THE WORLD'S MOST POWERFUL THIN CLIENT MANAGEMENT PLATFORM

ThinManager

RELEVANCE

ACP

www.thinmanager.com | 1-877-239-4282

# Relevance for ThinManager 8

**May 15, 2015**

# Relevance User Manual

# 1. Introduction to Relevance

**Relevance** is mobile computing based on location. This isn't just sending an application to a mobile device, but is a way to enable the location to determine the content sent to the device. The mobile device allows the user to interact with the location.

Relevance is the ***How*** to provide ***What*** you need, ***Where*** and ***When*** you need it.

There are two types of locations in Relevance, **Assigned** and **Unassigned**.

**Assigned** locations are locations that have a terminal and monitor at the given location, much like traditional computing. Relevance adds additional functions to the location that allows mobile devices to interact with the location and Shadow the terminal, Clone the applications, or Transfer the control of the location to the mobile device.

**Unassigned** locations are locations that lack a permanent terminal and monitor and all of the content is sent to the mobile device.

Relevance is an extension of ThinManager and adds a new feature set to ThinManager when a Relevance license is added to a ThinManager license. It is helpful to know and understand ThinManager before deploying or converting to Relevance. Please see the ThinManager documentation for details on ThinManager.

# 2. Convert an Existing System

## 2.1. Upgrading an existing ThinManager System

Un-synchronize your ThinManager Servers if they are a synchronized pair. Do this at ***Manage > ThinManager Server List > Auto-synchronization*** Selection and uncheck the ***Automatic Synchronization*** checkbox.

Don't re-synch them until both of the pair have the same version installed.

Backup the configuration on your Primary ThinManager Server by selecting ***Manage > Backup Configuration***.

This will give you an unsynchronized backup configuration if something goes wrong.

Install the ThinManager software on each ThinManager Server using the Install Mode, either using the ***Install Application on Terminal Server*** on a 2008/2012 server or with the **`change user /install`** command.

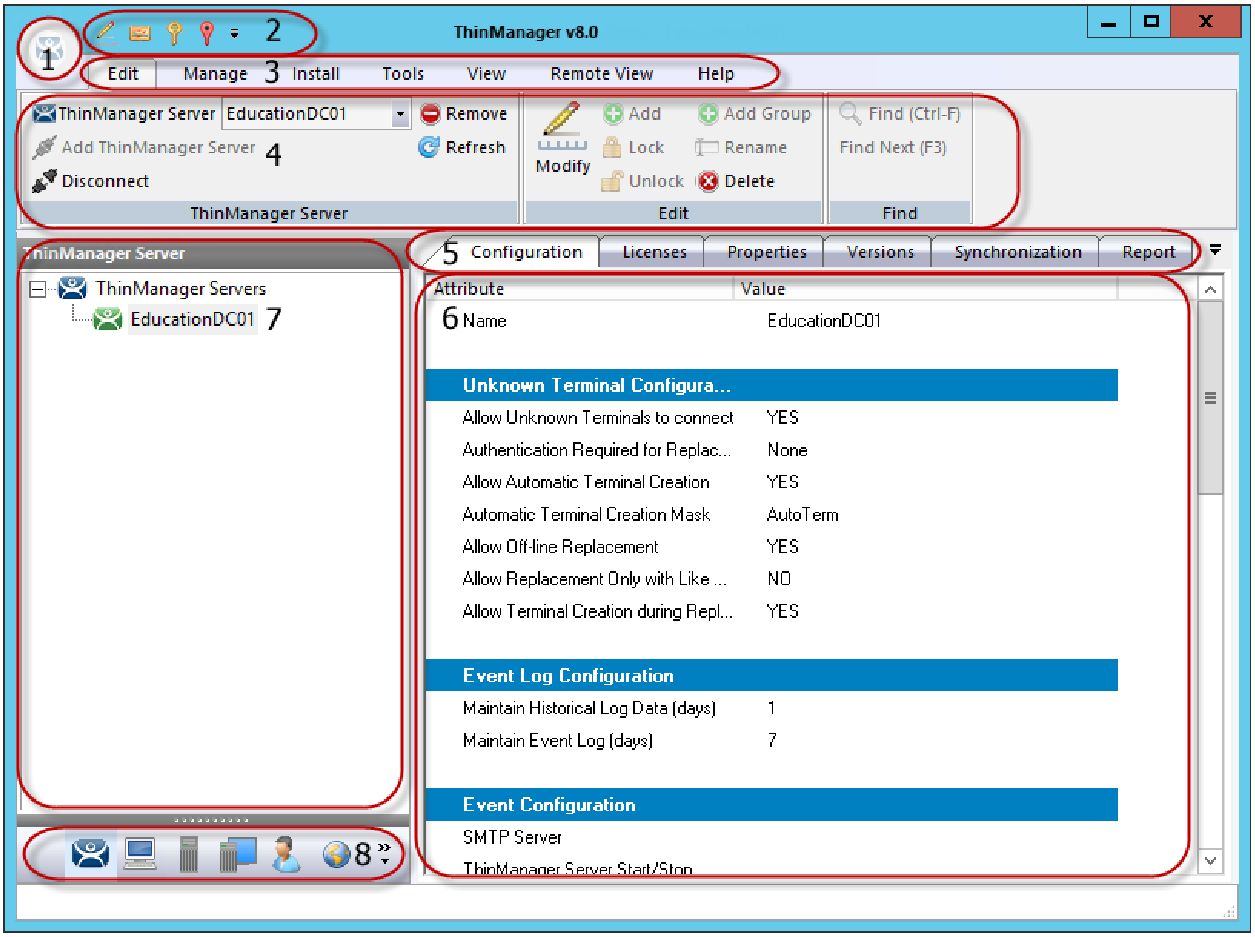
Synchronize your ThinManager Servers once they are both updated if they were synchronized before. Synchronize at ***Manage > ThinManager Server List > Auto-synchronization Selection*** and check the ***Automatic Synchronization*** checkbox.

Update the ThinManager license with a license that contains Relevance by going to the ThinManager License site and reactivating your master license with the updated installation ID.

The master license and installation ID are found in the Licensing window that is opened by selecting ***Install > Licenses*** from the ThinManager menu.

## 2.2. The ThinManager Interface

The ThinManager interface was changed in ThinManager 7.0 to a style based on the Microsoft Outlook template. This section will lead you through the important sections. You may find specific information by pressing the F1 key while in the ThinManager program.



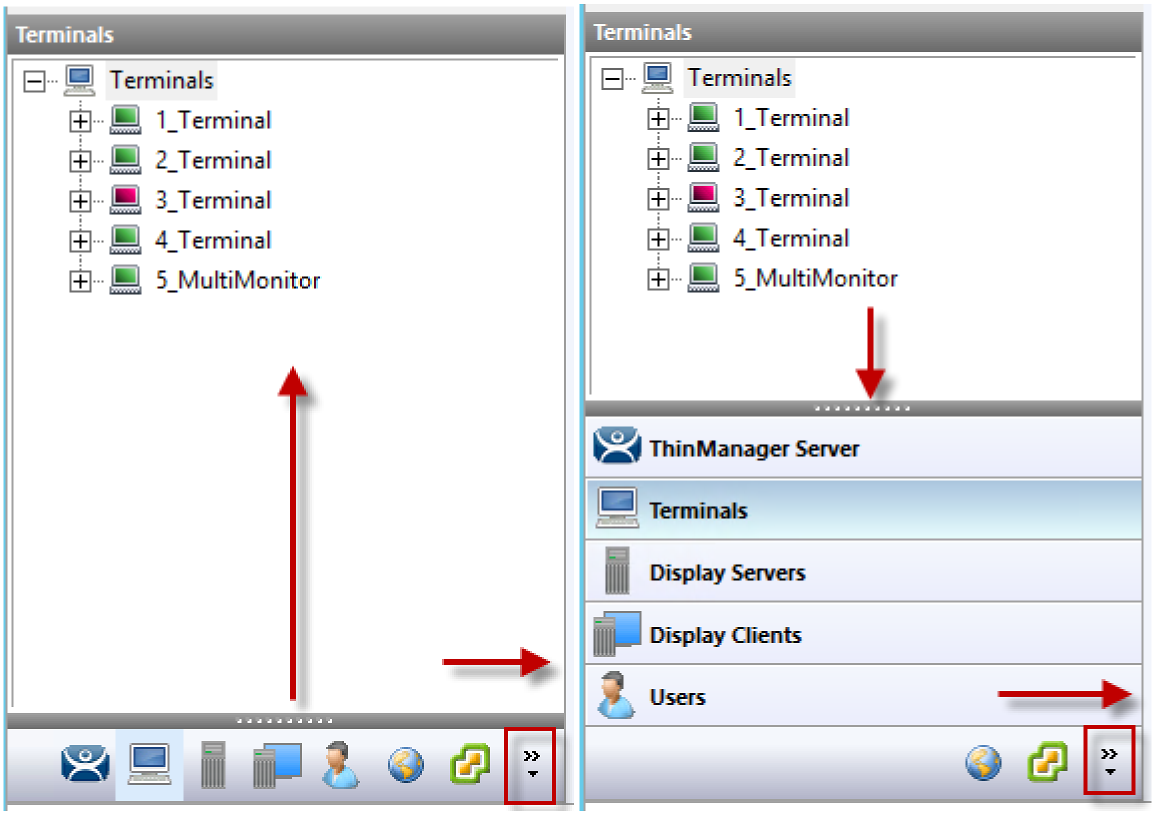
| Attribute | Value |
|---|---|
| Name | EducationDC01 |
| **Unknown Terminal Configura...** | |
| Allow Unknown Terminals to connect | YES |
| Authentication Required for Replac... | None |
| Allow Automatic Terminal Creation | YES |
| Automatic Terminal Creation Mask | AutoTerm |
| Allow Off-line Replacement | YES |
| Allow Replacement Only with Like ... | NO |
| Allow Terminal Creation during Repl... | YES |
| **Event Log Configuration** | |
| Maintain Historical Log Data (days) | 1 |
| Maintain Event Log (days) | 7 |
| **Event Configuration** | |
| SMTP Server | |
| ThinManager Server Start/Stop | |

*ThinManager Interface*

The ThinManager Interface has several components.

1. **Application Button** – This launches the ThinManager Server Configuration wizard to configure global ThinManager settings.
2. **Quick Access Toolbar** – This lets you add icons of commonly used tasks from the menu bar, like Restart, Send Message, Modify, Backup, and Shadow. Select the **Quick Access drop-down** arrow to customize this tool bar.
3. **Menu Bar** – The menu bar separates the functions into categories.
4. **Ribbon Bar** – The menu bar now has the ribbon with icons for the functions. The ribbon can remain visible or hidden when unused. This is controlled by the ***Minimize the Ribbon*** command on the **Quick Access drop-down** arrow menu.
5. **Detail Pane Tabs** - The Detail Pane has tabs that allow you to choose what details you want to display. The tabs and detail selections change depending on what is selected in the tree. You can drag the tabs to change the order.
6. **Detail Pane** – The Detail Pane displays the information for the selected tab for the highlighted tree component. You can tear away the detail pane by dragging the tab away from ThinManager. You can re-dock the pane by dragging the pane title bar back to the tabs.

7. **Tree** – The tree shows the components of ThinManager. The tree now uses the Outlook Bar Tab control so the branches of the ThinManager tree are shown one at a time.
8. **Tree Selector** – The selector buttons at the bottom of the tree control select which branch is active and visible. These can be pulled upwards to stack the buttons, or pulled down to minimize the buttons.



*Tree Selector Buttons*

*Minimized Buttons at the Bottom* *Buttons Stacked*

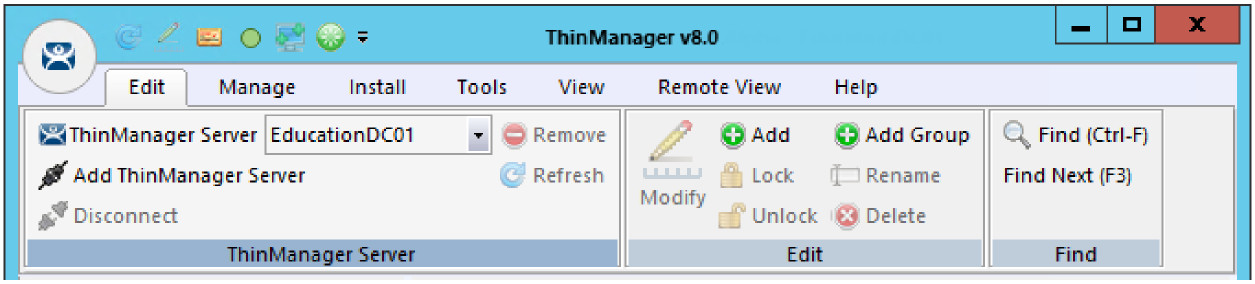
Stacking the buttons is provides quicker switching but the minimized buttons allows more room to show components in a larger system

There is an arrow that allows customization, tasks like hiding branches or reordering the branches of the tree

## 2.3. Menus

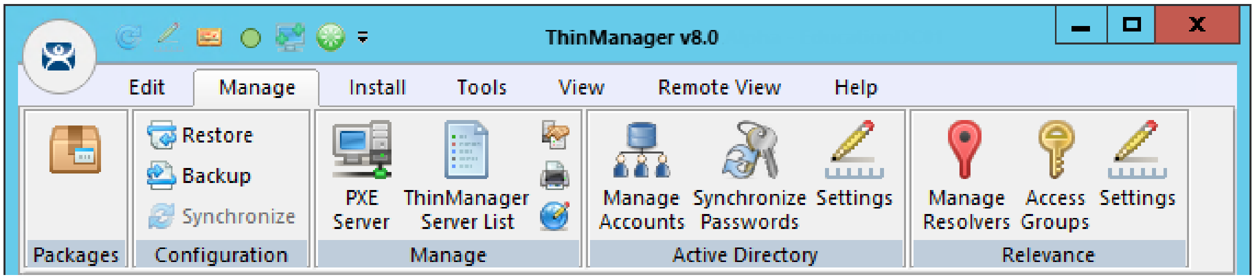
The menus of ThinManager use the Microsoft Outlook ribbon but contain similar functions as previous versions.

This is a brief description. Many of these functions will be explained in greater details in the sections of the manual that cover setup and configuration.



*Edit*

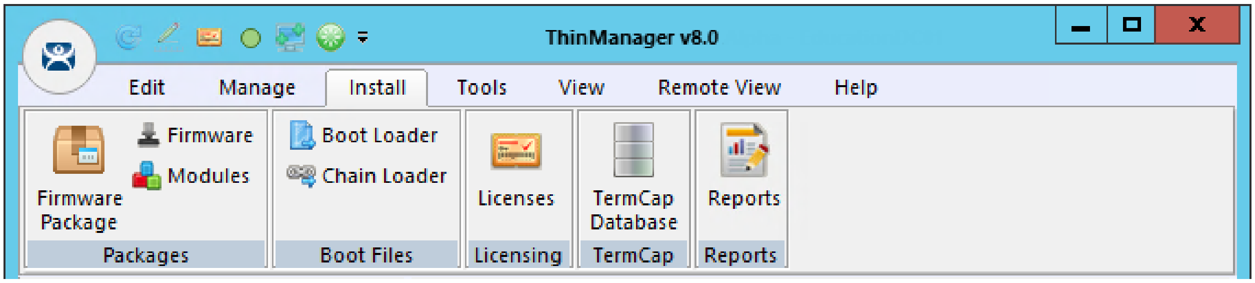
***Edit*** includes common editing commands and buttons to ***Add ThinManager Servers, Remove, Refresh***, and ***Modify***. There is a ***Find*** and ***Find Next*** button to allow you to search the tree.



*Manage*

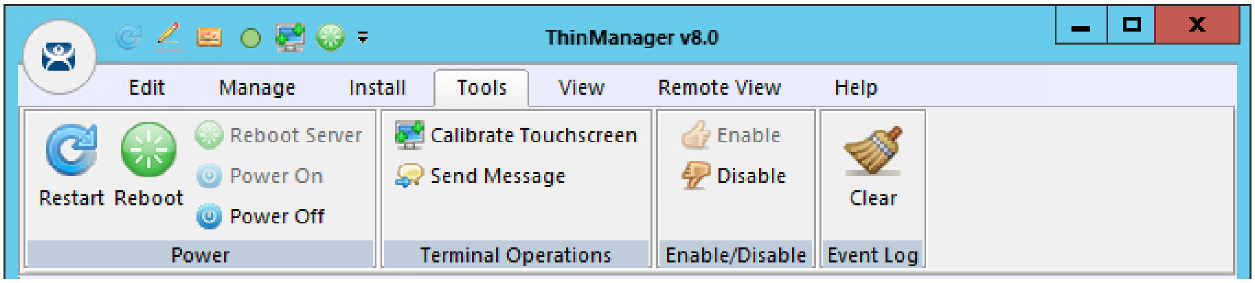
***Manage*** includes common management commands with icons for ***Packages***, ***PXE Server***, ***ThinManager Server List***, ***DNS***, ***Web*** access, and ***TermSecure Access Group*** management:

The ***Manage IDs*** is a new feature to manage Location IDs for Relevance.



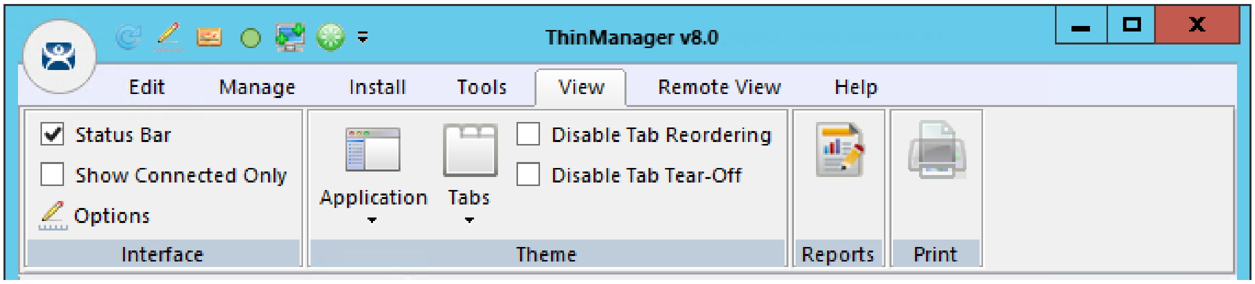
*Install*

***Install*** includes common commands with icons for installing ***Firmware Packages***, ***Modules***, ***Licenses***, the ***TermCap database*** and ***Reports***.



*Tools*

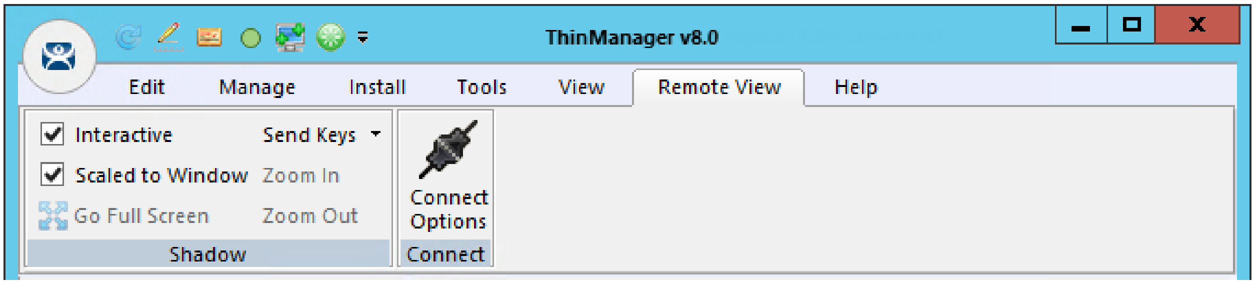
***Tools*** include common commands with icons for ***Restarts***, ***Reboots***, ***Touchscreen Calibration***, ***Disabling***, ***Enabling***, and clearing the event log.



☑ Status Bar
□ Show Connected Only
□ Disable Tab Reordering
□ Disable Tab Tear-Off

*View*

***View*** includes common commands with icons like ***Reports***, ***Applications***, and ***Tabs***. ***Reports*** open the **Select Reports** window. ***Application*** lets you select the theme for the new ThinManager interface, and ***Tabs*** allows you to pick the look of the detail pane tabs.



☑ Interactive
☑ Scaled to Window

*Remote View*

***Remote View*** includes common commands with icons like ***Interactive***, ***Scaled to Window***, ***Go Full Screen***, ***Send Keys***, and ***Connect Options***.

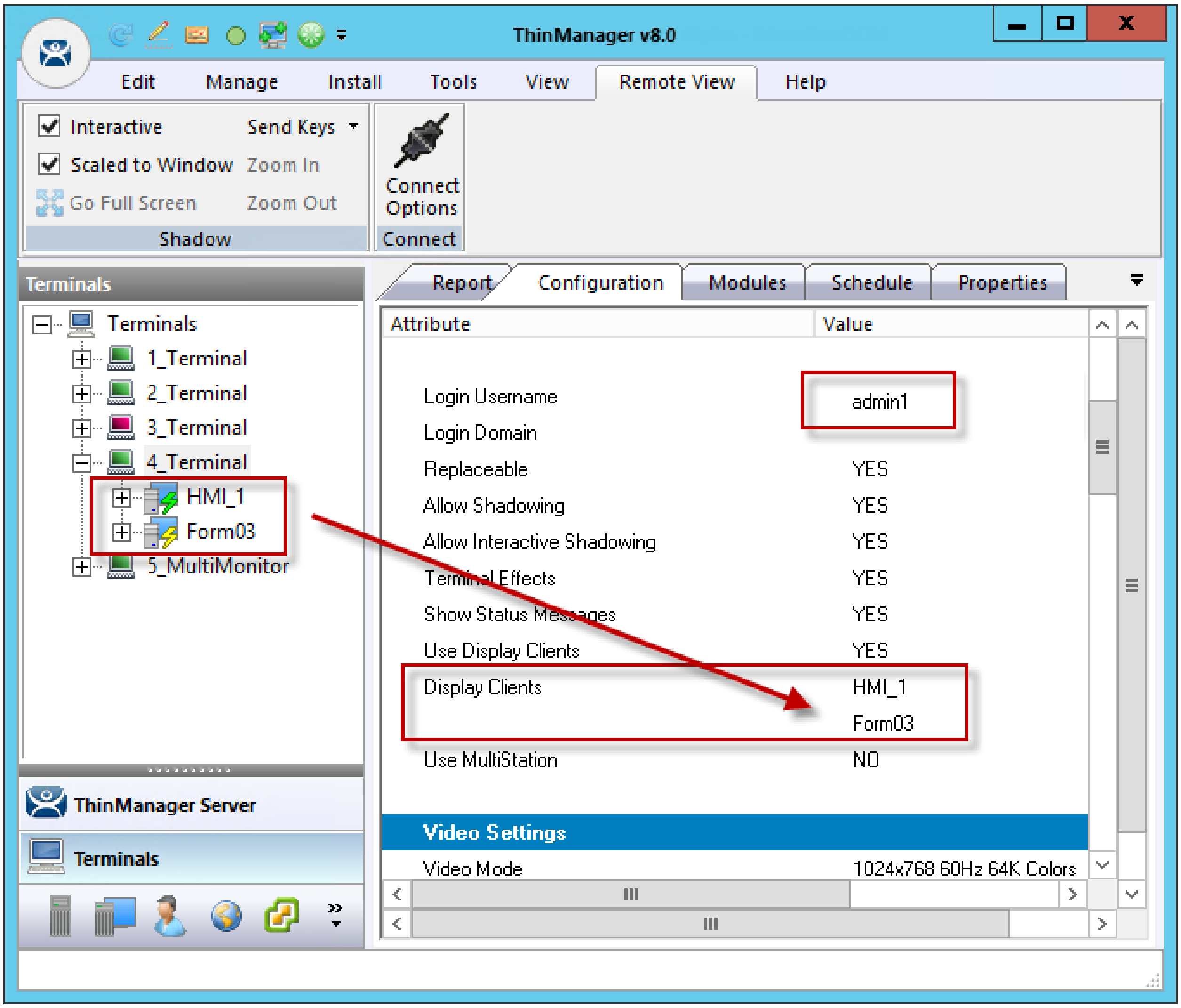
Be careful with **Go Full Screen.** This will make the shadowed terminal's image full screen. Although this can be reversed by selecting the ***CTL+ALT+Break*** buttons it is often forgotten. If you go full screen and forget the key sequence use ***ALT+F4*** to close ThinManager. It will close the full screen session.

***Help*** includes **About ThinManager** which shows the version and build number of ThinManager.

## 2.4. Upgrading an Existing Configuration

The current configuration in the example was created in ThinManager 7 and upgraded to ThinManager 8.

Each terminal is logging in with a Windows account and is running two display clients, HMI_New and either Reports or Form03.



