. Note: RP-VITA docking location should be consistent with the intended workflow of the device. For example, if it is a telestroke application, the RP-VITA should be within quick and easy access (less than 15 feet) from the stroke nurse. If an ICU application, the RP-VITA should be within line of sight of any ICU staff, preferably centrally located. If a rounding application, the RP-VITA should be near the nurses' station.

## *Destinations*

Work with the hospital staff to determine the list of desired preprogrammed destination locations. In addition to the locations the desired pose (orientation) of the robot should be determined. For example the staff may desire that the robot should be facing away from the door at each room destination for privacy concerns. Note these things in the pre-installation worksheet. Note: While RP-VITA can store a huge number of destinations, care should be taken to winnow the initial list to essential locations. Navigating a huge list of destinations is a burden upon remote physicians, so the list should be as small

as possible AND the names chosen should be clear for all intended users (remote physicians, nurses, administrators, etc). Today, names are listed alphabetically in the order created.

## ***Zones***

There will be areas that the staff would want the robot to avoid or not travel through when navigating autonomously. For example, one area could be behind the nurses' station where it is crowded and difficult for the robot to navigate. Work with the hospital staff to determine these areas and mark them on the floorplan. These areas can be designated as "No Go" or "Avoid". Additionally there may be areas where the robot should go slowly like over a threshold or in a quiet zone. Identify and mark these on the floorplan as well.

## ***Naming Conventions***

Each hospital has its own style when referring to the rooms in their department. For example they may say Room 234 or they may say 234 East or ER234. Regardless of the style, work with the hospital staff to determine the naming convention for all desired destination tags and note it in the pre-installation worksheet.

## **Network Credentials**

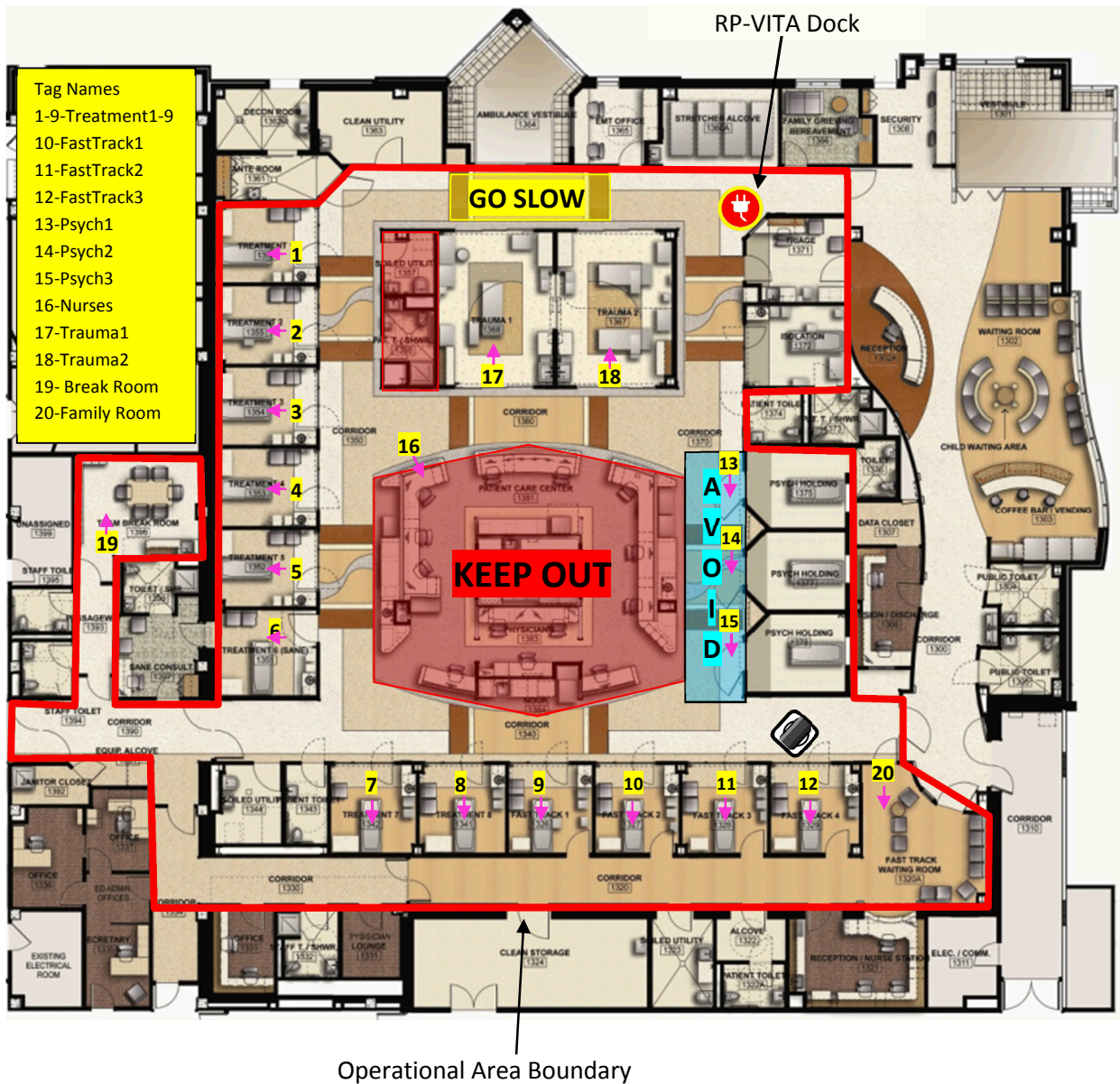
Just like other RP endpoints the installation on the hospital wireless network is critical. The required permissions and credentials for the hospital network must be acquired from the hospital's IT group. A site survey of the wireless performance over the desired operational area must be done and any issues addressed BEFORE the RP-VITA installation.