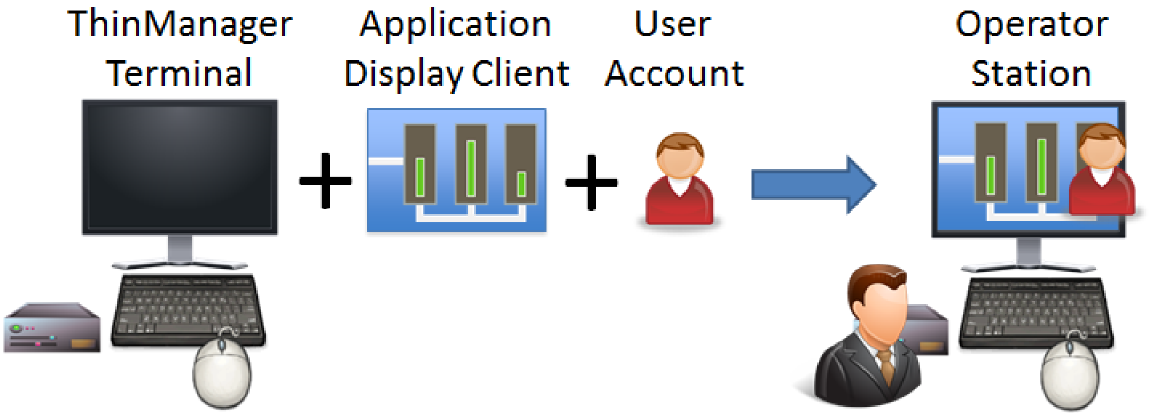
| Attribute | Value |
|---|---|
| Login Username | admin1 |
| Login Domain | |
| Replaceable | YES |
| Allow Shadowing | YES |
| Allow Interactive Shadowing | YES |
| Terminal Effects | YES |
| Show Status Messages | YES |
| Use Display Clients | YES |
| Display Clients | HMI_1<br>Form03 |
| Use MultiStation | NO |
| **Video Settings** | |
| Video Mode | 1024x768 60Hz 64K Colors |

*Terminal Tree*

The terminals can continue to run in this configuration but they don't gain any of the Relevance features or functions.

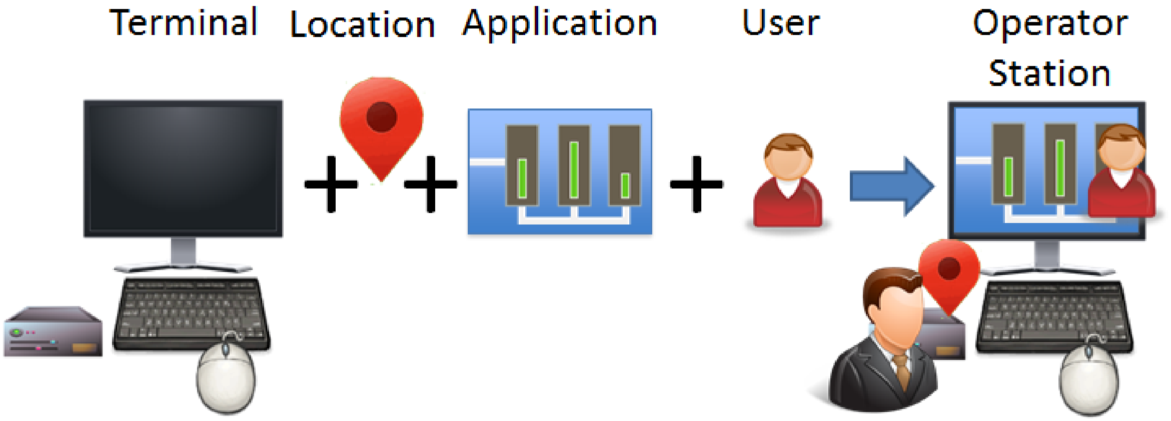
## 2.5. Adding a Location

In ThinManager you deploy applications by defining a terminal, configuring it with applications and a user account. This allows the operator to access the applications needed.



*ThinManager Deployment*

The new Relevance method will add a location. The application and user account will be added to the location.

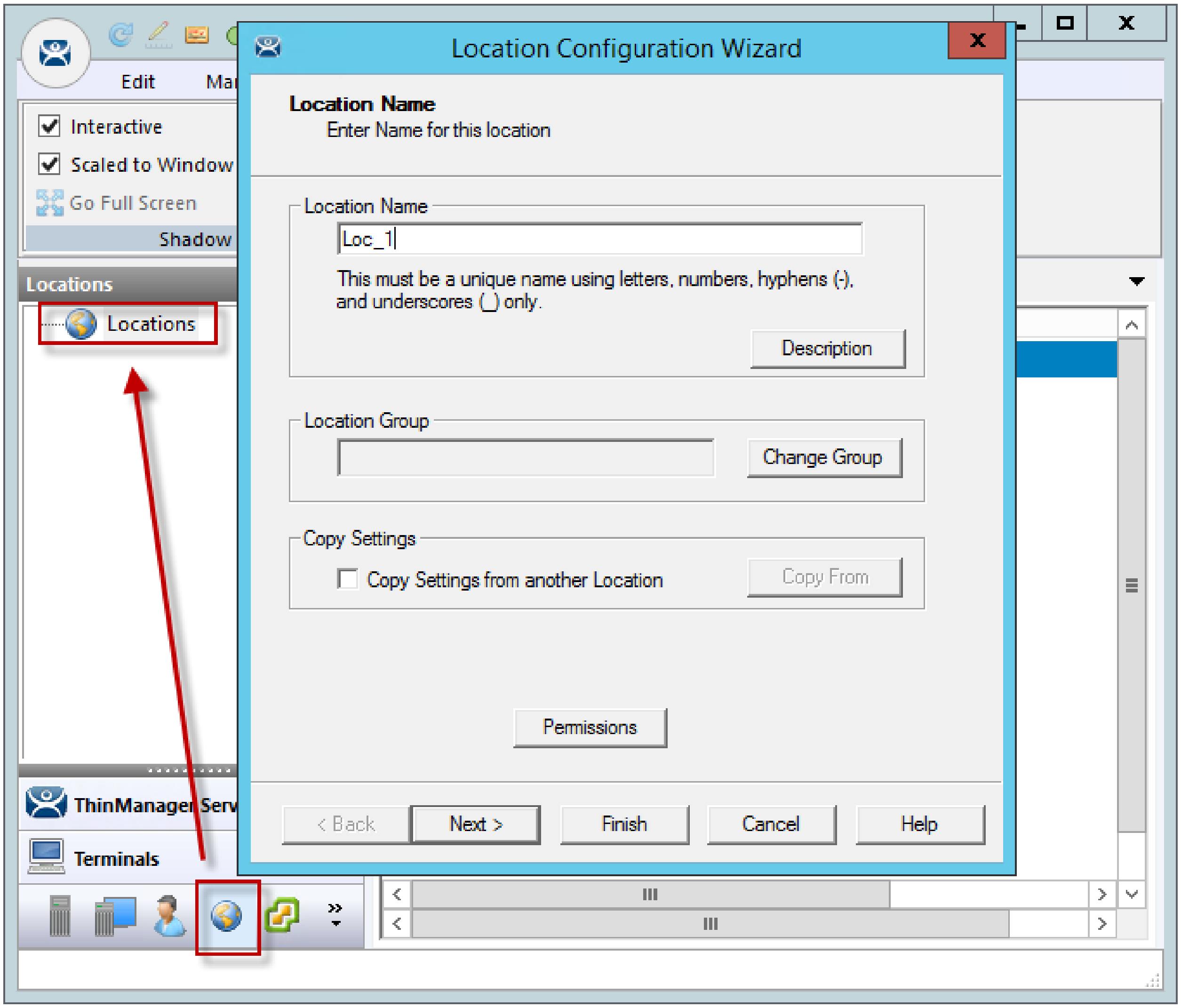


*First Relevance Deployment*

The first task is to create a location and re-apply the application and user account to the location which will then be assigned to the terminal.

### 2.5.1. Location Configuration Wizard

Open the **Locations** branch by selecting the ***Location*** icon, the globe, in the **Tree Selector** at the bottom of the tree.



Location Configuration Wizard

**Location Name**
Enter Name for this location

Location Name: Loc_1

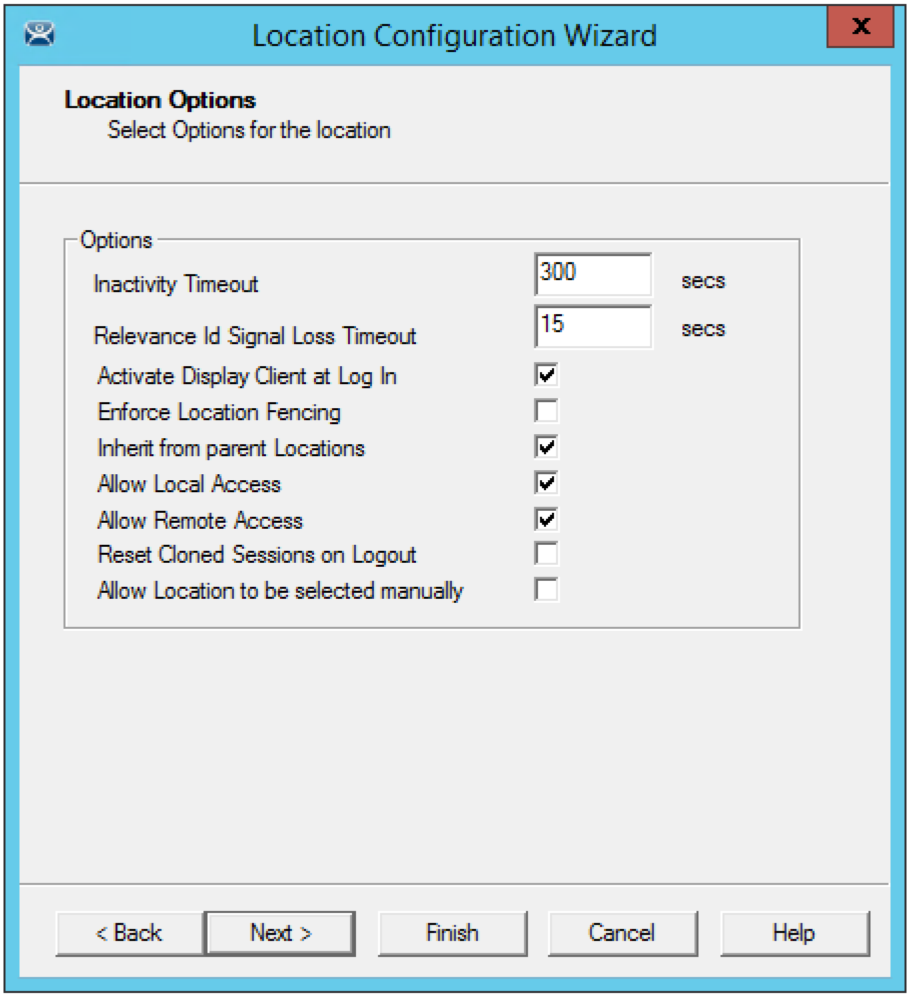
This must be a unique name using letters, numbers, hyphens (-), and underscores (_) only.

*Location Configuration Wizard*

Right click on the globe ***Locations*** icon in the tree and select ***Add Location*** to open the **Location Configuration Wizard.**

Name the location.

Select ***Next*** to continue.



**Location Options**
Select Options for the location

Options

Inactivity Timeout 300 secs

Relevance Id Signal Loss Timeout 15 secs

Activate Display Client at Log In ☑

Enforce Location Fencing □

Inherit from parent Locations ☑

Allow Local Access ☑

Allow Remote Access ☑

Reset Cloned Sessions on Logout □

Allow Location to be selected manually □

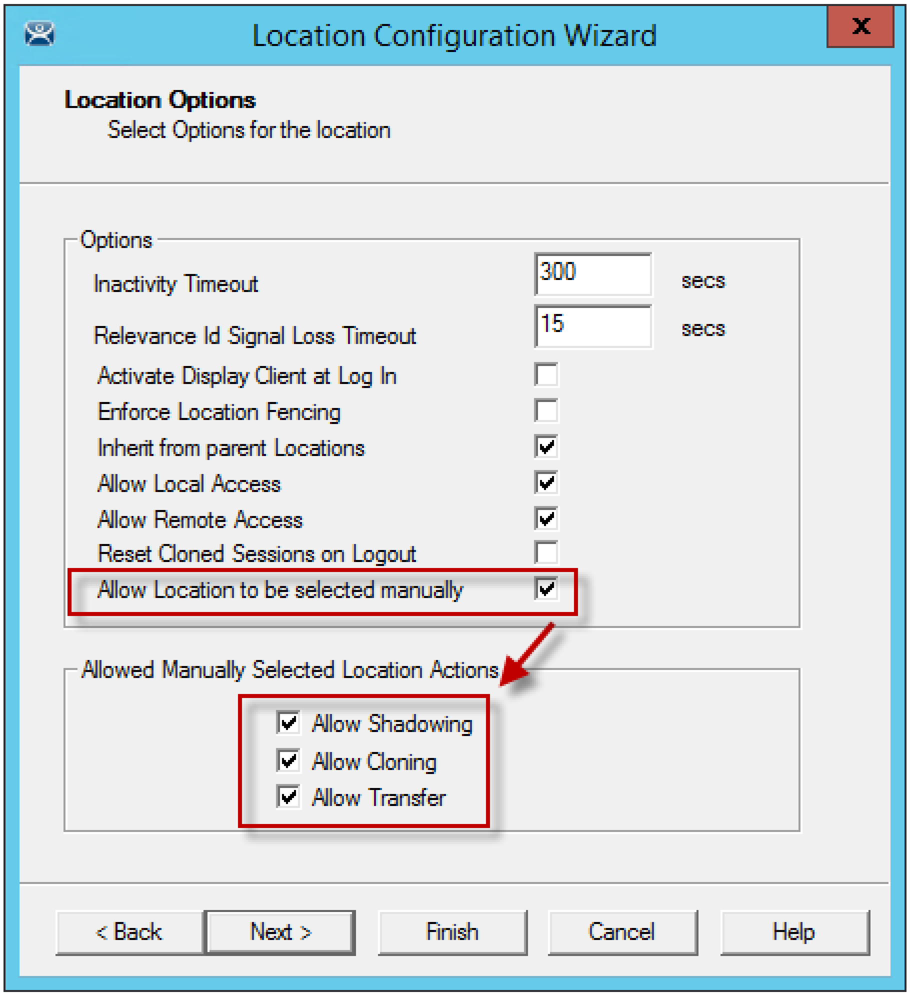
*Location Options Page*

The **Location Options** page has several configurable options that control the remote access.

- ***Inactivity Timeout* –** A Relevance user will be logged off after this interval if inactive.
- ***Relevance ID Signal Loss Timeout* –** This is the interval before a Relevance user is logged off due to lack of a signal.
- ***Activate Display Client at Log In* –** This brings the display client to the forefront when the Relevance user logs in.
- ***Enforce Location Fencing* –** This controls access in an area with nested locations. If local fencing is enforced the user has to be within the fence to access the sub-locations.
- ***Inherit from parent Locations* –** This allows nested sub-locations to inherit the parent display clients.
- ***Allow Local Access* –** This allows a Relevance user to access the location from that location. Unchecking this will only allow remote access.
- ***Allow Remote Connection* -** This allows a Relevance user to access the location from a remote site. Unchecking this will only allow access at the location.
- ***Reset Cloned Sessions on Logout* –** This will close any cloned sessions once they are disconnected.

- ***Allow Location to be selected manually* –** This allows a location to be manually selected. Unchecking this will require the Relevance user to use a Resolver like QR Codes, Wi-Fi, or Bluetooth to initiate the location access.

Checking the ***Allow Location to be selected manually*** checkbox reveals other settings.



**Location Options**
Select Options for the location

Options

| | | |
|---|---|---|
| Inactivity Timeout | 300 | secs |
| Relevance Id Signal Loss Timeout | 15 | secs |
| Activate Display Client at Log In | □ | |
| Enforce Location Fencing | □ | |
| Inherit from parent Locations | ☑ | |
| Allow Local Access | ☑ | |
| Allow Remote Access | ☑ | |
| Reset Cloned Sessions on Logout | □ | |
| Allow Location to be selected manually | ☑ | |

Allowed Manually Selected Location Actions

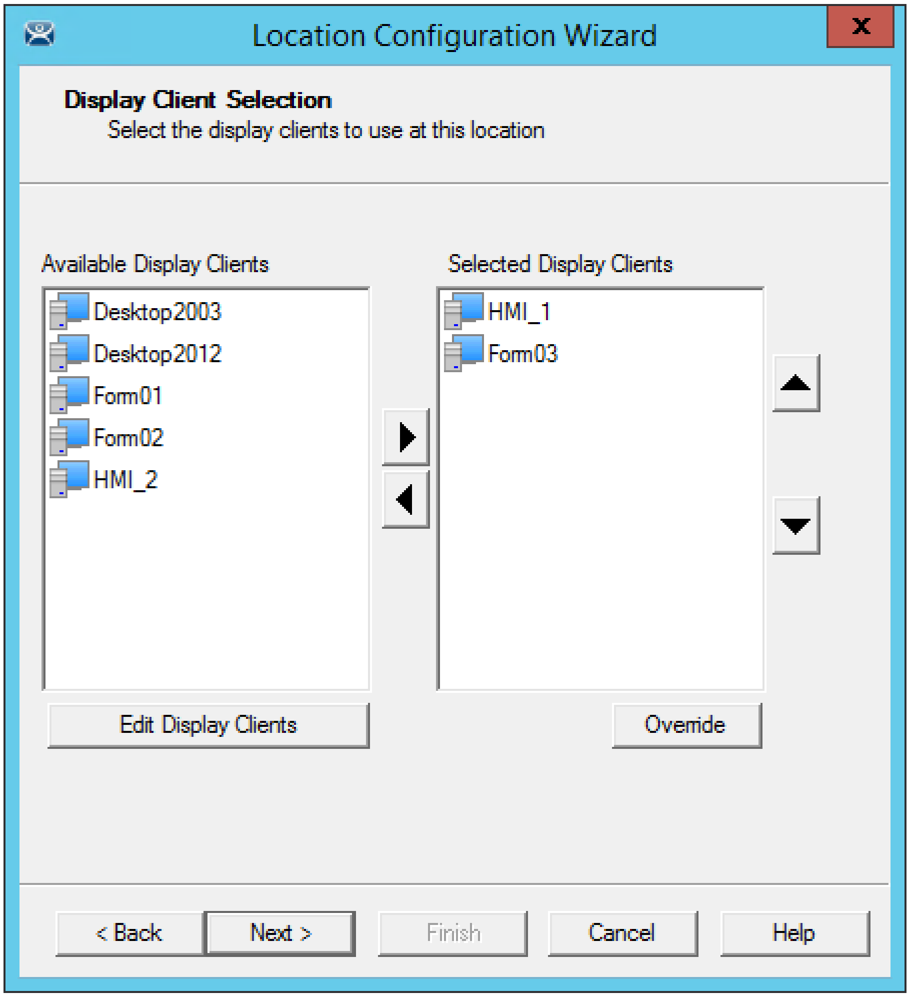
☑ Allow Shadowing
☑ Allow Cloning
☑ Allow Transfer

*Location Options Page*

***Allow Manually Selected Location Actions* –** These are the actions you can manually select. You can allow all, or none.

- ***Allow Shadowing*** – This allows a duplicate of the display to be shown on the mobile device.
- ***Allow Cloning*** – This allows the user to launch the same applications as the location but using their Windows account.
- ***Allow Transfer*** – This allows the display to be moved from the location to the mobile device.

The defaults are fine but you have the option to customize the settings as needed.



Location Configuration Wizard

**Display Client Selection**

Select the display clients to use at this location

Available Display Clients

- Desktop2003
- Desktop2012
- Form01
- Form02
- HMI_2

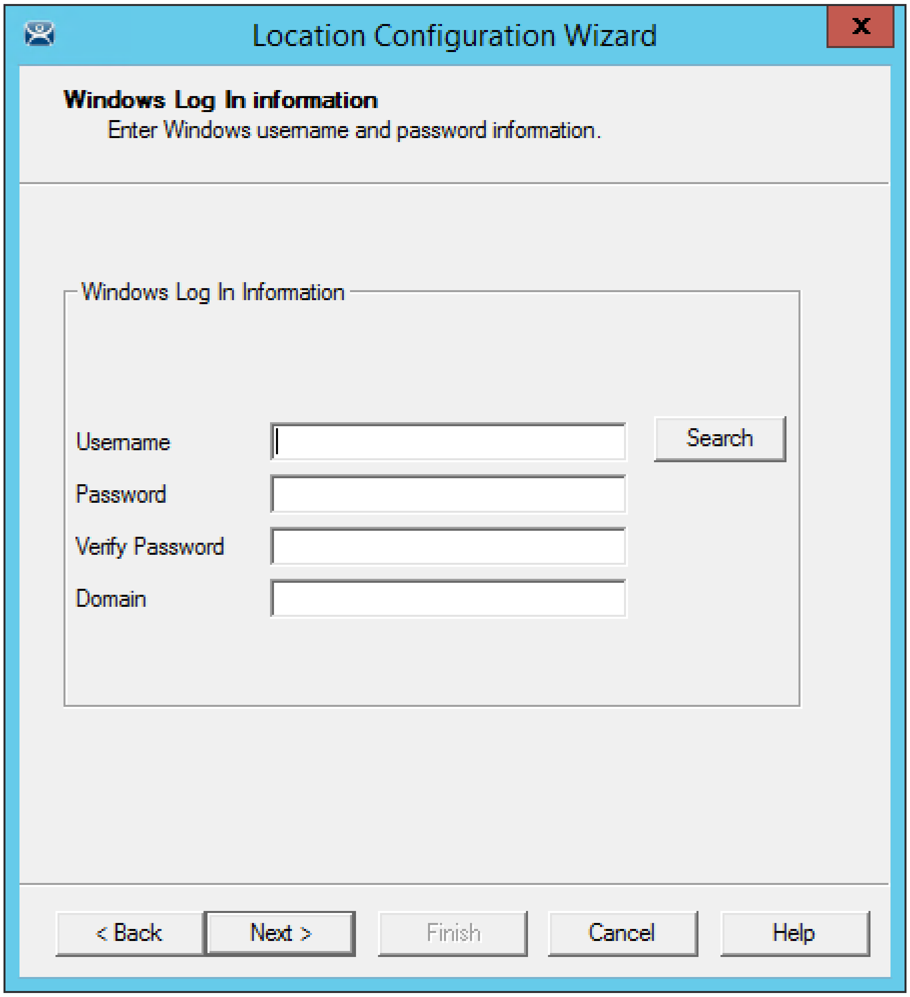
Selected Display Clients

- HMI_1
- Form03

*Terminal Server Selection*

This example will replace the display clients of the terminal with the same display clients on the location.

Apply the desired display clients to the location and select ***Next*** to continue.



Location Configuration Wizard

**Windows Log In information**

Enter Windows username and password information.

Windows Log In Information

Username

Password

Verify Password

Domain

*Window Log In Information Page*

A location with a display client will require a Windows username.

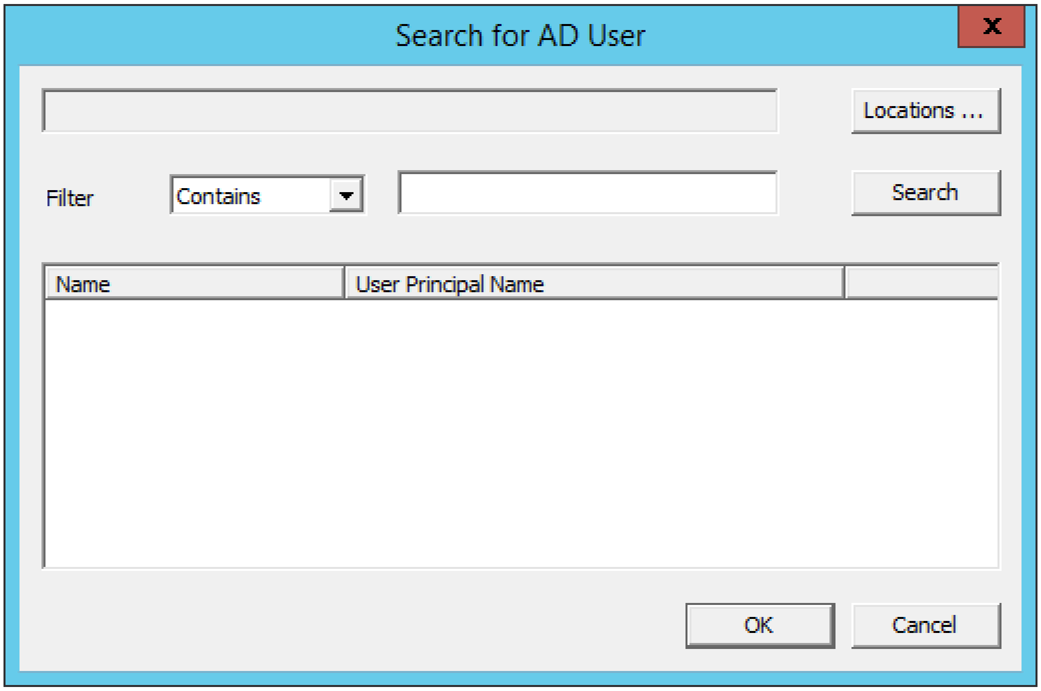
Enter a valid Windows username in the ***Username*** field.

Enter the password in the ***Password*** and ***Verify Password*** fields.

ThinManager 8 introduces Active Directory integration to ThinManager that is explained in detail in the ThinManager documentation.

The **Log In Information** page has ***Search***, ***Verify***, and ***Password Options*** buttons.

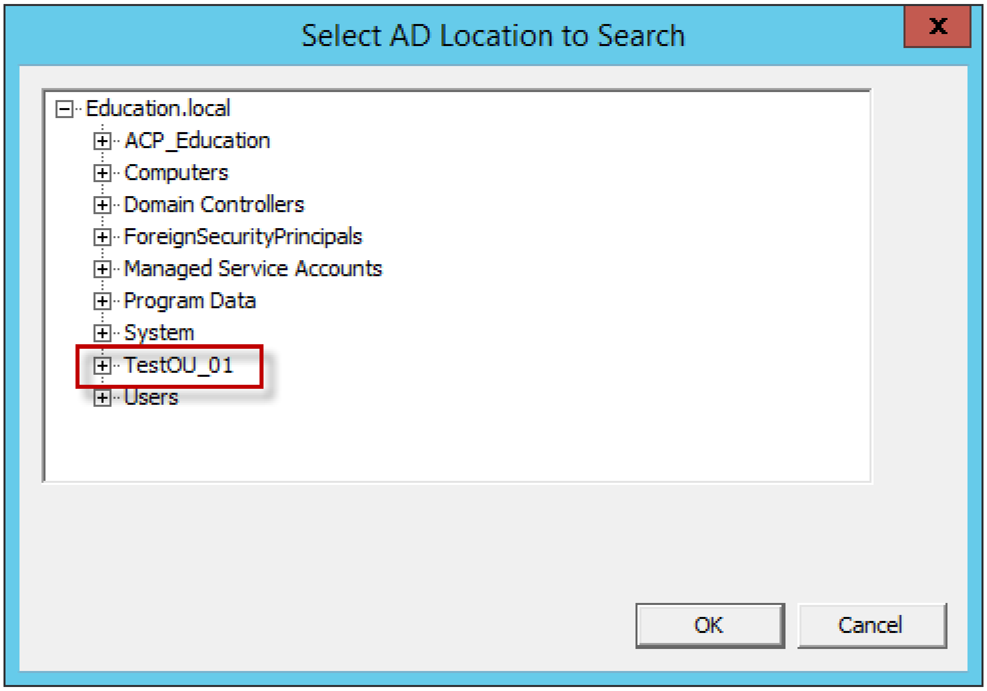
The ***Search*** button will open the **Search for AD User** window.



*Search for AD User*

The **Search for AD User** window allows you to reference users from the Active Directory.

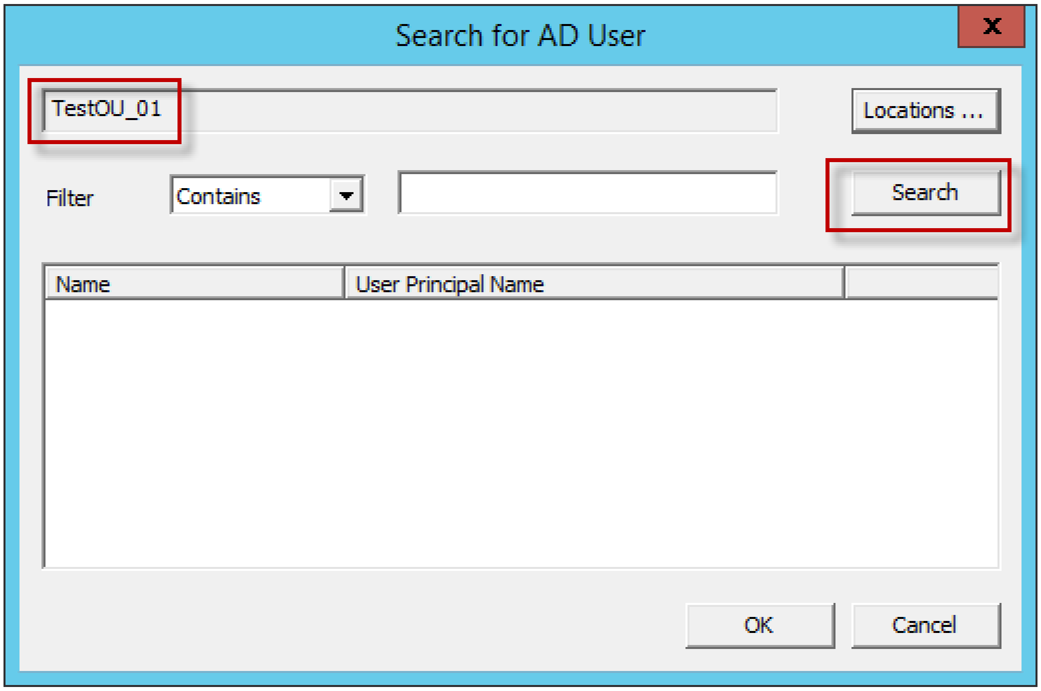
Click the ***Locations…*** button to choose where to select users.



*Select AD Location to Search*

Clicking the ***Locations…*** button will launch the **Select AD Location to Search** window.

Highlight the domain branch you want to use and select the ***OK*** button.



TestOU_01

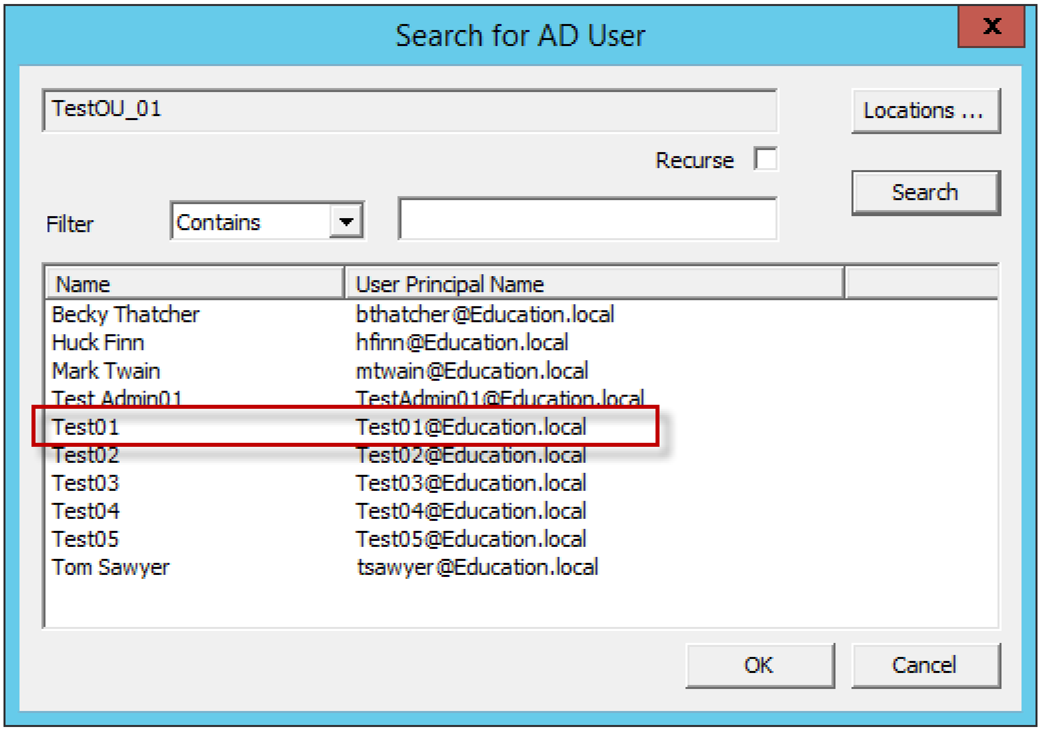
Filter: Contains

| Name | User Principal Name |
|---|---|

*Search for AD User Window*

Highlighting the domain branch you want to use and select the ***OK*** button will add the Location for the search.

Selecting the ***Search*** button will fetch the user accounts and populate the **Search for AD User** window.



TestOU_01

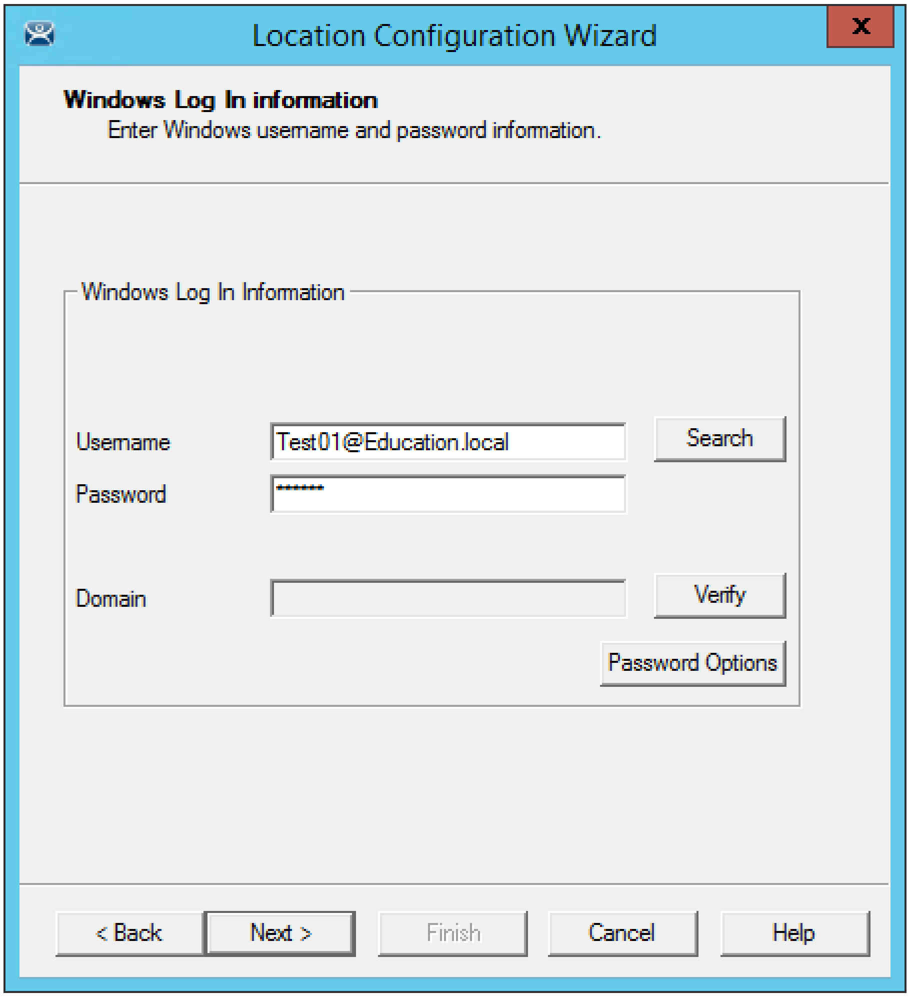
Recurse □

Filter: Contains

| Name | User Principal Name |
|---|---|
| Becky Thatcher | bthatcher@Education.local |
| Huck Finn | hfinn@Education.local |
| Mark Twain | mtwain@Education.local |
| Test Admin01 | TestAdmin01@Education.local |
| Test01 | Test01@Education.local |
| Test02 | Test02@Education.local |
| Test03 | Test03@Education.local |
| Test04 | Test04@Education.local |
| Test05 | Test05@Education.local |
| Tom Sawyer | tsawyer@Education.local |

*Populated Search for AD User Window*

Highlight the domain user you want and select the ***OK*** button. This will reference the user for the terminal log in account.



Location Configuration Wizard

**Windows Log In information**

Enter Windows username and password information.

Windows Log In Information

Username: Test01@Education.local

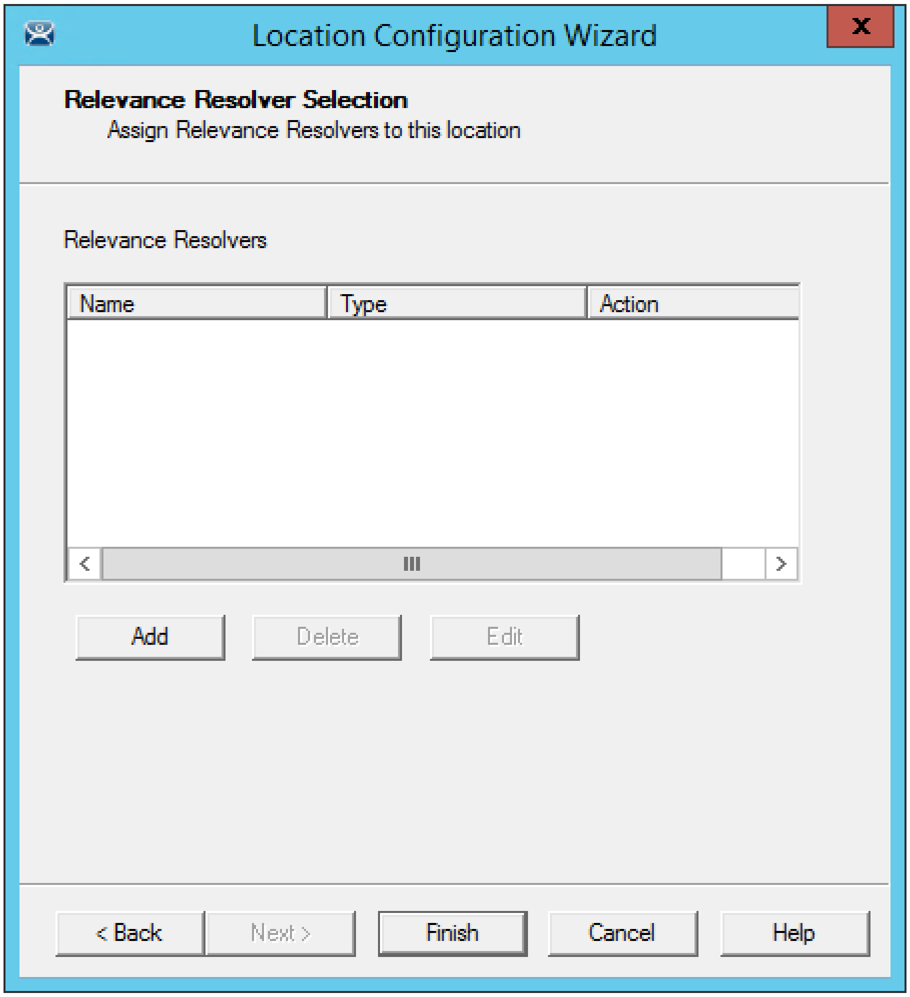
Password: ******

Domain:

*Window Log In Information Page*

The Location will now use a Active Directory user account.

Select ***Next*** to continue.



Location Configuration Wizard

**Relevance Resolver Selection**

Assign Relevance Resolvers to this location

Relevance Resolvers

| Name | Type | Action |
|---|---|---|

*Relevance Resolver Selection Page*

The **Relevance Resolver Selection** page allows the association of Resolvers to the location.

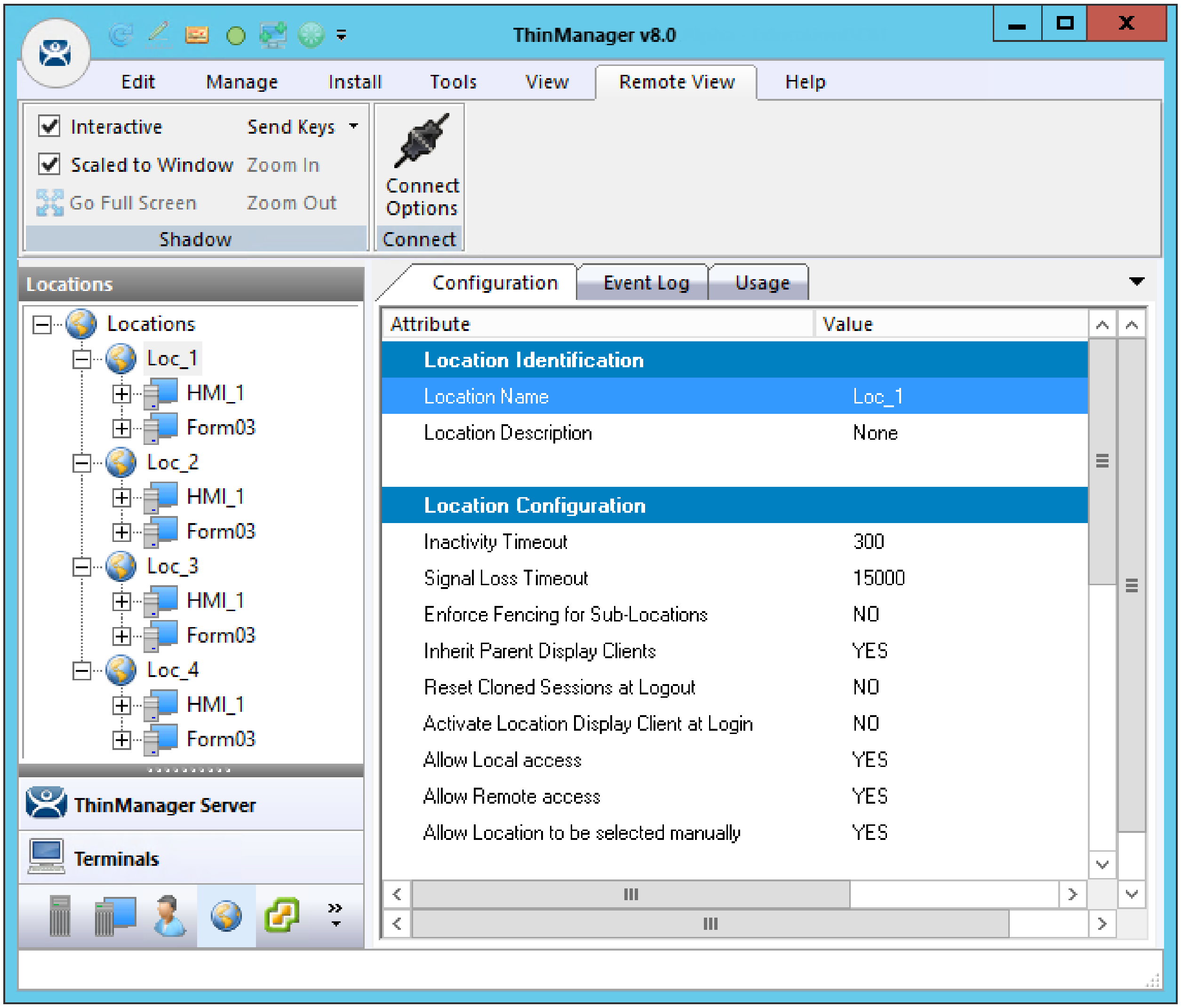
Resolvers include

- Bar Codes
- QR Codes
- Bluetooth Beacons
- Wi-Fi Access Points
- GPS

We will explain the configuration of Relevance Resolvers later.

See **Using the Mobile Device to Add Resolver Codes** at page 65.

Select the ***Finish*** button to create the **Location**.



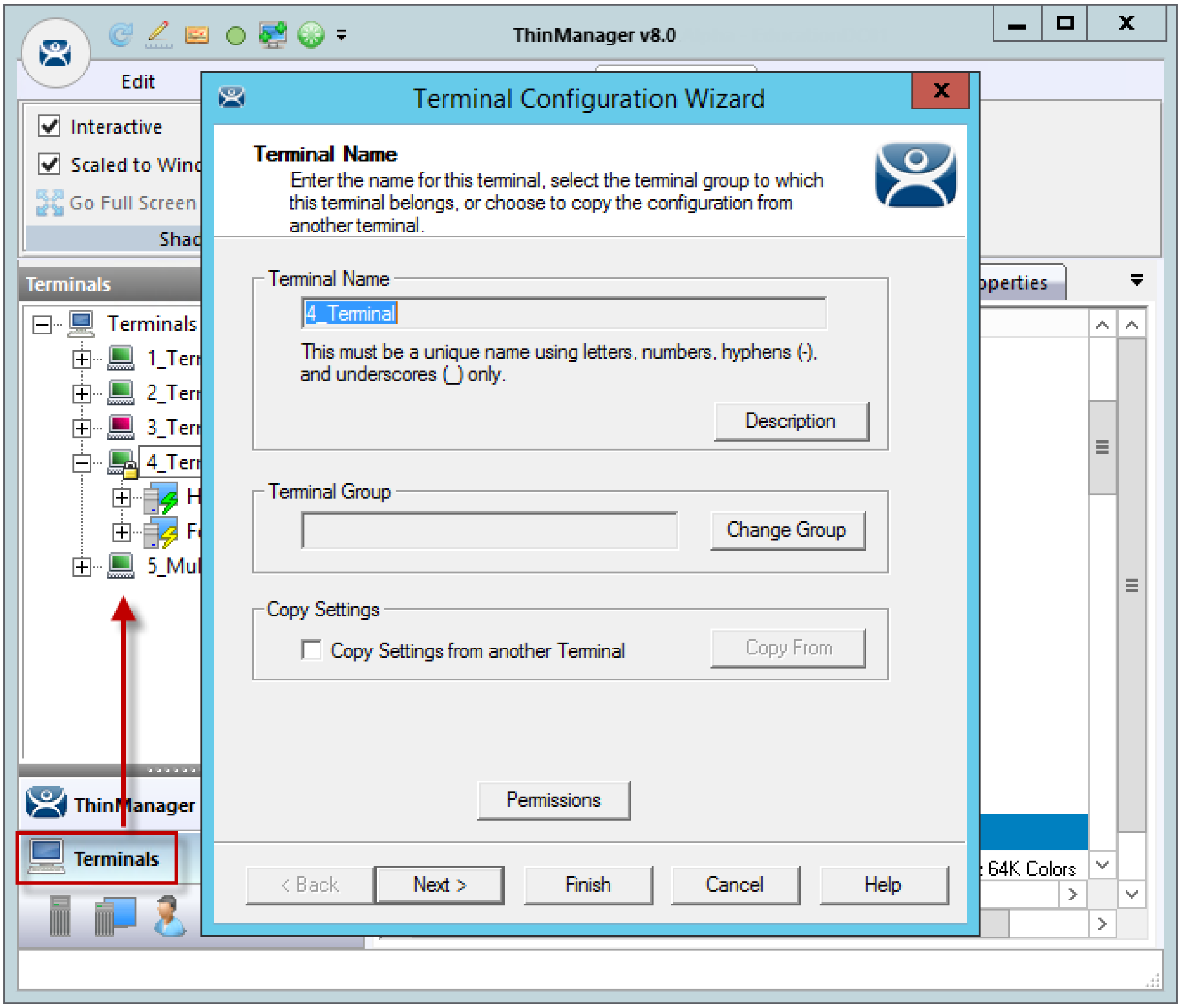
| Attribute | Value |
|---|---|
| **Location Identification** | |
| Location Name | Loc_1 |
| Location Description | None |
| **Location Configuration** | |
| Inactivity Timeout | 300 |
| Signal Loss Timeout | 15000 |
| Enforce Fencing for Sub-Locations | NO |
| Inherit Parent Display Clients | YES |
| Reset Cloned Sessions at Logout | NO |
| Activate Location Display Client at Login | NO |
| Allow Local access | YES |
| Allow Remote access | YES |
| Allow Location to be selected manually | YES |

*Location with Assigned Display Clients*

The **Location** tree will show the created Locations and the display clients assigned to it.

## 2.6. Adding a Location to a Terminal

Now the newly created location needs to be attached to a terminal.