## **Dock Installation**

Once the dock location has been determined work with the facilities personal of the hospital to determine when they are able to do the installation. The dock should be installed BEFORE the planned RP-VITA installation day! Note: The dock on RP-VITA is lower to the ground than RP-7i and articulates vertically. Thus, the dock is expected to overlap with common baseboard heights requiring the removal of some baseboard material, a process that might take some time to arrange. Therefore, getting the process started is key. RP-VITA MUST have a dock installed BEFORE robot installation. InTouch Health is NOT considering the use of power-cord-only power charging as the dock is used for the RP-VITA to re-localize periodically (after power cycle, etc.)

## Floorplan Example

The following is an example of a well-marked floorplan. Notice that the boundary of the operational area of the robot is clearly defined. The location of the robot dock is shown. The desired keep out areas and other zones are shown. All destination locations and orientations are identified along with the desired name.



## Optional Pre-Installation Worksheet

The following information will be useful to collect prior to going on-site for a VITA installation.

### Fill out all the following information

Customer Name: \_\_\_\_\_

Type of Application: \_\_\_\_\_

Customer Location: \_\_\_\_\_

Customer Contact Number: \_\_\_\_\_

Application Contact Number: \_\_\_\_\_

Customer IT Contact Number: \_\_\_\_\_

### Network Information

Wireless Protocols: 802.11  B  G  A  N

SSID: \_\_\_\_\_ Encryption/Authentication: \_\_\_\_\_

Username/Password: \_\_\_\_\_

DHCP  Static IP address: \_\_\_\_\_

Subnet: \_\_\_\_\_

GW: \_\_\_\_\_

DNS: \_\_\_\_\_

Proxy Server & Port: \_\_\_\_\_

Site Survey

### Site Information

Floorplan, Format:  \*.DXF  \*.PDF  \*.JPG Other: \_\_\_\_\_

Operational area boundary defined and marked on floorplan

Dock marked on floorplan

Zones marked on floorplan

Destinations and orientations marked on floorplan

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List Destinations names

- |           |           |
|-----------|-----------|
| 1. _____  | 21. _____ |
| 2. _____  | 22. _____ |
| 3. _____  | 23. _____ |
| 4. _____  | 24. _____ |
| 5. _____  | 25. _____ |
| 6. _____  | 26. _____ |
| 7. _____  | 27. _____ |
| 8. _____  | 28. _____ |
| 9. _____  | 29. _____ |
| 10. _____ | 30. _____ |
| 11. _____ | 31. _____ |
| 12. _____ | 32. _____ |
| 13. _____ | 33. _____ |
| 14. _____ | 34. _____ |
| 15. _____ | 35. _____ |
| 16. _____ | 36. _____ |
| 17. _____ | 37. _____ |
| 18. _____ | 38. _____ |
| 19. _____ | 39. _____ |
| 20. _____ | 40. _____ |

Name: \_\_\_\_\_ Contact Number: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_