Terminal Configuration Wizard

**Terminal Name**

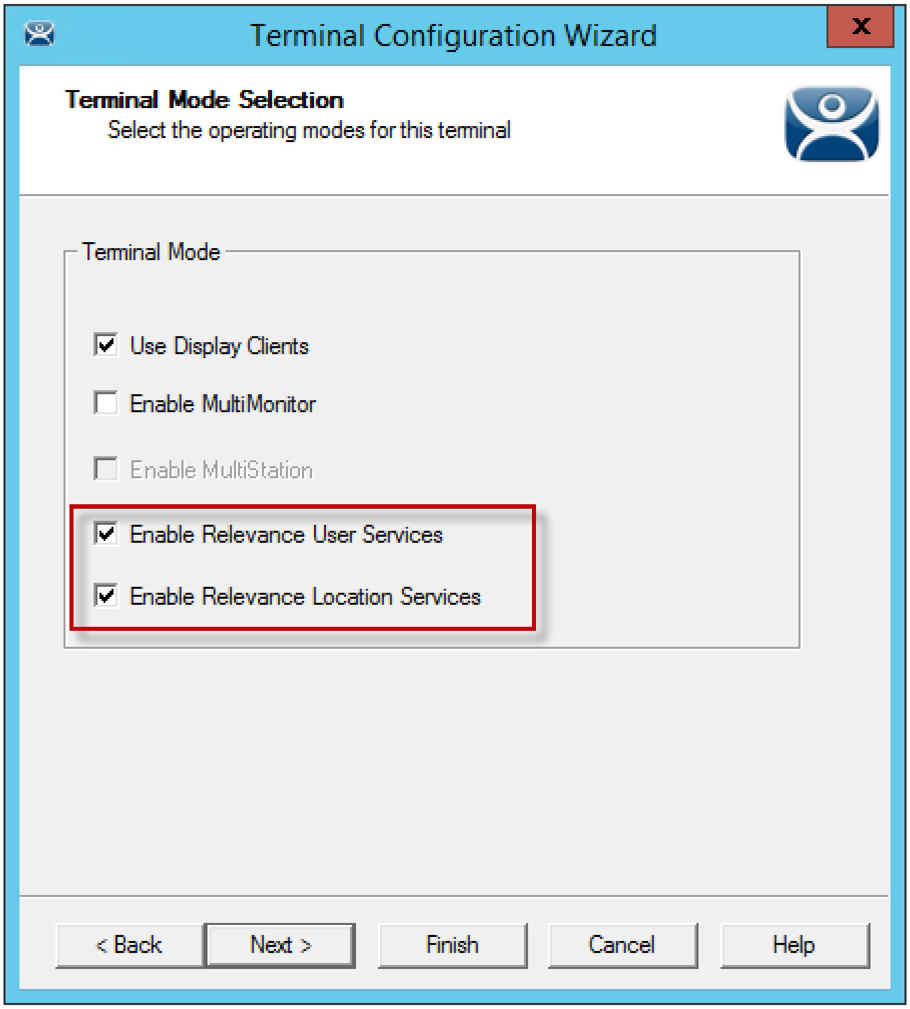
Enter the name for this terminal, select the terminal group to which this terminal belongs, or choose to copy the configuration from another terminal.

Terminal Name: 4_Terminal

This must be a unique name using letters, numbers, hyphens (-), and underscores (_) only.

*Terminal Configuration Wizard*

Select the **Terminal** icon on the Tree Selector at the bottom of the tree to open the Terminals branch. Highlight a terminal and double click or select ***Modify*** to open the **Terminal Configuration Wizard**.



**Terminal Mode Selection**

Select the operating modes for this terminal

Terminal Mode

☑ Use Display Clients

☐ Enable MultiMonitor

☐ Enable MultiStation

☑ Enable Relevance User Services

☑ Enable Relevance Location Services

*Terminal Mode Selection Page*

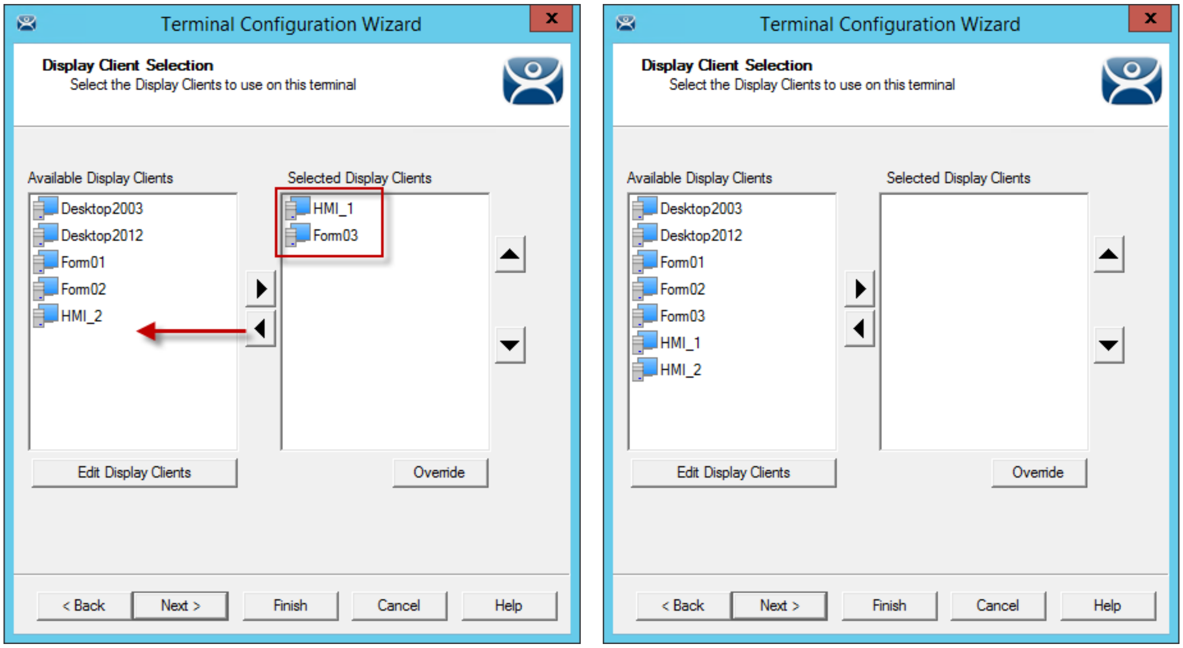
Navigate to the **Terminal Mode Selection** page. There are two Relevance checkboxes.

***Enable Relevance User Services* –** This uses the ThinManager TermSecure Access to control access to applications.

***Enable Relevance Location Services* –** This allows the terminal to use Locations in its configuration.

- ✓ **Check the *Enable Relevance Location Services* checkbox to use Locations.**

Select ***Next*** to navigate to the Display Client Selection page.



**Display Client Selection**
Select the Display Clients to use on this terminal

Available Display Clients: Desktop2003, Desktop2012, Form01, Form02, HMI_2
Selected Display Clients: HMI_1, Form03

**Display Client Selection**
Select the Display Clients to use on this terminal

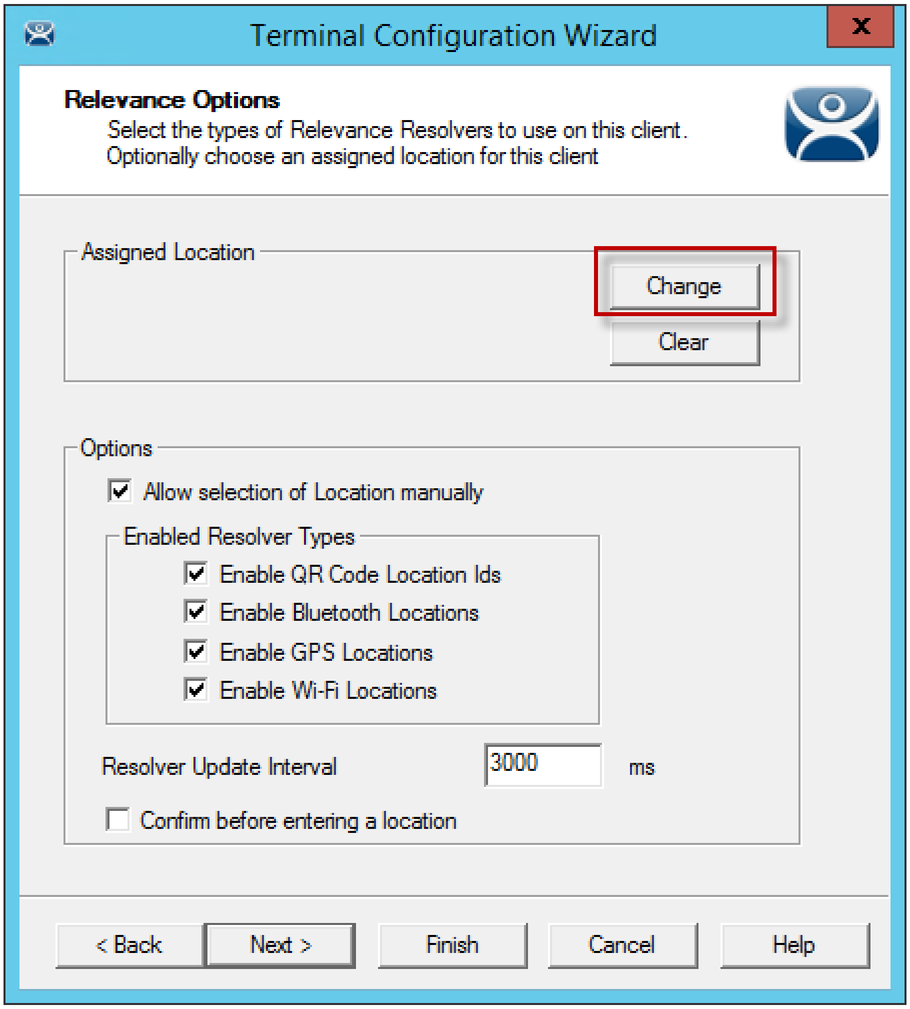
Available Display Clients: Desktop2003, Desktop2012, Form01, Form02, Form03, HMI_1, HMI_2
Selected Display Clients:

*Remove Display Clients on the Display Client Selection Page*

Remove the existing display clients from the terminal by highlighting them and selecting the left arrow button.

The user will access the display clients through the location, not the terminal.

Select ***Next*** and continue to the **Relevance Options** page.



**Relevance Options**

Select the types of Relevance Resolvers to use on this client.
Optionally choose an assigned location for this client

Assigned Location

Options

☑ Allow selection of Location manually

Enabled Resolver Types

☑ Enable QR Code Location Ids
☑ Enable Bluetooth Locations
☑ Enable GPS Locations
☑ Enable Wi-Fi Locations

Resolver Update Interval 3000 ms

☐ Confirm before entering a location

*Relevance Options Page*

Select the Options before choosing a location. Once the Location is assigned the Options are locked.

✓ **Select the Options before choosing a location. If you need to change an option you can clear the location with the Clear button, change the option, and then re-assign the Location.**

The Options include:

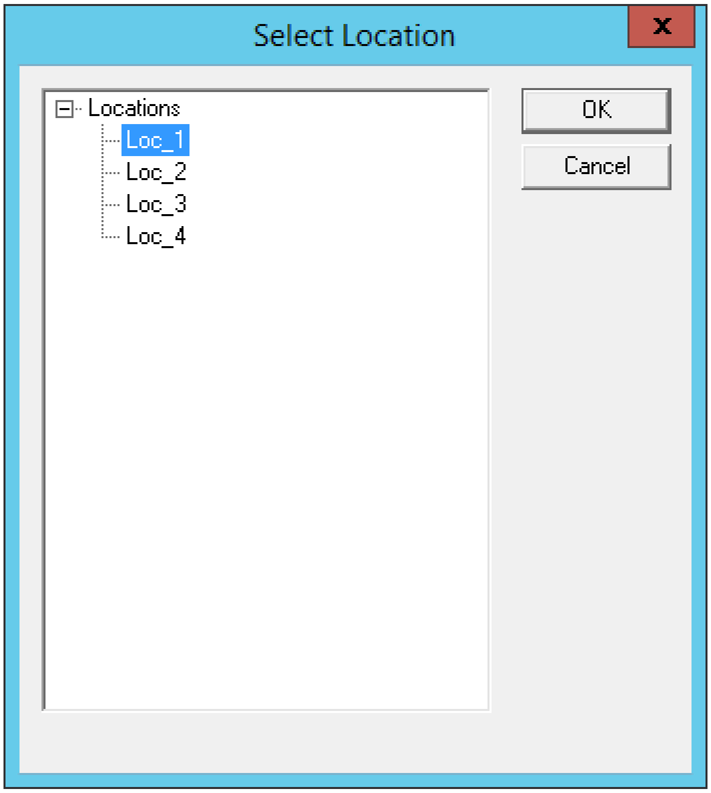
- ***Allow Selection of the Location manually*** – This will let the user select the location manually from a menu on the mobile device. If this is unselected then the user must use a Resolver.

***Enable Resolver Types*** – Relevance has several methods of resolving the location to allow specific applications to get sent to specific locations.

- ***Enable QR Code Location Ids*** – This allows the scanning of a QR code to determine the location.
- ***Enable Bluetooth Locations*** – This allows the use of Bluetooth beacons to determine the location.
- ***Enable GPS Locations***– This allows the Global Positioning System of the mobile device to determine the location.
- ***Enable Wi-Fi Locations*** – This allows the signal strength of Wi-Fi access points to determine the location.

Each method selected will require configuration to associate a location with the Resolver data.

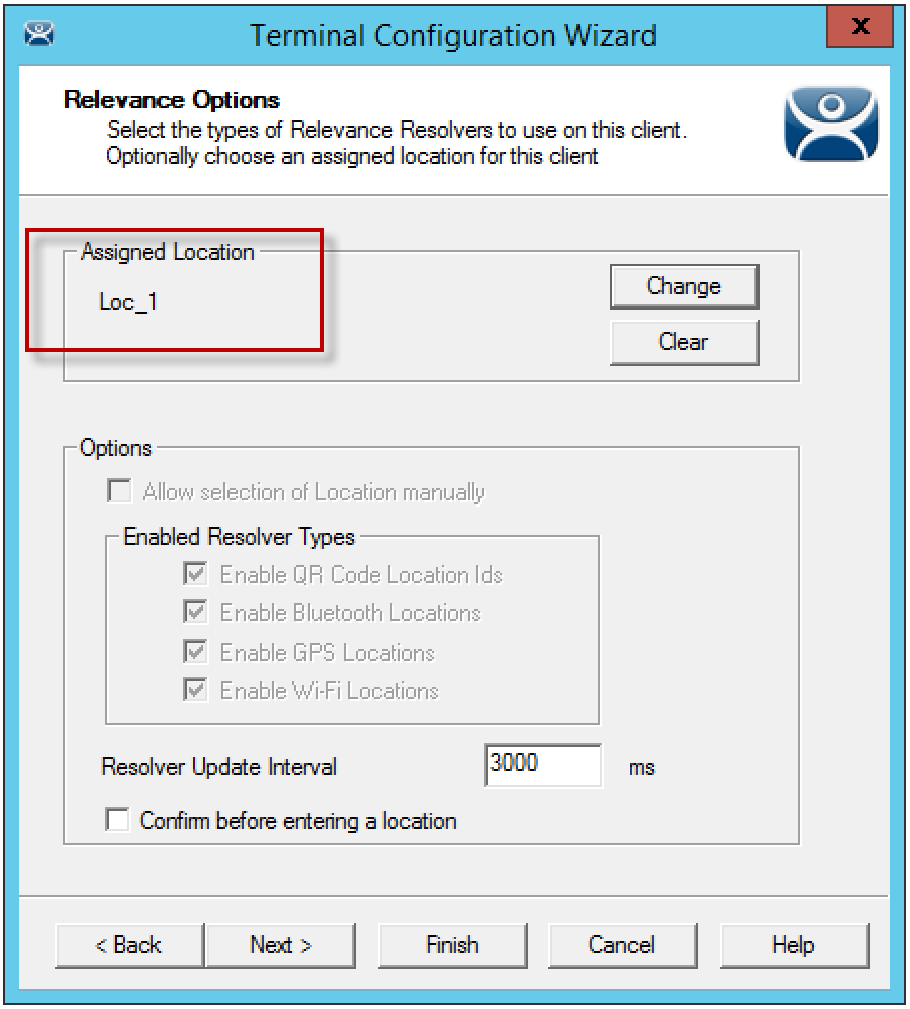
Select the ***Change*** button to open the **Select Location** window.



*Select Location Window*

The created **Locations** will be displayed in the **Select Location** tree.

Highlight the desired Location and select the ***OK*** button.



Terminal Configuration Wizard

**Relevance Options**

Select the types of Relevance Resolvers to use on this client.
Optionally choose an assigned location for this client

Assigned Location

Loc_1

Options

□ Allow selection of Location manually

Enabled Resolver Types

☑ Enable QR Code Location Ids
☑ Enable Bluetooth Locations
☑ Enable GPS Locations
☑ Enable Wi-Fi Locations

Resolver Update Interval 3000 ms

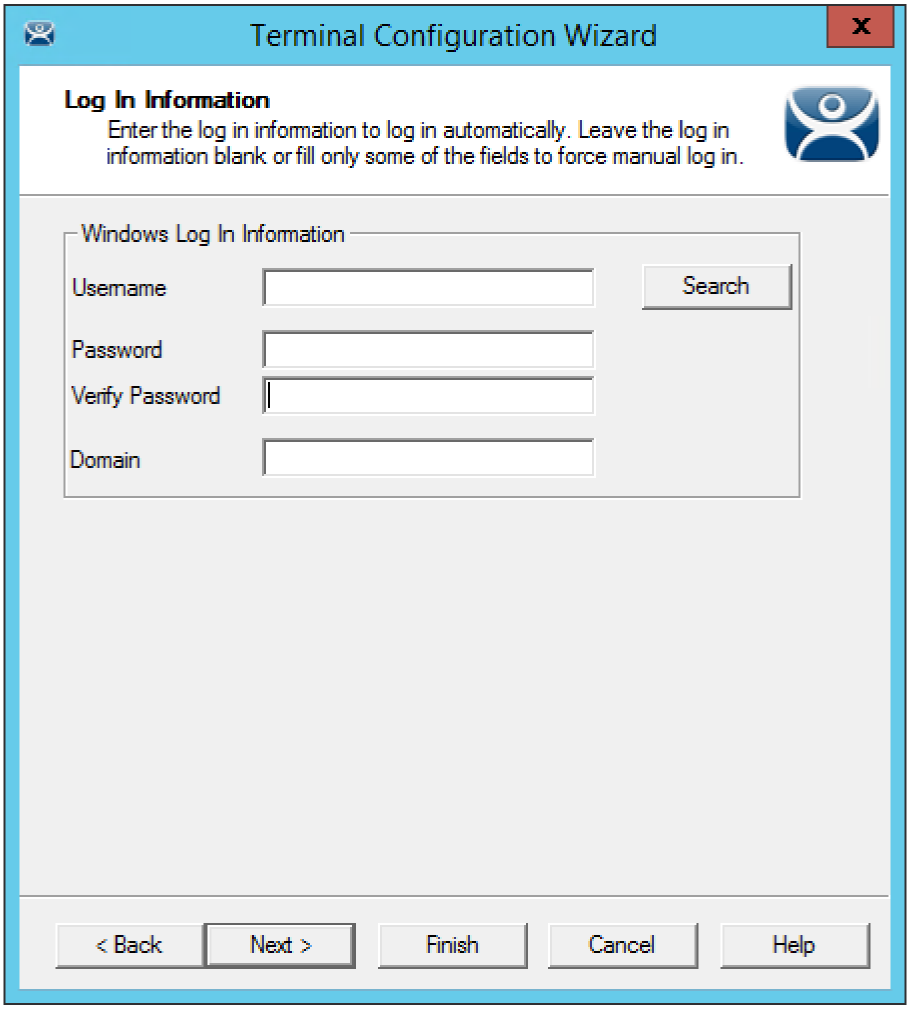
□ Confirm before entering a location

*Location Assigned*

. Once the Location is assigned the Options are locked.

✓ **If you need to change an option you can clear the location with the *Clear* button, change the option, and then re-assign the Location.**

Once the location is assigned select ***Next*** and navigate to the **Log In Information** page.



Terminal Configuration Wizard
Log In Information
Enter the log in information to log in automatically. Leave the log in information blank or fill only some of the fields to force manual log in.
Windows Log In Information
Username
Search
Password
Verify Password
Domain
< Back
Next >
Finish
Cancel
Help

*Log In Information Page*

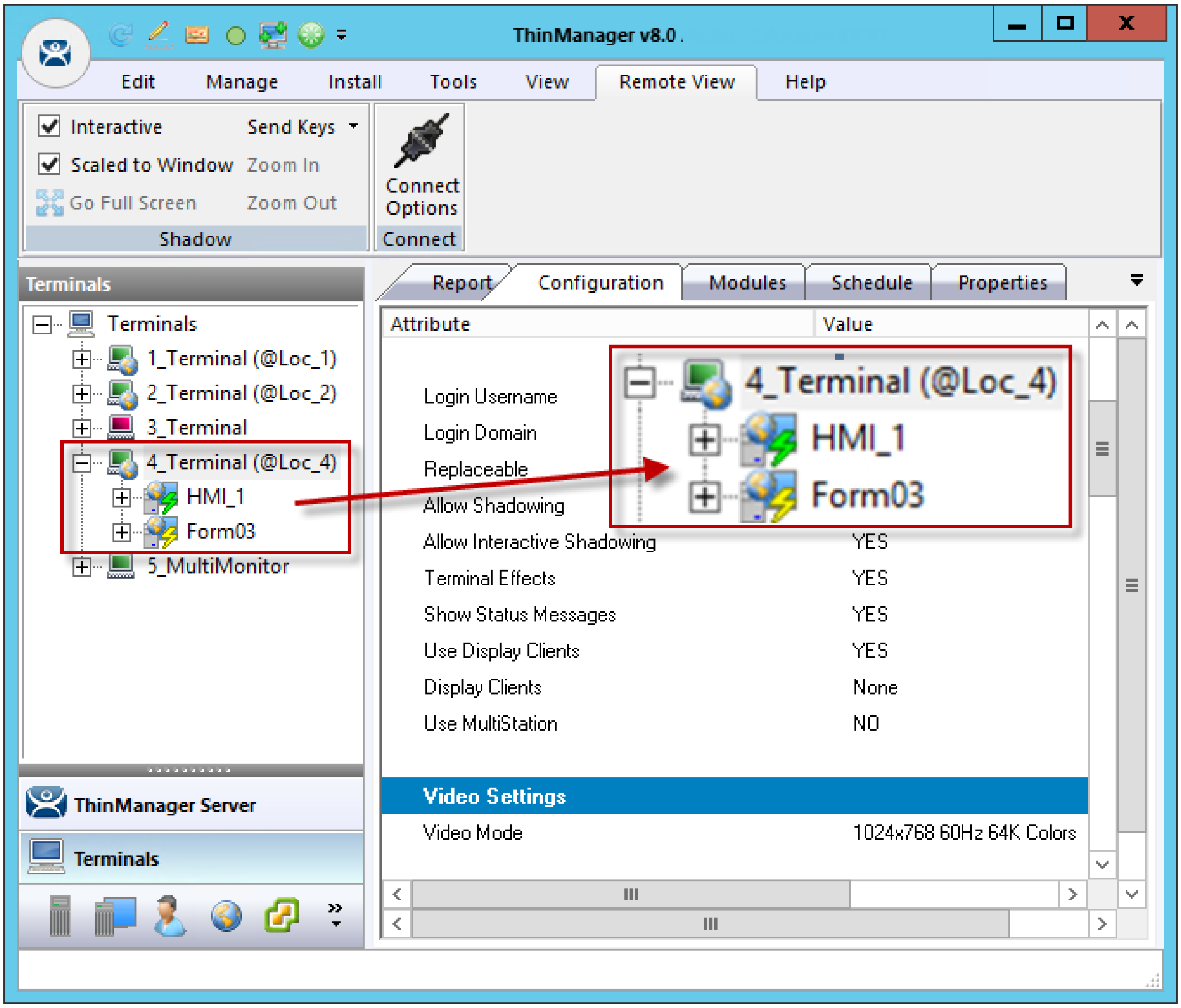
The terminal was assigned a user account to allow it to log in to the servers. This is not needed because the user account is assigned to the location.

Clear the ***Username*** and ***Password*** fields.

Once the ***Username*** is cleared select the ***Finish*** button to complete the wizard.

**Apply the changes.**

Right click on the terminal in the tree and select ***Restart Terminal*** to load the new configuration.



| Attribute | Value |
|---|---|
| Login Username | |
| Login Domain | |
| Replaceable | |
| Allow Shadowing | |
| Allow Interactive Shadowing | YES |
| Terminal Effects | YES |
| Show Status Messages | YES |
| Use Display Clients | YES |
| Display Clients | None |
| Use MultiStation | NO |
| **Video Settings** | |
| Video Mode | 1024x768 60Hz 64K Colors |

*Locations on Terminals in Terminal Tree*

The application is now running on the location which is assigned to the terminal.

The tree will show location icons to show what display clients are from the location.

In this example the terminals are using locations. The 3_Terminal doesn't show locations because it is an older Package 5 terminal and Relevance requires Package 6 or later.

- ✓ **The user should see no difference in the application deployment using Locations than when the application was assigned to the terminal.**

Relevance makes changes when a mobile device is added to the system.

# 3. Using Mobile Devices to Interact with Relevance

Adding a location to a terminal doesn't seem like it makes any difference. The application runs the same on the terminal versus a location on a terminal. The difference is the interaction a user can have with that location using a mobile device.

Relevance uses Resolvers to define the location.

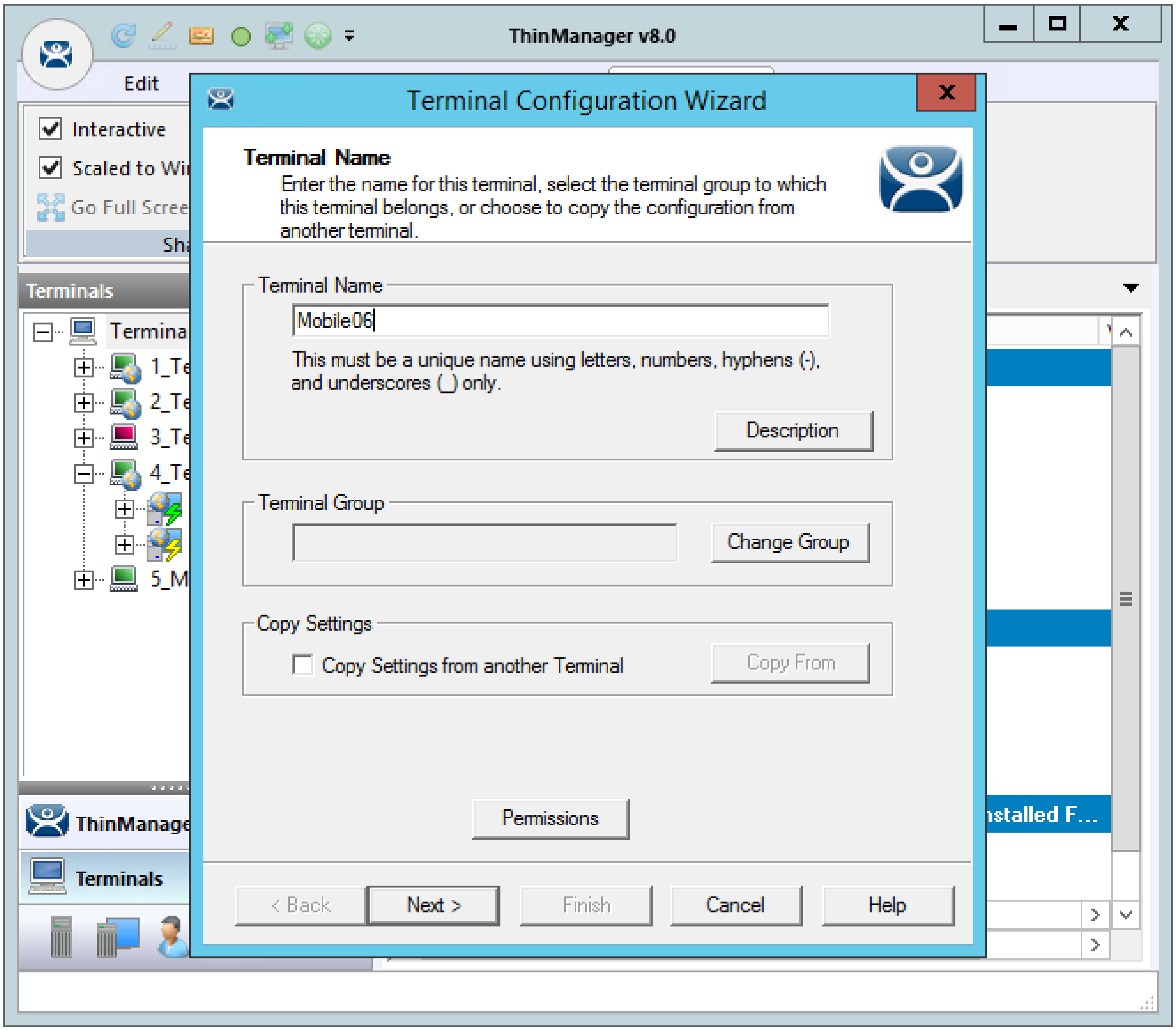
- ***Manual Selection*** – This allows user select the location manually from a menu on the mobile device.
- ***QR Code*** – QR codes can be created to define a location.
- ***Bluetooth*** – This allows the use of Bluetooth beacons to determine the location.
- ***GPS*** – This allows the Global Positioning System of the mobile device to determine the location.
- ***Wi-Fi*** – This allows the signal strength of Wi-Fi access points to determine the location.
- ***iBeacon*** – This is an Apple version of Bluetooth

Resolvers are identified and marked using the mobile device so it is important to configure a mobile device for identifying the resolvers in Relevance

**Note:** The iTMC application can be installed for free from the Apple App store.
The AndroidTMC application can be downloaded for free from the ThinManager web site at http://downloads.thinmanager.com/

## 3.1. Configuring Mobile Device in ThinManager

A configuration needs to be created in ThinManager so that the mobile device can join the system as a terminal.



**Terminal Name**

Enter the name for this terminal, select the terminal group to which this terminal belongs, or choose to copy the configuration from another terminal.

Terminal Name: Mobile06

This must be a unique name using letters, numbers, hyphens (-), and underscores (_) only.

Terminal Group:

Copy Settings: ☐ Copy Settings from another Terminal

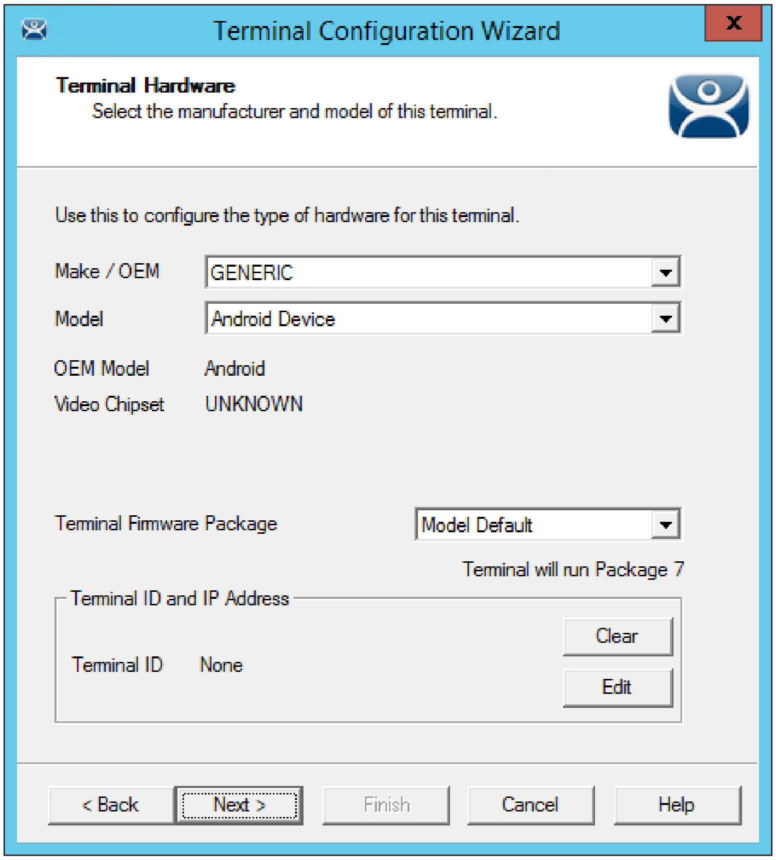
*ThinManager Terminal Configuration Wizard*

Open **ThinManager**.

Select the **Terminal** icon to show the **Terminal** branch of the tree.

Right click on the Terminals branch and select ***Add Terminal*** to launch the **Terminal Configuration wizard**.

Enter a name for your mobile device and select ***Next***.



**Terminal Hardware**
Select the manufacturer and model of this terminal.

Use this to configure the type of hardware for this terminal.

Make / OEM: GENERIC

Model: Android Device

OEM Model: Android

Video Chipset: UNKNOWN

Terminal Firmware Package: Model Default

Terminal will run Package 7

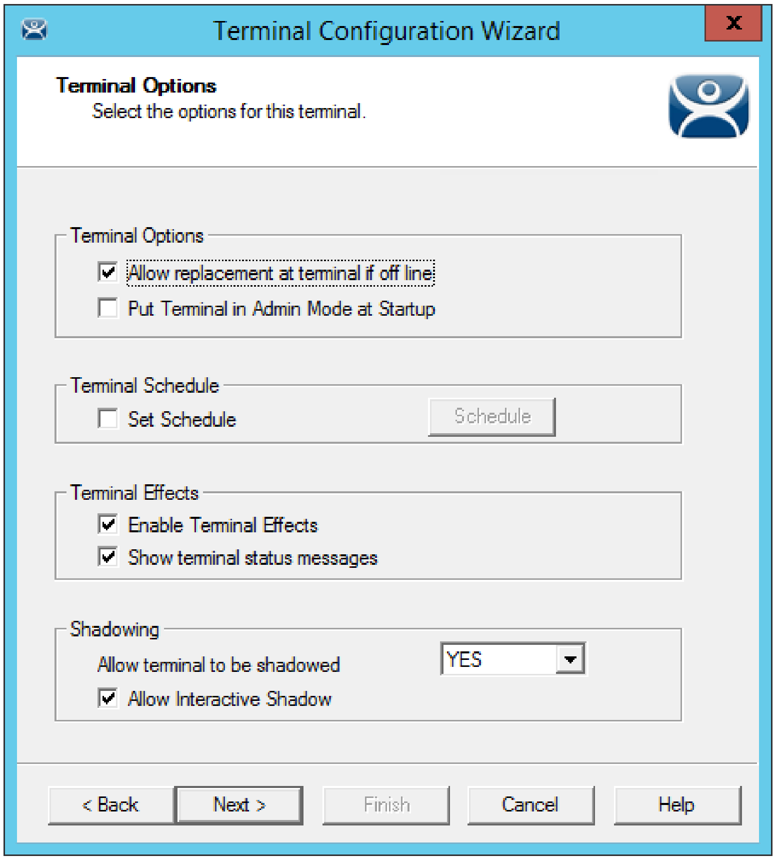
Terminal ID and IP Address

Terminal ID: None

*Terminal Hardware Page*

Select your make and model of hardware. An iPad is ***Apple / iOS.*** An Android Device is ***GENERIC / Android Device.***

Navigate to the **Terminal Mode Selection** page by clicking ***Next***.


Terminal Configuration Wizard
Terminal Options
Select the options for this terminal.
Terminal Options
☑ Allow replacement at terminal if off line
□ Put Terminal in Admin Mode at Startup
Terminal Schedule
□ Set Schedule
Schedule
Terminal Effects
☑ Enable Terminal Effects
☑ Show terminal status messages
Shadowing
Allow terminal to be shadowed
YES
☑ Allow Interactive Shadow
< Back
Next >
Finish
Cancel
Help

*Terminal Options Page*

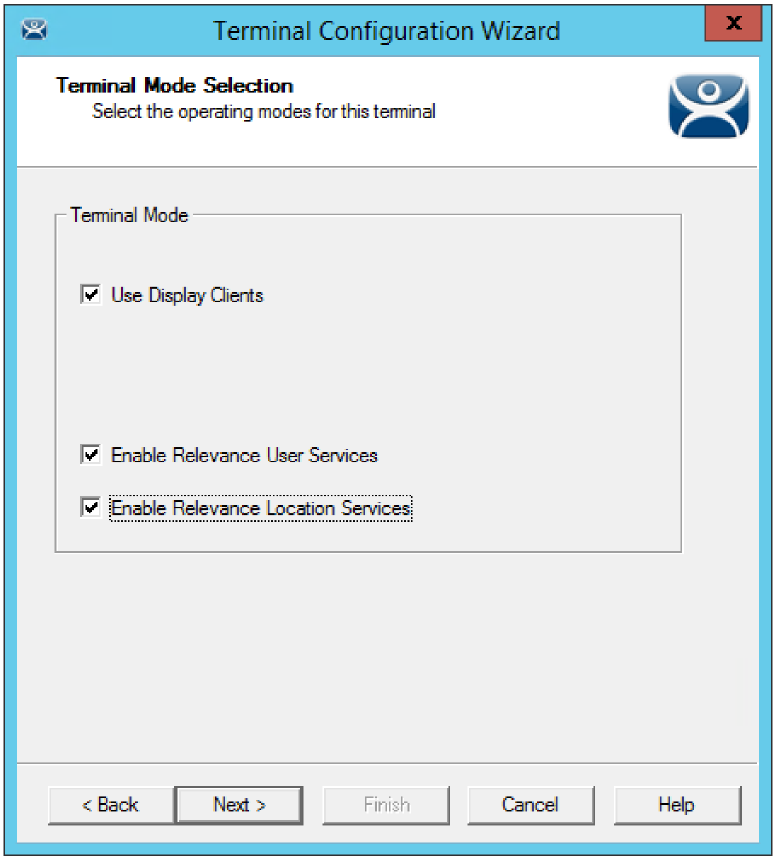
*Terminal Options Page of the Terminal Configuration Wizard*

The **Terminal Options** page has a few settings of interest.

- ***Allow replacement at terminal if offline –*** This allows the terminal to show up in the replacement list during a new terminal connection
- ***Put Terminal in Admin Mode at Startup –*** This turns the terminal on without showing the display clients. This is useful to use as the terminal to register HID cards or registering fingerprint scans.
- ***Set Schedule –*** This will allow the Schedule button to become active.
- ***Enable Terminal Effects -*** This allows the desktops in MultiSession to slide smoothly into the desktop instead of appearing instantaneously.
- ***Show terminal status messages*** - This allows the terminal to display status messages in the upper left corner of the screen.
- ***Allow terminal to be shadowed*** – This dropdown sets the Shadowing setting allowing the configuration of Shadowing Options.
  - ***No*** – This will prevent the terminal from being shadowed by anyone.
  - ***Ask*** – This will ask the user to allow shadowing. The user will need to say ***Yes*** on a message window before the shadowing is allowed.
  - ***Warn*** - Will display a message window alerting the terminal that it is to be shadowed, but doesn't require user input before the shadowing is allowed.
  - ***Yes*** – Will allow shadowing to occur without warning or user input.

- ***Allow Interactive Shadow*** – This allows users with Shadowing permission to interactively shadow the terminal.

Select the ***Next*** button to configure the configuration.



Terminal Configuration Wizard

**Terminal Mode Selection**

Select the operating modes for this terminal

Terminal Mode

☑ Use Display Clients

☑ Enable Relevance User Services

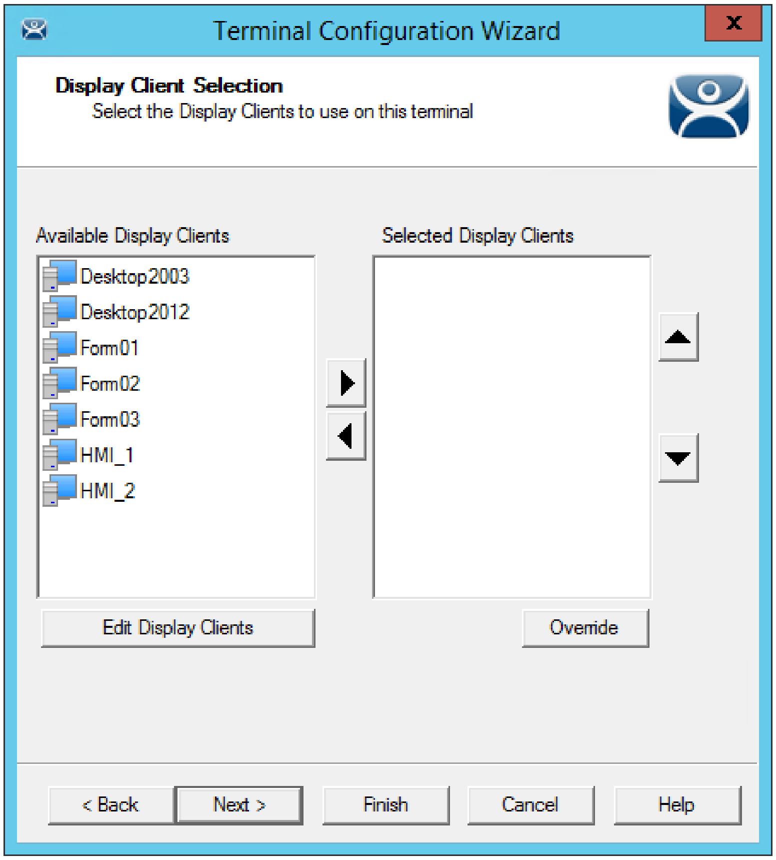
☑ Enable Relevance Location Services

*Terminal Mode Selection*

Check ***Enable Relevance User Services*** to use Relevance Access to control access to applications.

Check ***Enable Relevance Location Services*** to allow the device to use Locations.

Select ***Next***.



Select the Display Clients to use on this terminal

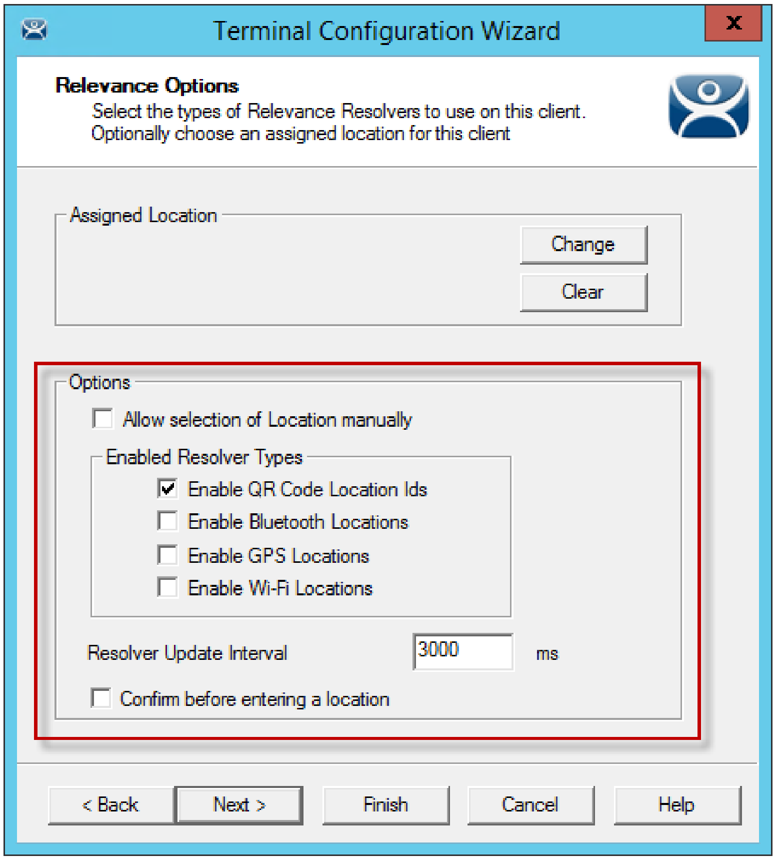
Desktop2003
Desktop2012
Form01
Form02
Form03
HMI_1
HMI_2

*Display Client Selection Page*

The mobile device can have display clients assigned to it permanently, and then access others with Relevance. This example will leave the display clients off of the mobile device to show the effect of Relevance more clearly.

Leave the ***Selected Display Clients*** list empty on the Display Client Selection page.

Select ***Next*** to navigate to the Relevance Options page.



**Relevance Options**

Select the types of Relevance Resolvers to use on this client.
Optionally choose an assigned location for this client

Assigned Location

Options

☐ Allow selection of Location manually

Enabled Resolver Types

☑ Enable QR Code Location Ids
☐ Enable Bluetooth Locations
☐ Enable GPS Locations
☐ Enable Wi-Fi Locations

Resolver Update Interval 3000 ms

☐ Confirm before entering a location

*Relevance Options*

Select the Resolvers you want to use, including the ***Allow selection of Location manually*** checkbox.

✓ You can start with one resolver and add the others as you deploy them, or start with all the resolvers selected and remove the ones you chose not to use. The central management of ThinManager and Relevance make changes to configuration easy.

**Options**

- ***Allow Selection of Location manually*** – This checkbox lets a location be selected manually from the mobile device menu. If unselected you must use a resolver to select the location.

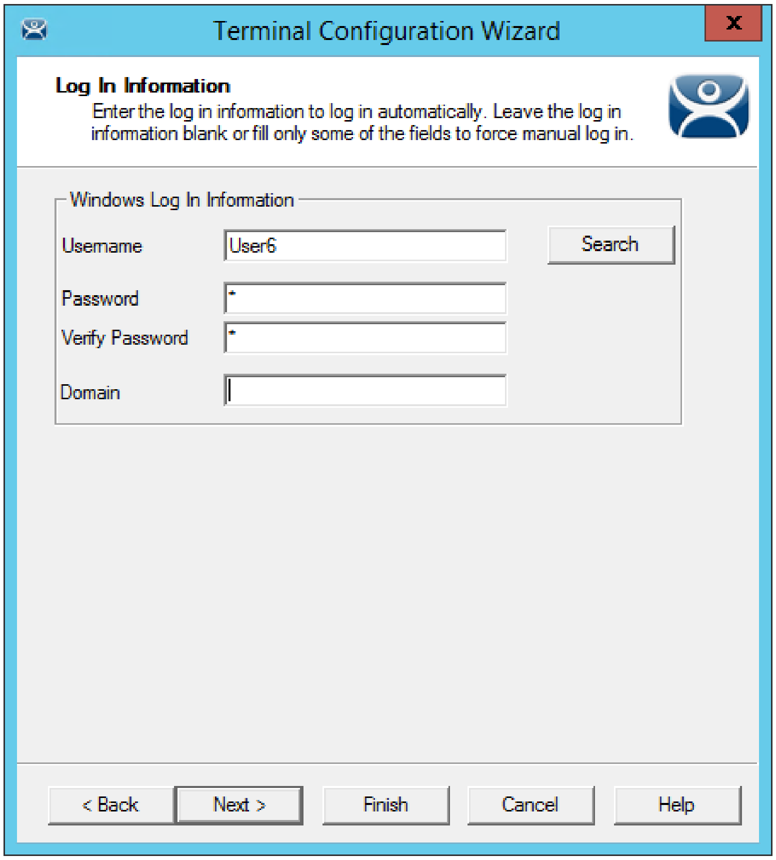
**Enable Resolver Types**

- ***Enable QR Code Location IDs***– This checkbox allows the mobile device to scan QR codes as resolvers.
- ***Enable Bluetooth Locations***– This checkbox allows the mobile device to use Bluetooth beacons as resolvers.
- ***Enable GPS Locations***– This checkbox allows the mobile device to use GPS settings as resolvers.
- ***Enable Wi-Fi Locations***– This checkbox allows Wi-Fi connection to be used as a resolver.

**Resolver Update interval –** This is the frequency that the resolver updates.

- ***Confirm before entering a location*** – This checkbox enables a dialog box that will be shown each time a user enters an area..

Select ***Next*** to navigate to the **Log In Information** page.



Terminal Configuration Wizard

**Log In Information**

Enter the log in information to log in automatically. Leave the log in information blank or fill only some of the fields to force manual log in.

Windows Log In Information

Username: User6

Password: *

Verify Password: *

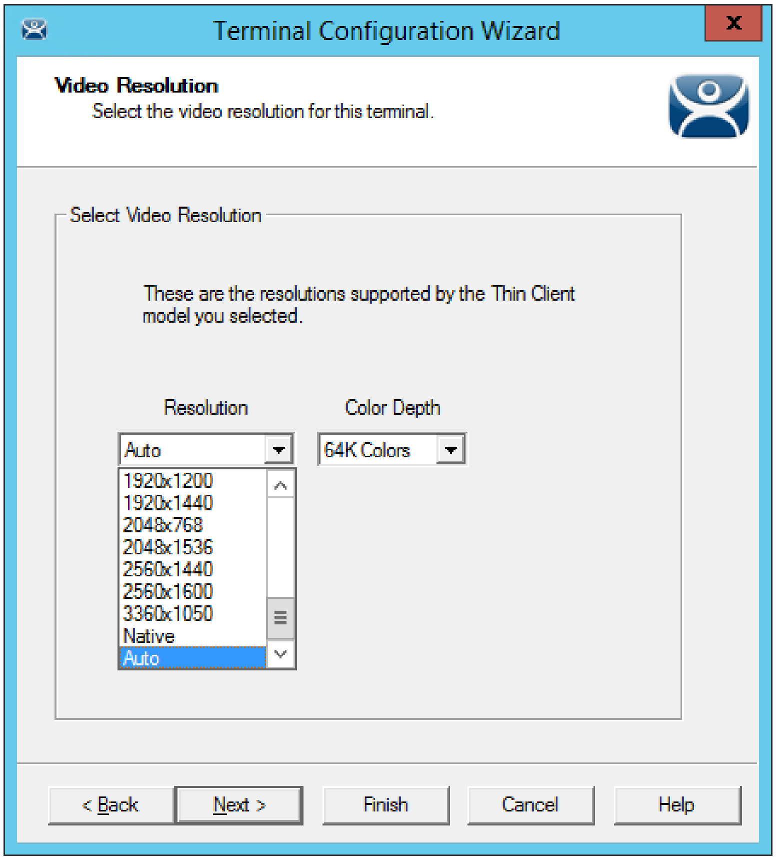
Domain:

*Log In Information Page*

Enter a user name in the ***Username*** field.

Enter the password in the ***Password*** and ***Verify Password*** fields.

You may use the Search button to reference an Active Directory account as shown in Location Configuration Wizard on page 11.



Terminal Configuration Wizard

**Video Resolution**

Select the video resolution for this terminal.

Select Video Resolution

These are the resolutions supported by the Thin Client model you selected.

Resolution: Auto

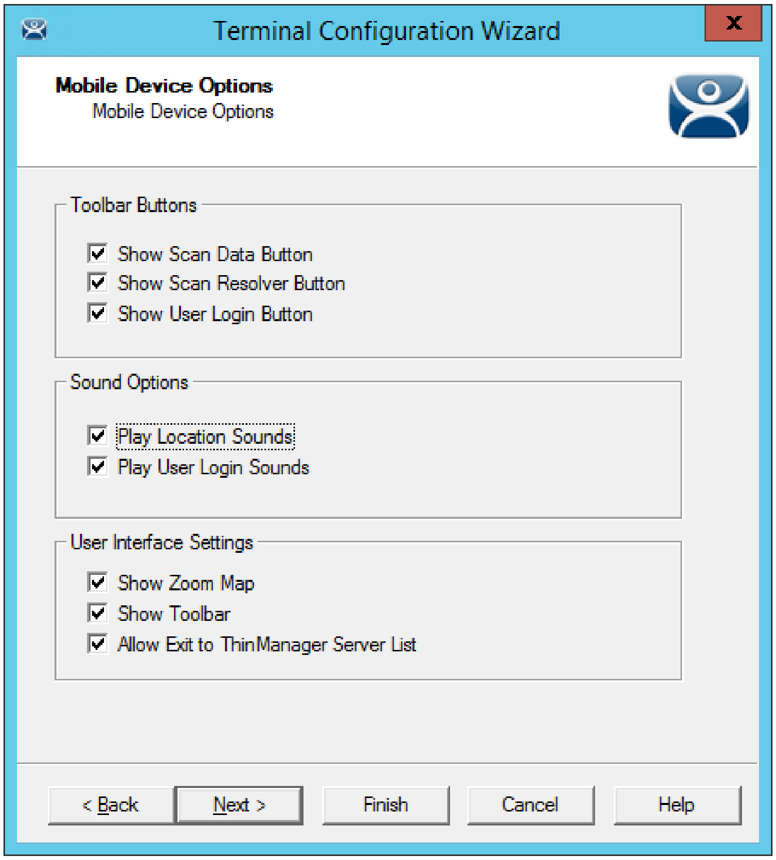
Color Depth: 64K Colors

*Video Resolution of the Terminal Configuration Wizard*

The **Video Resolution** page of the Terminal Configuration Wizard lets you chose the ***Resolution***, and ***Color Depth.*** There is no refresh rate for mobile devices.

The resolutions in the dropdown are dependent on the make and model of hardware used.

Select the ***Next*** button to configure the configuration.



*Mobile Device Options*

The **Mobile Device Options** window has several settings that control the user experience on mobile devices. This page allows you to disable features normally displayed in the mobile apps.

**Toolbar Buttons**

- ***Show Scan Data Button*** – This checkbox, when unselected, will hide the Scan Data button.
- ***Show Scan Resolver Button***– This checkbox, when unselected, will hide the Scan Resolver button.
- ***Show User Login Button***– This checkbox, when unselected, will hide the User Login button.

**Sound Options**

- ***Play Location Sounds*** – This checkbox, when selected, will play a sound when a location is entered..
- ***Play User Login Sounds*** – This checkbox, when selected, will play a sound when the user logs in as a TermSecure or Relevance user.

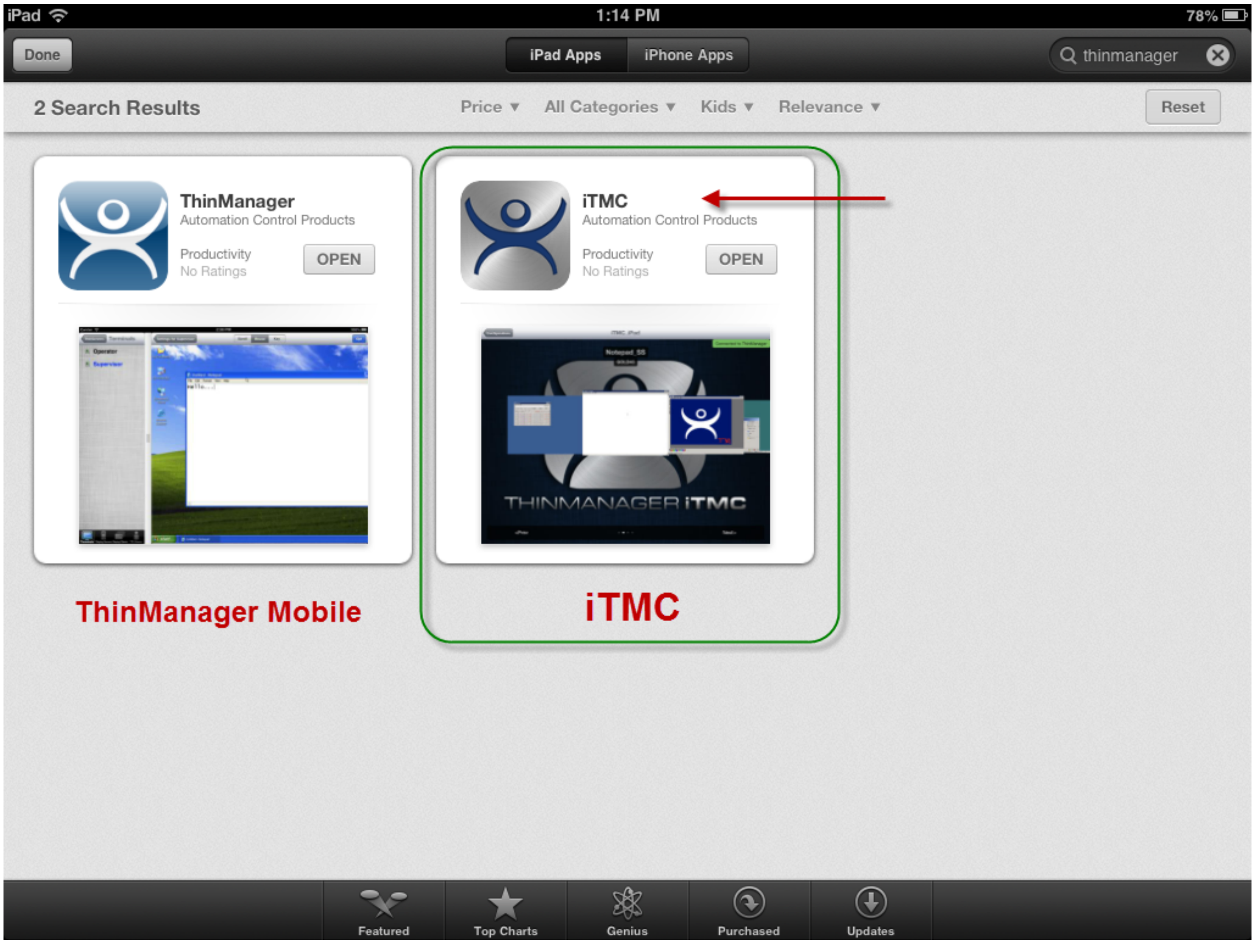
**User Interface Settings**

- ***Show Zoom Map*** – This checkbox, when unselected, will hide the screen map while zooming.
- ***Show Toolbar*** – This checkbox, when unselected, will hide the app toolbar.
- ***Allow Exit to ThinManager Server List*** – This checkbox, when unselected, will prevent the user from leaving the app to switch ThinManager Servers.

Select ***Finish*** to complete the configuration of the mobile terminal.

## 3.2. Configuring an iPad for Relevance

The iPad needs to have the iTMC client installed. The iTMC application can be downloaded from the Apple App Store for free.



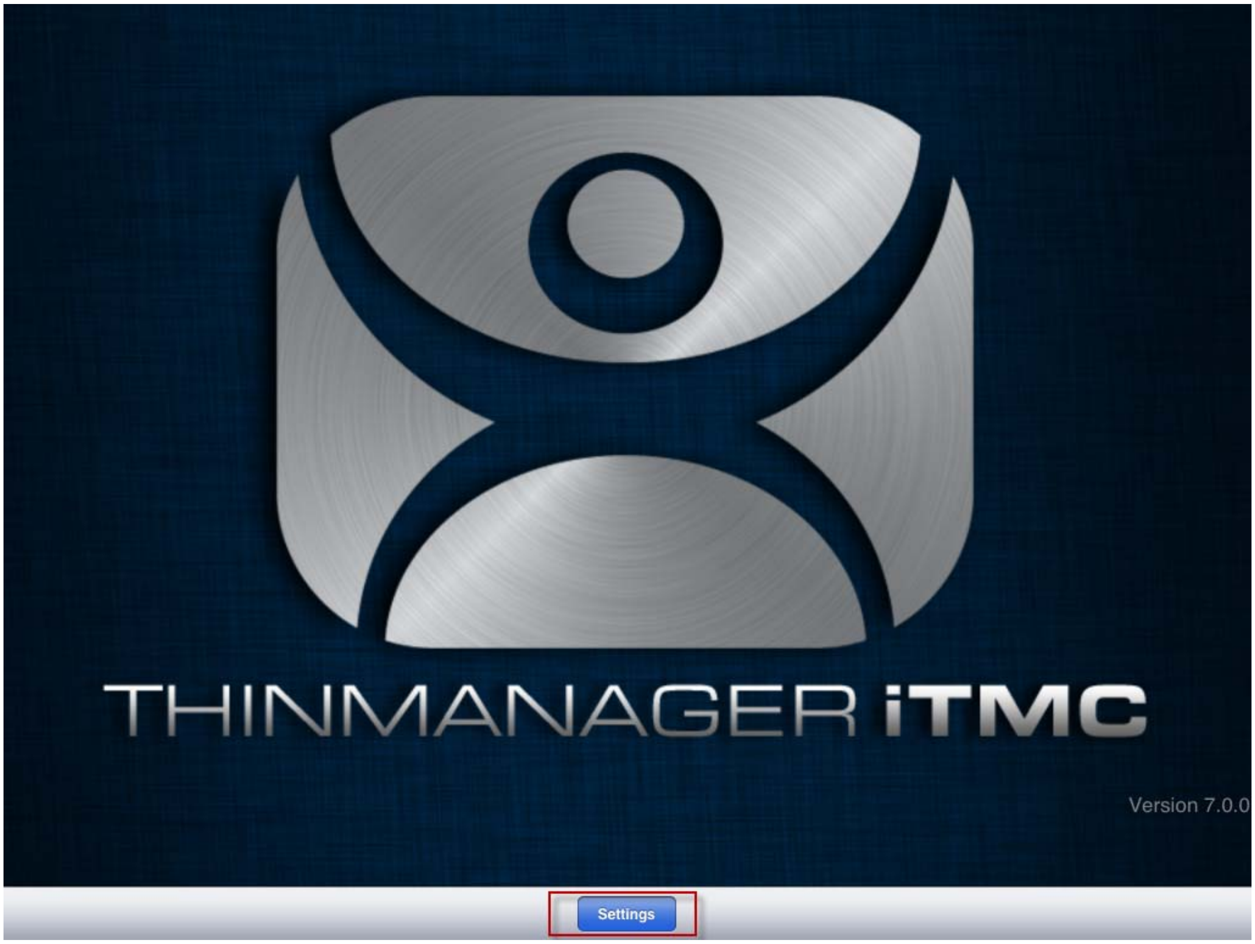
*ThinManager in the Apple App Store*

Go to the Apple App Store.

Enter **ThinManager** in the search field.

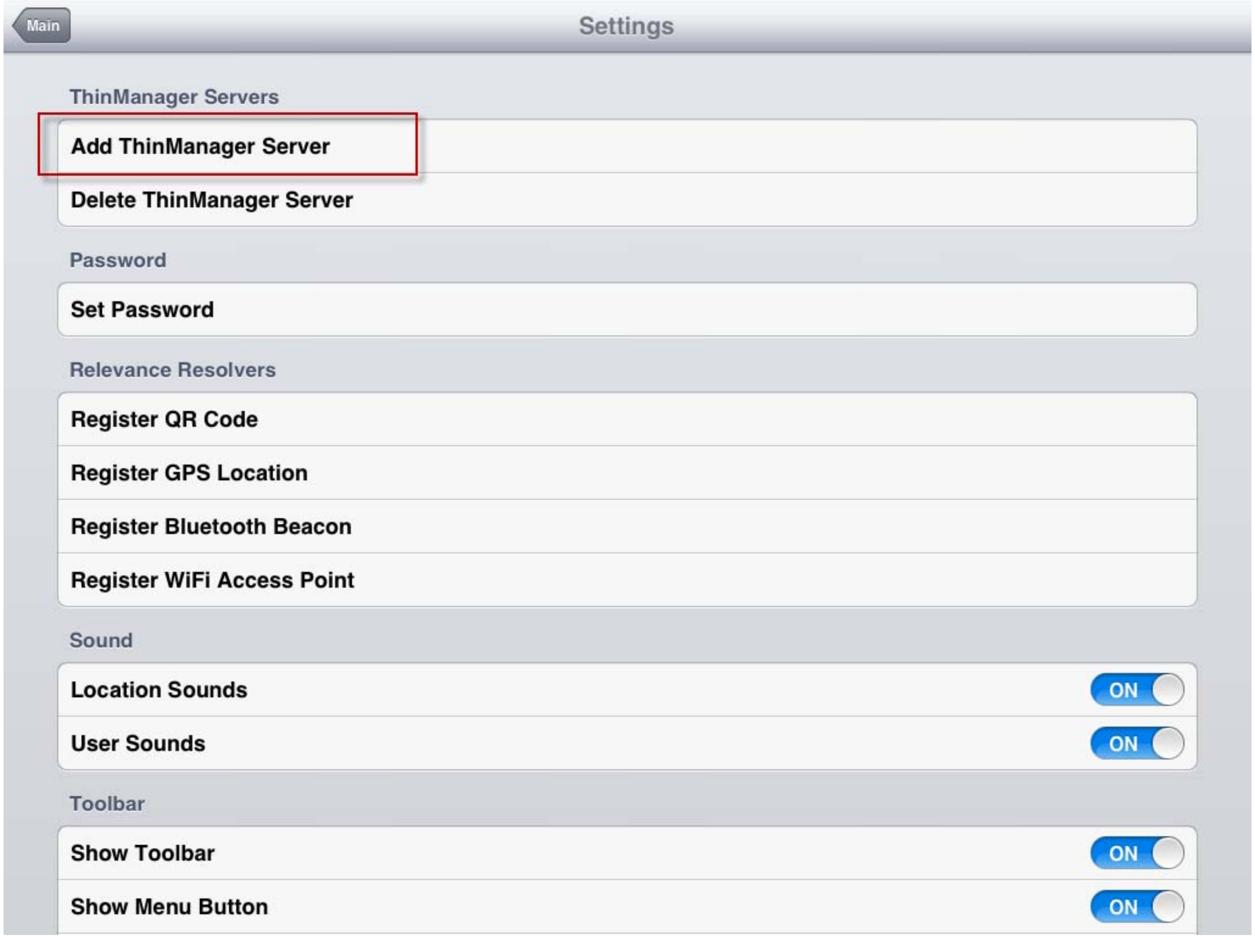
Select the **iTMC** application and select ***Open***. It will download and install on your iPad.

The ThinManager app shown on the left is the ThinManager Mobile app that lets you control ThinManager from a mobile device. The iTMC application is on the right.



*ThinManager iTMC Configuration Screen*

Select the ***Settings*** button at the bottom to launch the **Settings** page.



ThinManager Servers

- Add ThinManager Server
- Delete ThinManager Server

Password

- Set Password

Relevance Resolvers

- Register QR Code
- Register GPS Location
- Register Bluetooth Beacon
- Register WiFi Access Point

Sound

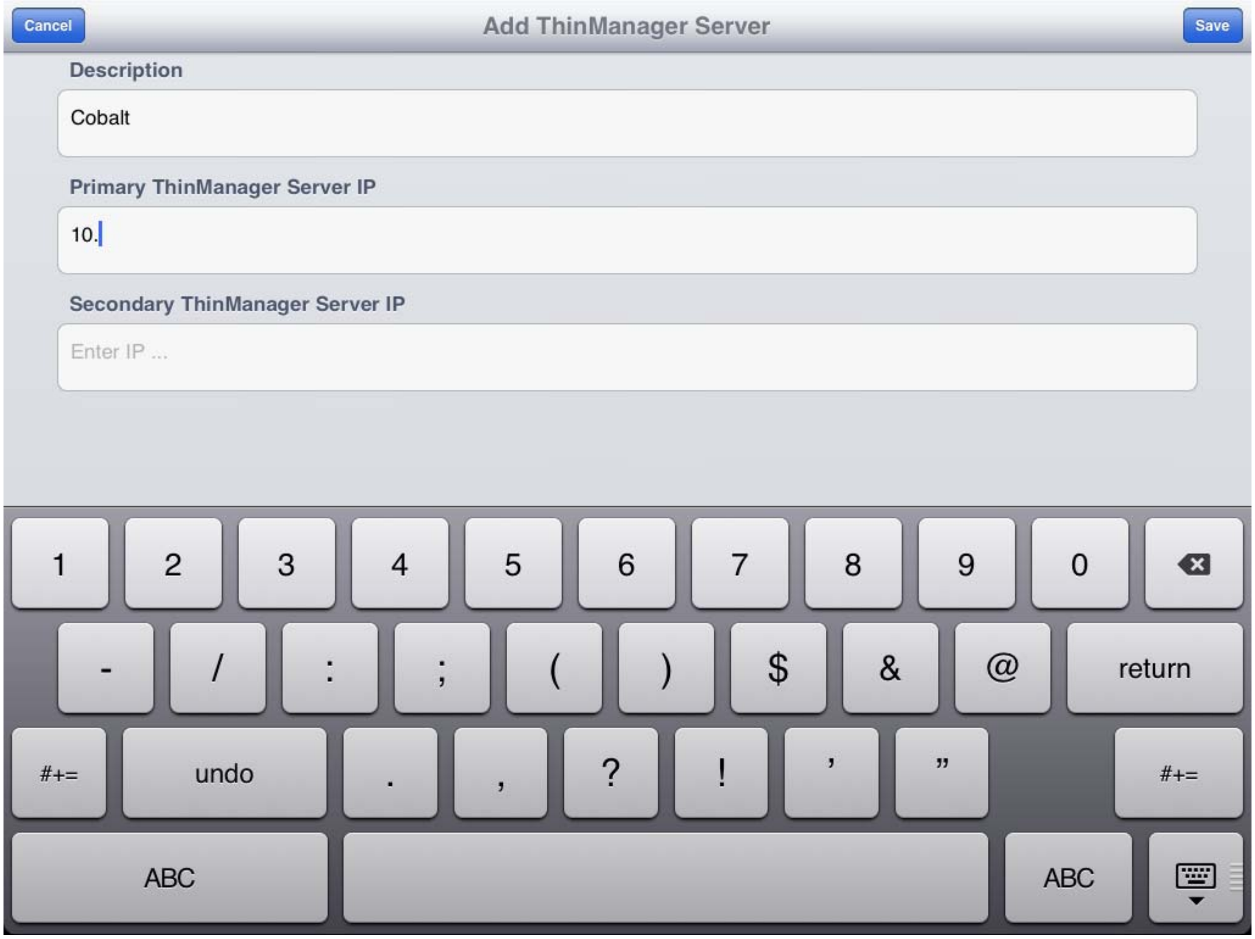
- Location Sounds ON
- User Sounds ON

Toolbar

- Show Toolbar ON
- Show Menu Button ON

*Settings Page*

Select ***Add ThinManager Server*** to launch the **Add ThinManager Server** page.



Add ThinManager Server

Description

Cobalt

Primary ThinManager Server IP

10.

Secondary ThinManager Server IP

Enter IP ...

*Add ThinManager Server Page*

Enter your ThinManager Server name in the ***Description*** field.

Enter the IP address of the ThinServers (usually the ThinManager Server) in the ***Primary ThinServer IP*** field.

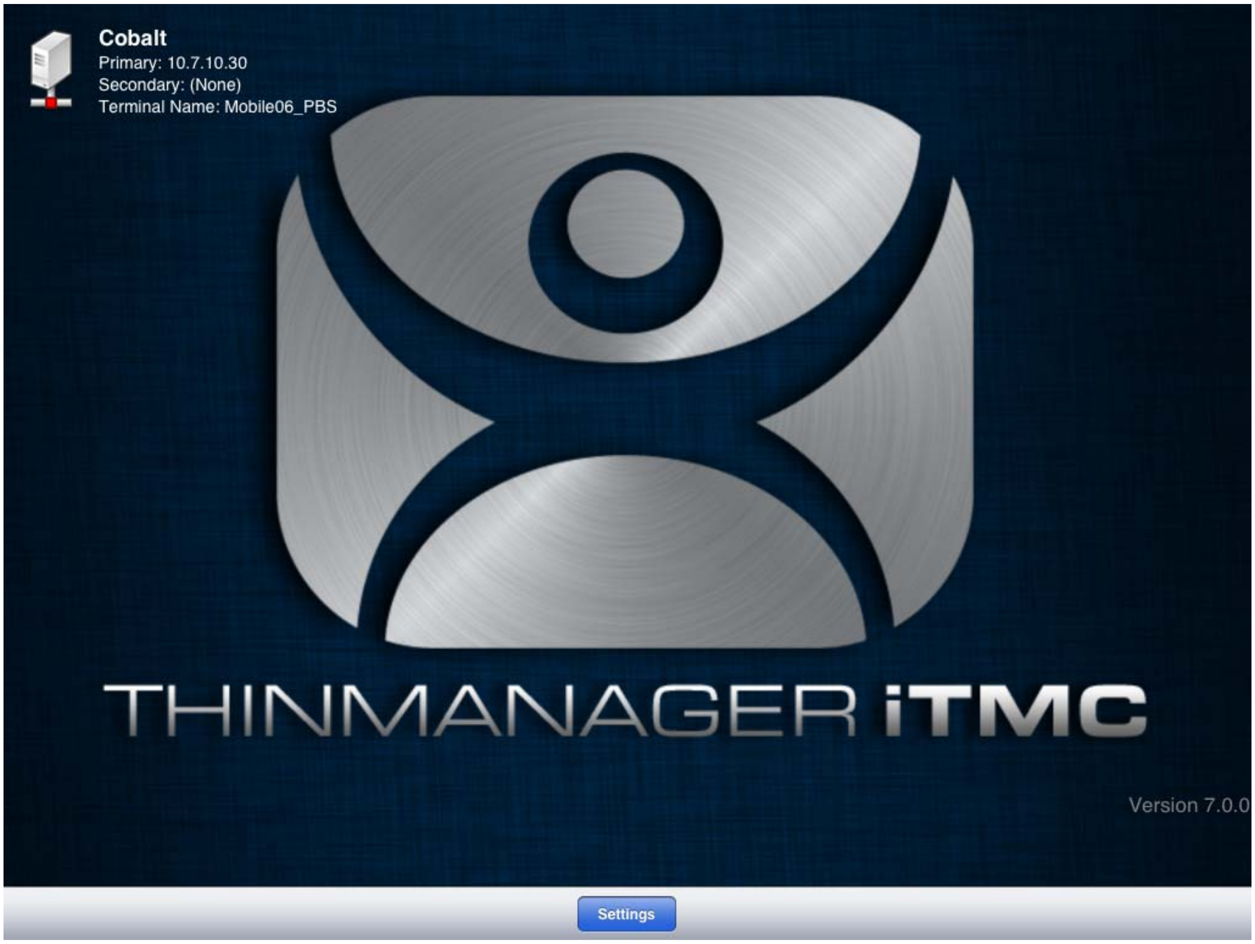
Enter the IP address of a secondary ThinManager Server, if you have one.

Select the ***Save*** button in the corner. This will return you to the **Settings** page.

Select the ***Configurations*** button in the top left corner to return to the configurations screen.

### 3.2.1. Associating the iPad to the Configuration

Once the ThinManager Server is defined on the iPad you need to associate the hardware to the iTMC configuration you created.

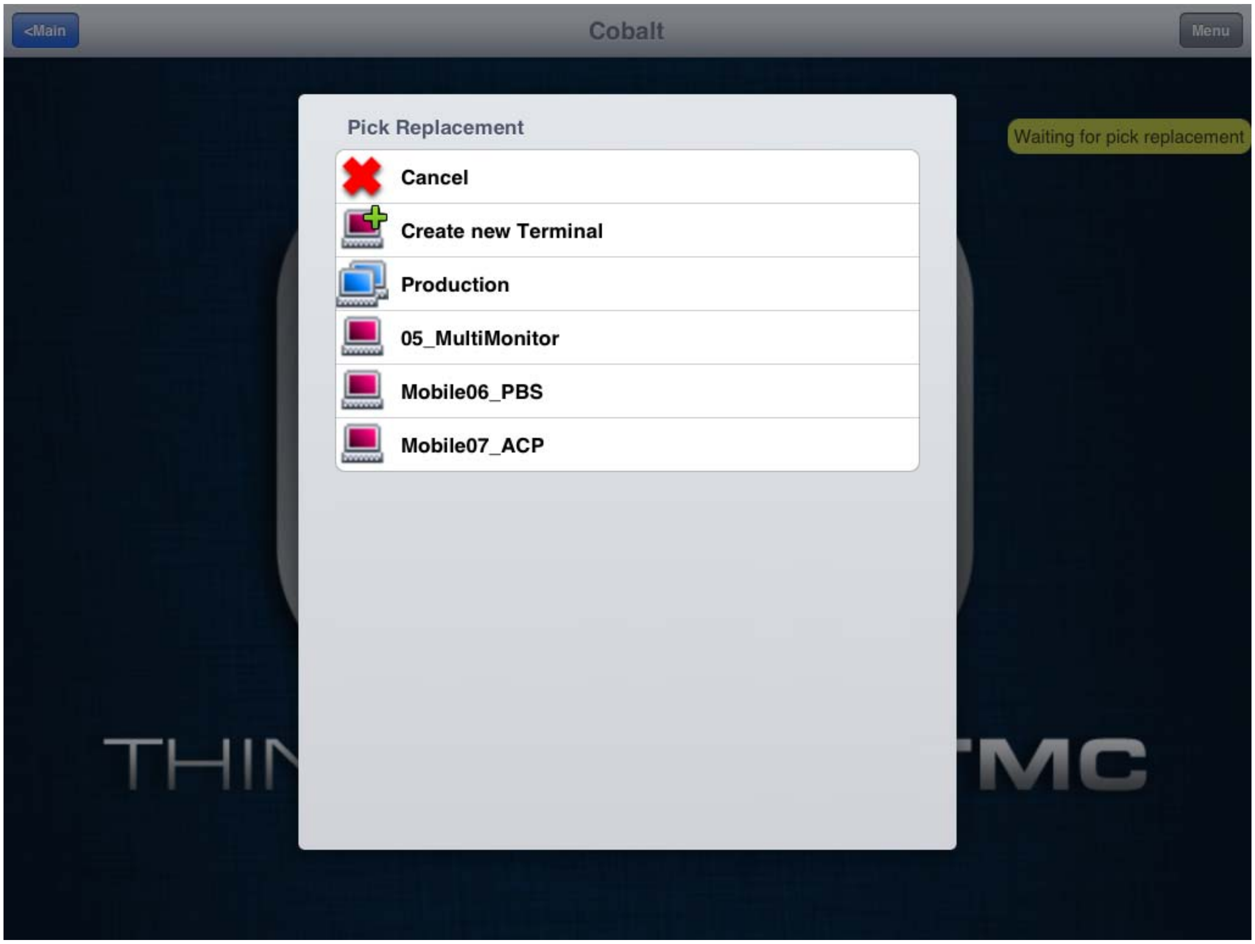


Cobalt
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile06_PBS

*Defined ThinManager Servers*

The defined ThinManager Server will be displayed on the configuration screen.

Select the ThinManager Server. You will be connected to the ThinManager Server.

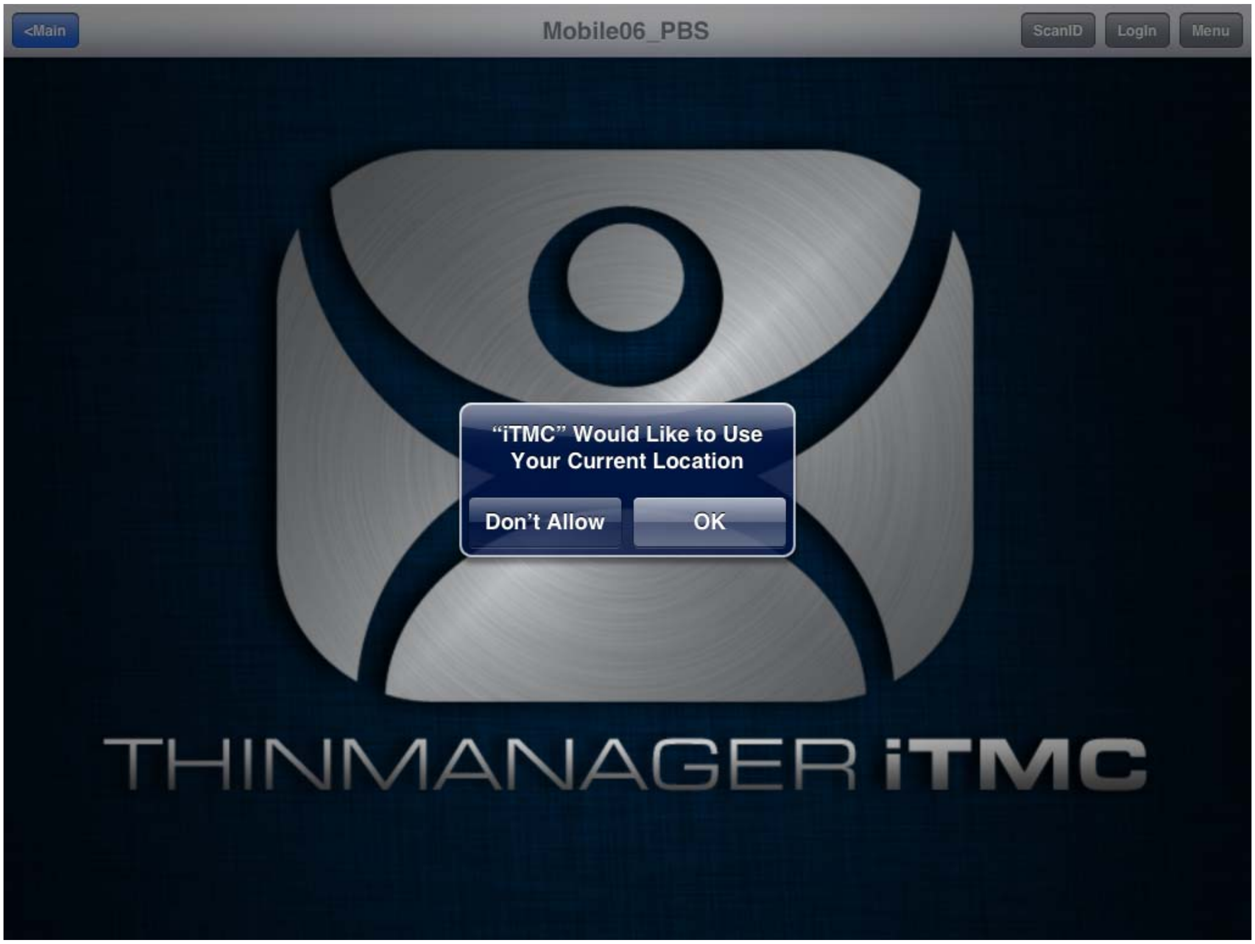


Waiting for pick replacement

*Pick Replacement*

A **Pick Replacement** window will be shown allowing you to select the newly created terminal configuration or to launch the Terminal Configuration Wizard by selecting ***Create New Terminal***.

Touch your newly defined terminal to choose the configuration you created for the iPad. This will tie the mobile device to the configuration in ThinManager.



*ThinManager iTMC Home Screen*

The terminal will be connected, logged on, but no applications are running because we left that blank.

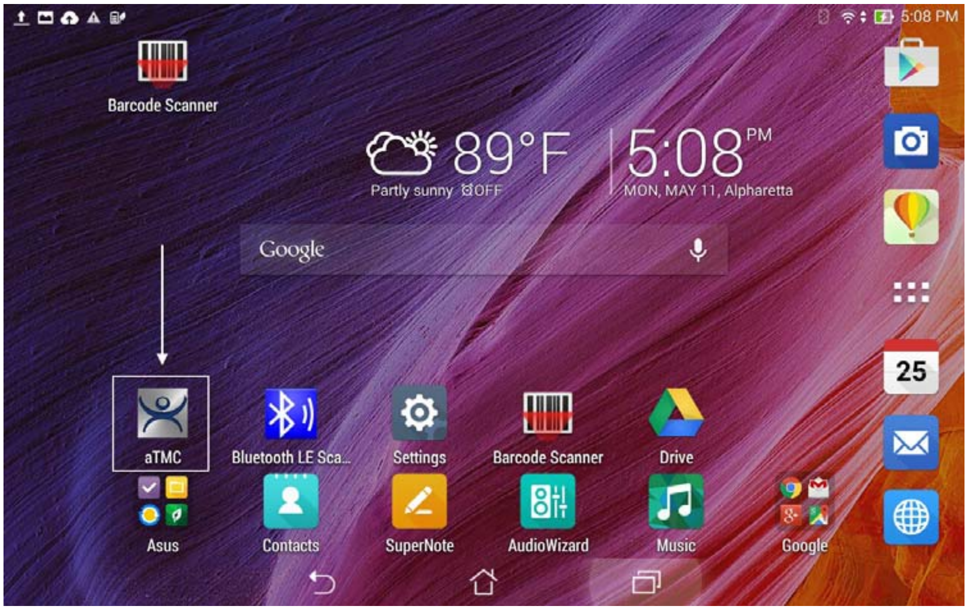
A dialog will open stating that "iTMC Would Like to Use Your Current Location". This enables the GPS location tool.

- ✓ **Allow the "Use Current Location" to enable GPS as a resolver on this mobile device.**

Select the ***OK*** button to allow GPS as a resolver.

## 3.3. Configuring an Android for ThinManager

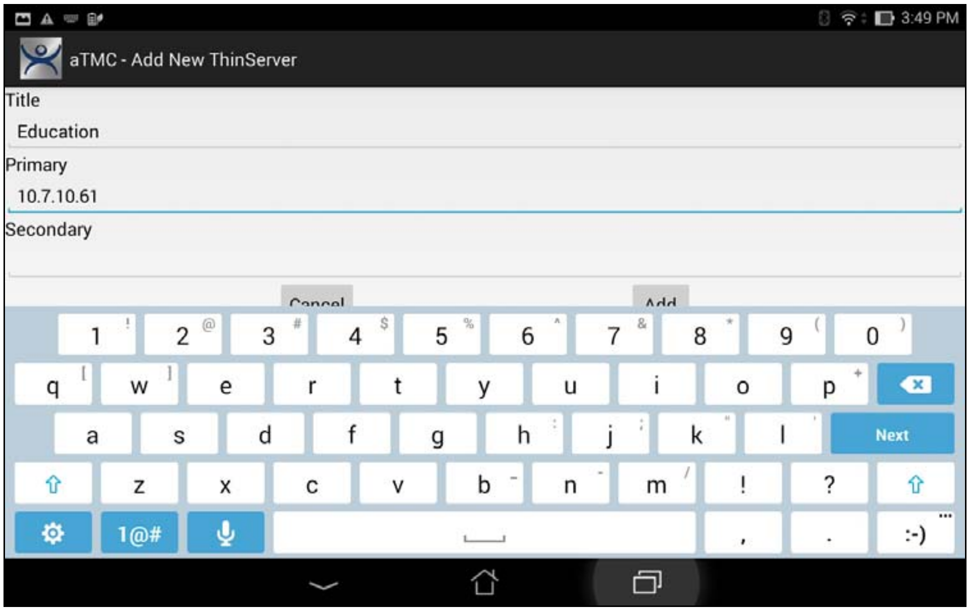
The Android device needs to have the AndroidTMC client installed. The AndroidTMC application can be downloaded from the ThinManager Download page at http://downloads.thinmanager.com/ .



*Android ThinManager Compatible thin client on an Android Desktop*

The AndroidTMC program is launched from an icon on the desktop.

The first action will be to define the ThinManager Server.



Title

Education

Primary

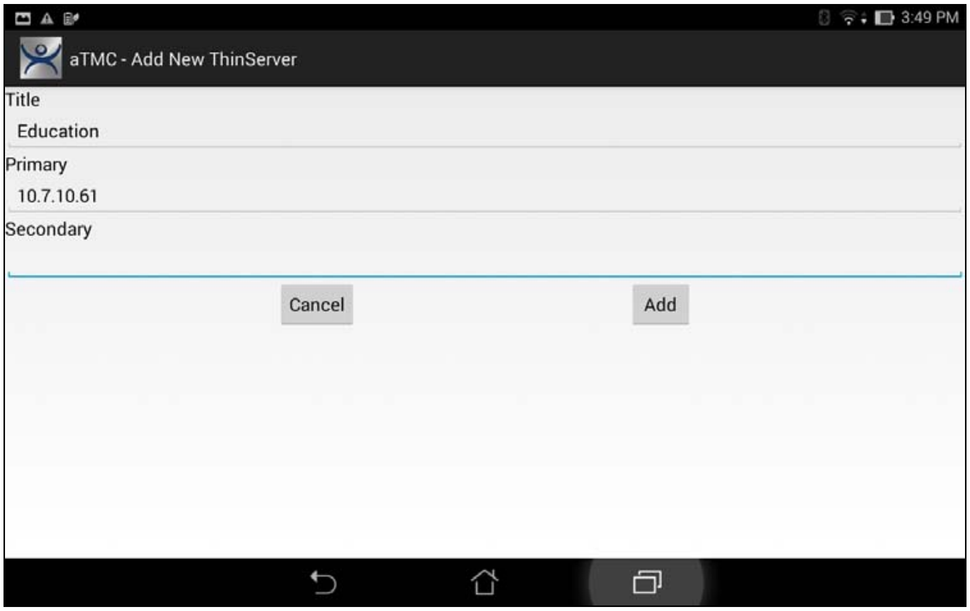
10.7.10.61

Secondary

*Add ThinManager Server Window*

The **Add ThinManager Server** window will launch with fields for the ThinManager Server name and IP address.

Enter **ThinManager** in the Title field and the IP address of the Primary and Secondary ThinManager Server in the ***Primary*** and ***Secondary*** address field and select ***Done***. If you have only one ThinManager Server you will need to select the ***Next*** button to cycle to the ***Done*** button.



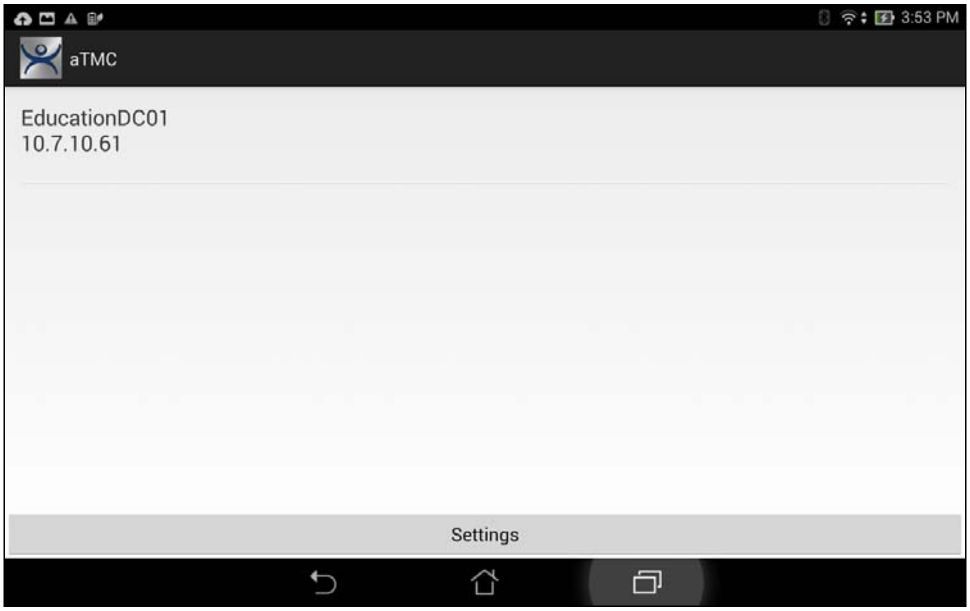
Title
Education
Primary
10.7.10.61
Secondary

*Add ThinManager Server Window*

Select the Add button and the AndroidTMC app has your ThinManager Server listed.

### 1.1.1. Associating the Android Device to the Configuration

Once the ThinManager Server is defined on the iPad you need to associate the hardware to the iTMC configuration you created.

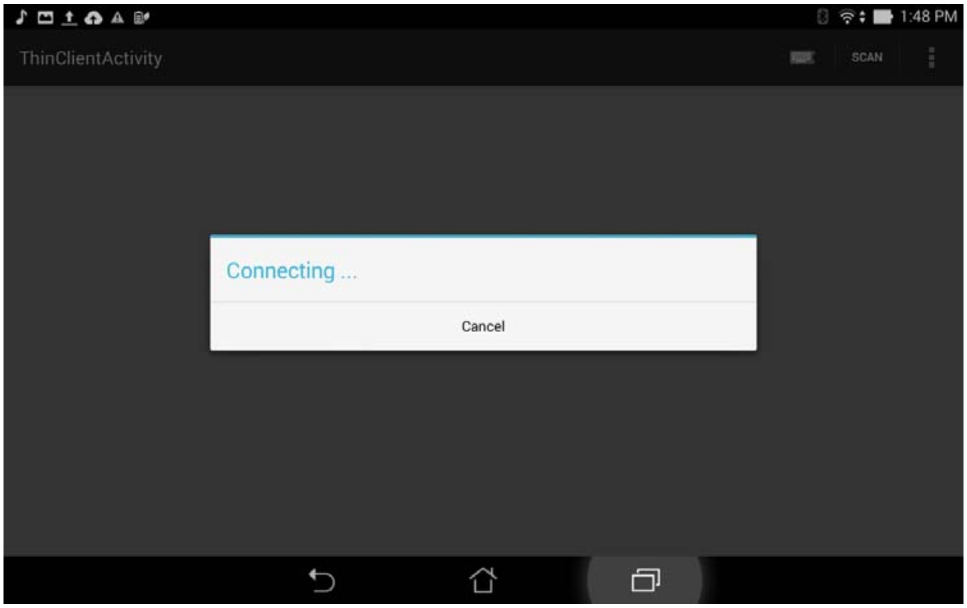


EducationDC01
10.7.10.61

*AndroidTMC Start Screen*

The AndroidTMC Start Screen will show the registered ThinManager Server.

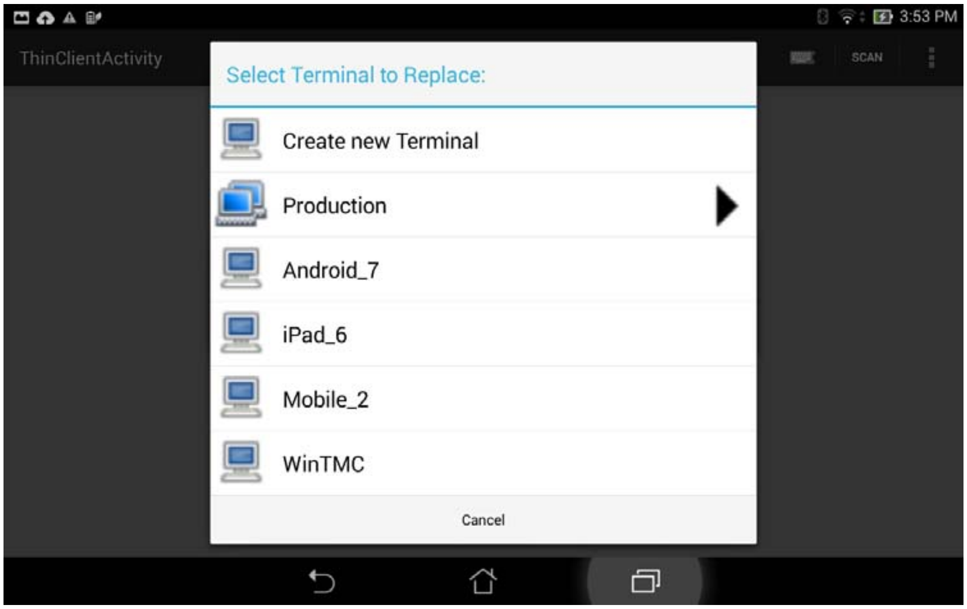
Touch the ThinManager Server to connect.



Connecting ...

*Connecting Status*

The AndroidTMC will connect to the ThinManager Server.

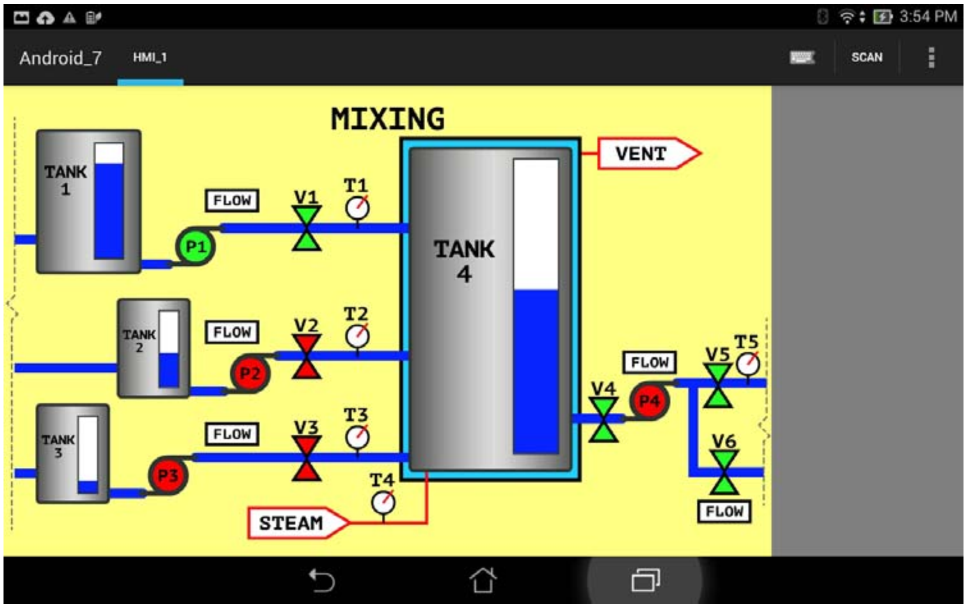


Select Terminal to Replace:

- Create new Terminal
- Production
- Android_7
- iPad_6
- Mobile_2
- WinTMC

*Select a Terminal to Replace*

Once the AndroidTMC had connected to the ThinManager Server you will get the **Select a Terminal to Replace** window. You may choose an existing terminal configuration or you may choose ***Create New Terminal***. If you choose ***Create New Terminal*** then a Terminal Configuration Wizard will launch on the ThinManager Server that will let you configure the AndroidTMC as a new terminal.

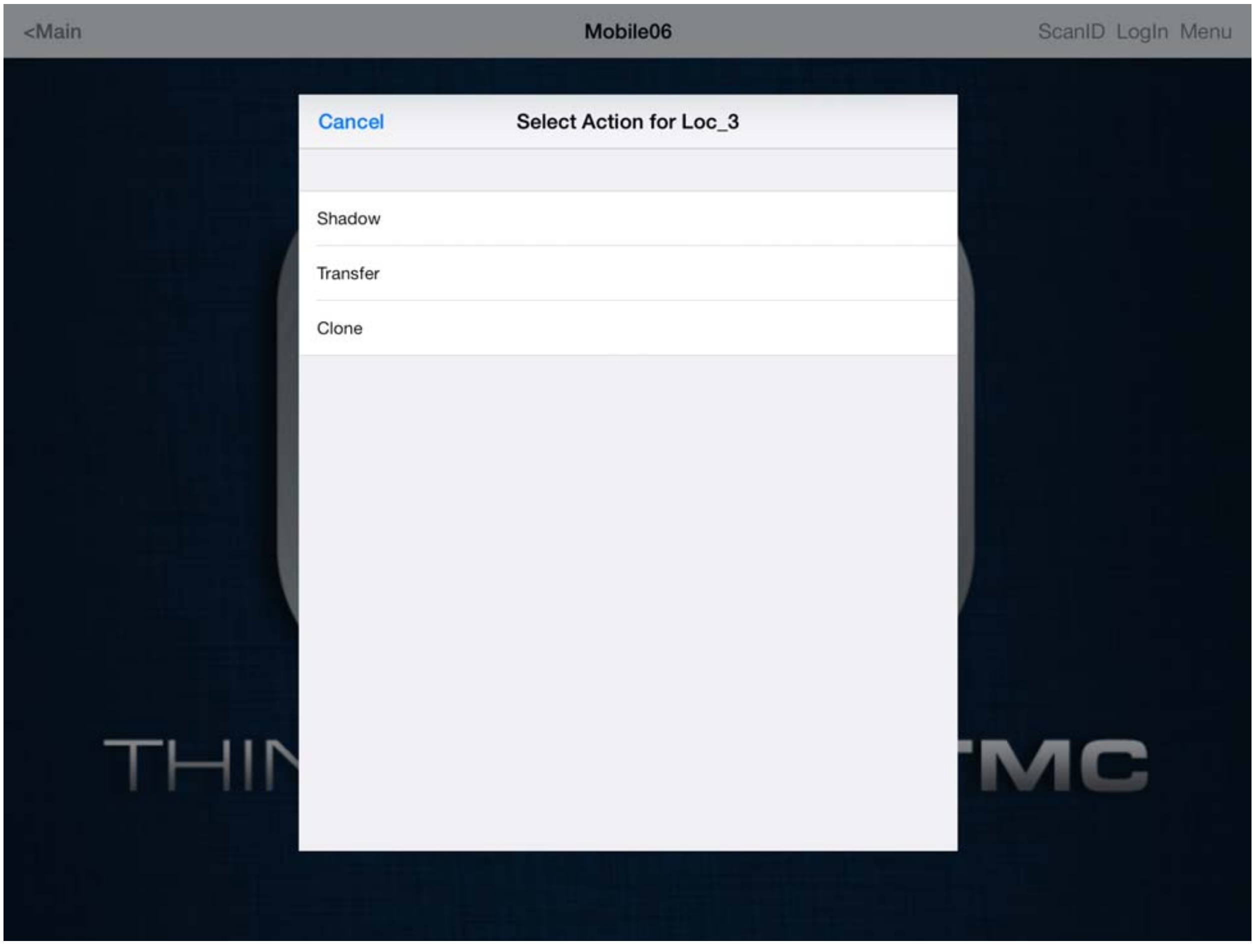


*AndroidTMC Client*

Once connected the Android device will display the applications assigned in ThinManager.

# 4. Manual Interaction with Locations

A mobile device can connect to a **Location** and manually interact with the applications.



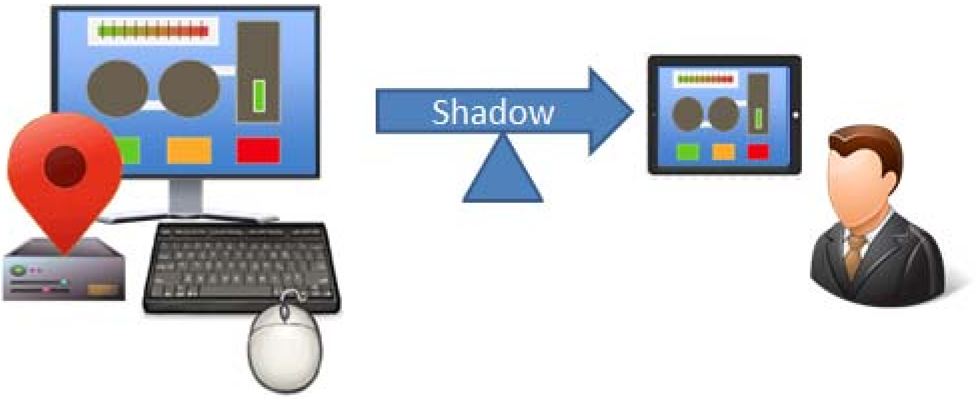
*Manual Interactions with a Location*

The three manual interactions between a mobile device and a location are:

- **Shadow** – Shadowing duplicates the graphic output of the Location screen and sends it to the mobile device.
- **Transfer** – Transferring sends the graphic output of the location to the mobile device instead of the location. This requires the operator to manually allow the transfer.
- **Clone** – Cloning will create a duplicate session for the mobile device using the configuration of the location and the user credentials of the mobile device.

## 4.1. Shadow

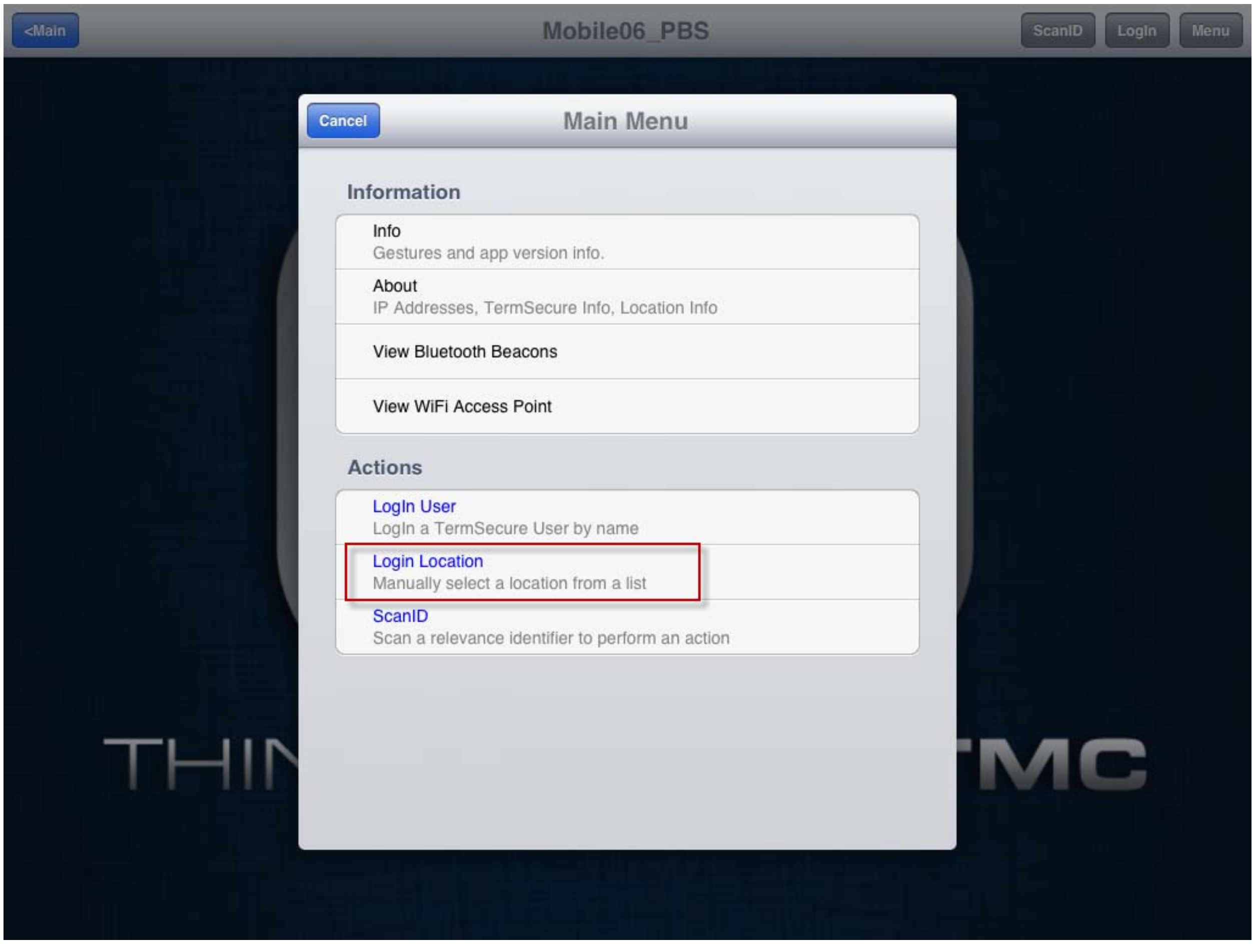
**Shadowing** duplicates the graphic output of the location and sends it to the mobile device.



*Shadowing*

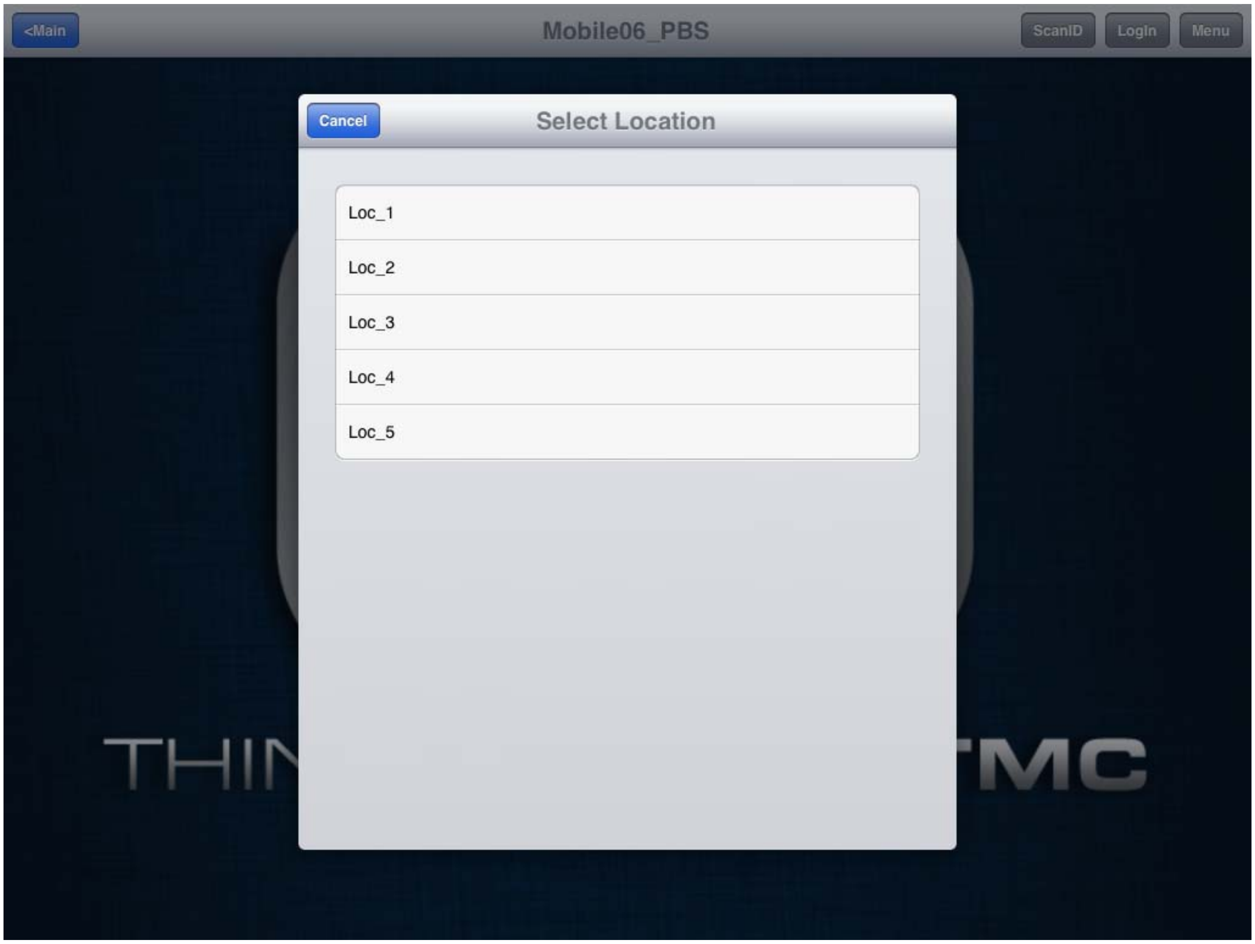
The mobile user will see the exact display as the location.

Open the iTMC program, select your ThinManager Server, and touch the ***Menu*** button in the upper right corner to launch the **Main Menu** window.


<Main
Mobile06_PBS
ScanID
LogIn
Menu
Cancel
Main Menu
Information
Info
Gestures and app version info.
About
IP Addresses, TermSecure Info, Location Info
View Bluetooth Beacons
View WiFi Access Point
Actions
LogIn User
LogIn a TermSecure User by name
Login Location
Manually select a location from a list
ScanID
Scan a relevance identifier to perform an action
THIN
TMC

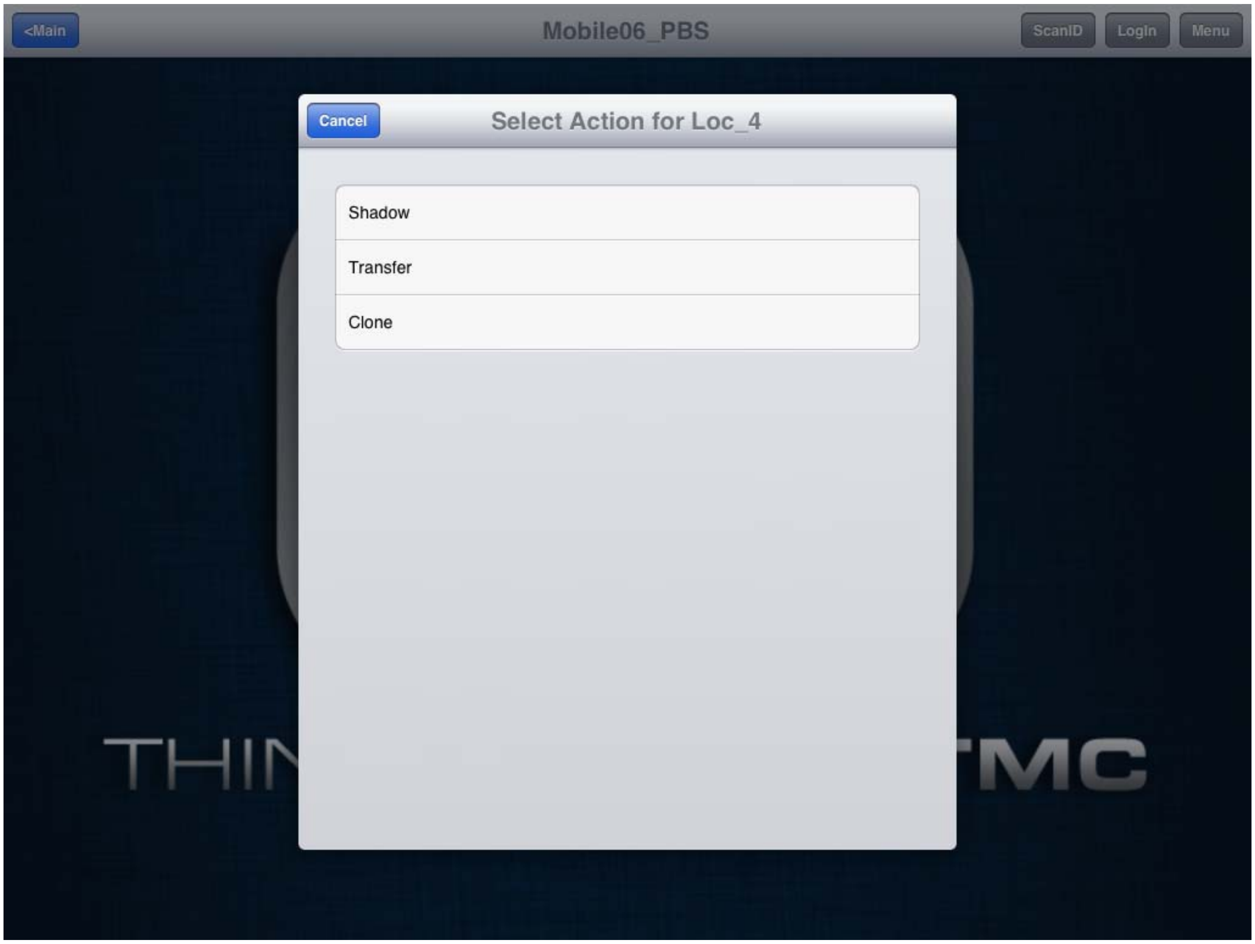
*Main Menu*

Touch the ***Login Locations*** on the menu to open the **Select Location** window.



*Select Location Menu*

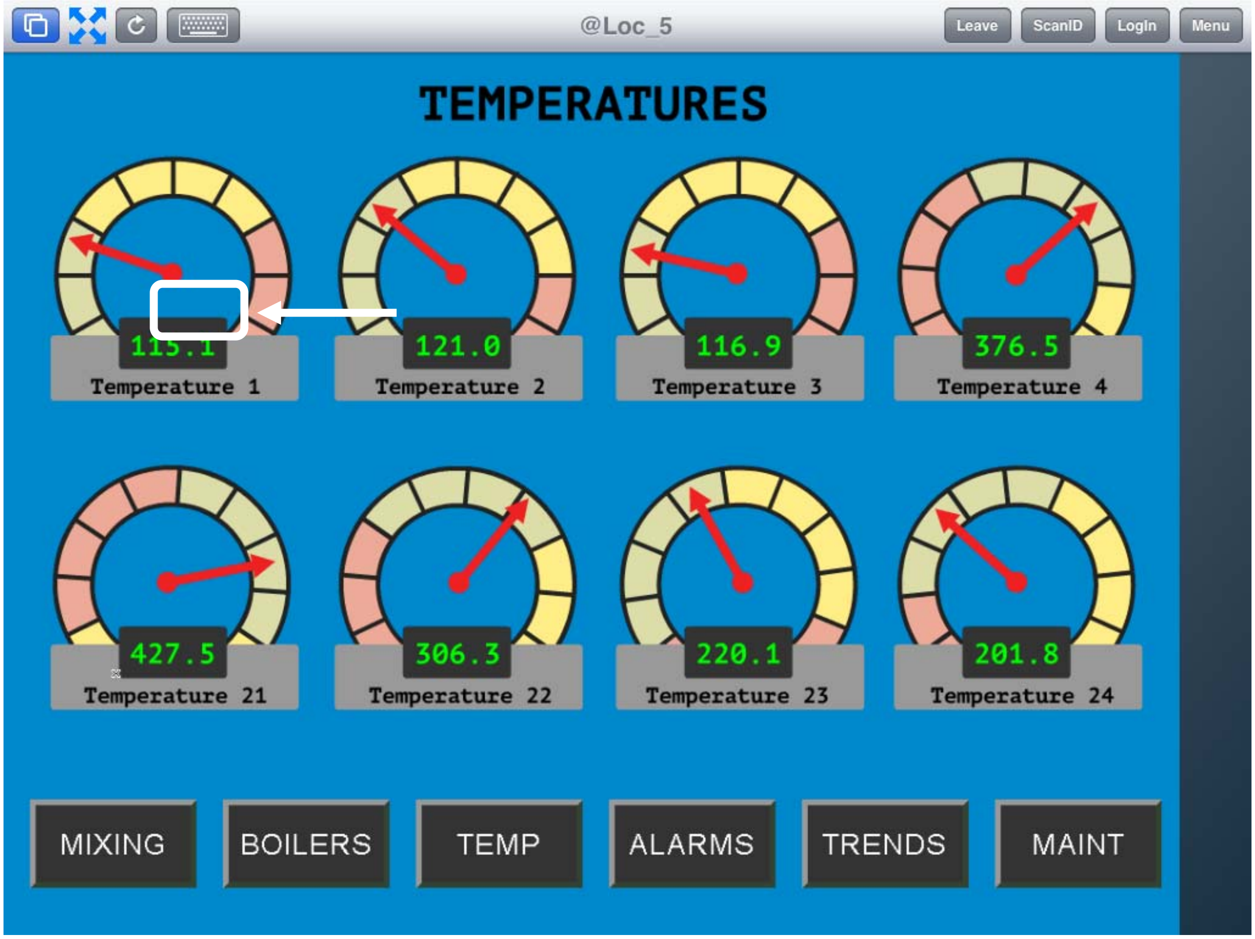
Select a location to open the **Select Action** window.



*Select Action Window*

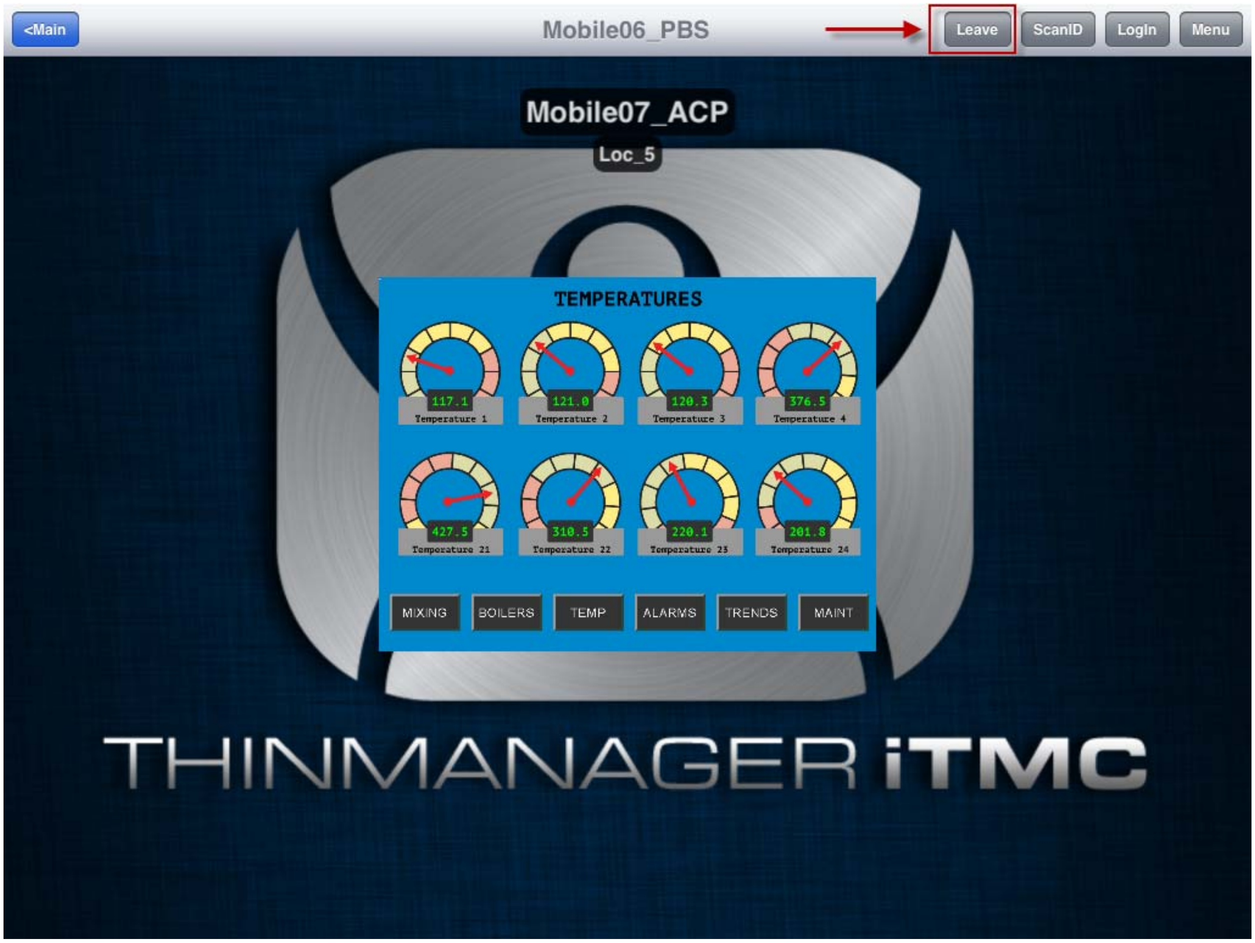
The **Select Action** window will list the actions that are allowed at the location.

Touch ***Shadow***.



*iTMC Shadowing Location*

The screen should show the shadow of the location.



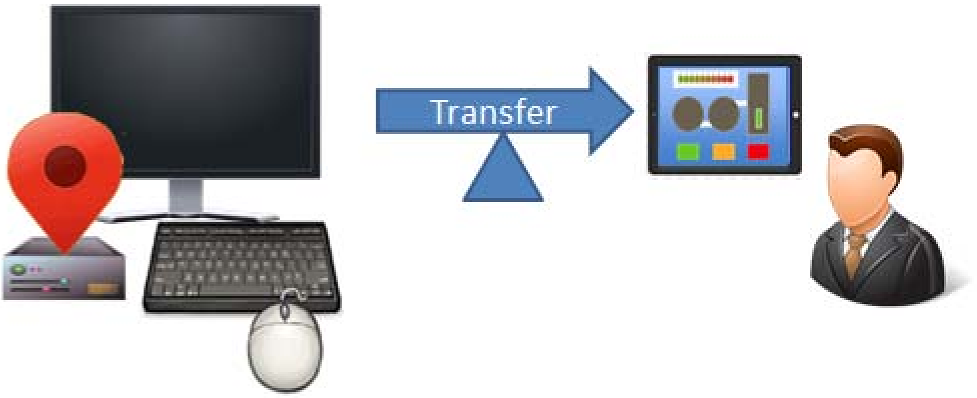
*Single Display Client Shown in Shadow*

The shadow will only show one display client window because you are shadowing the location and are receiving the current graphic output from the location.

Touch ***Leave*** to end the shadow.

## 4.2. Transfer

Transfer is similar to Shadow except that the user has to allow the transfer at the location.



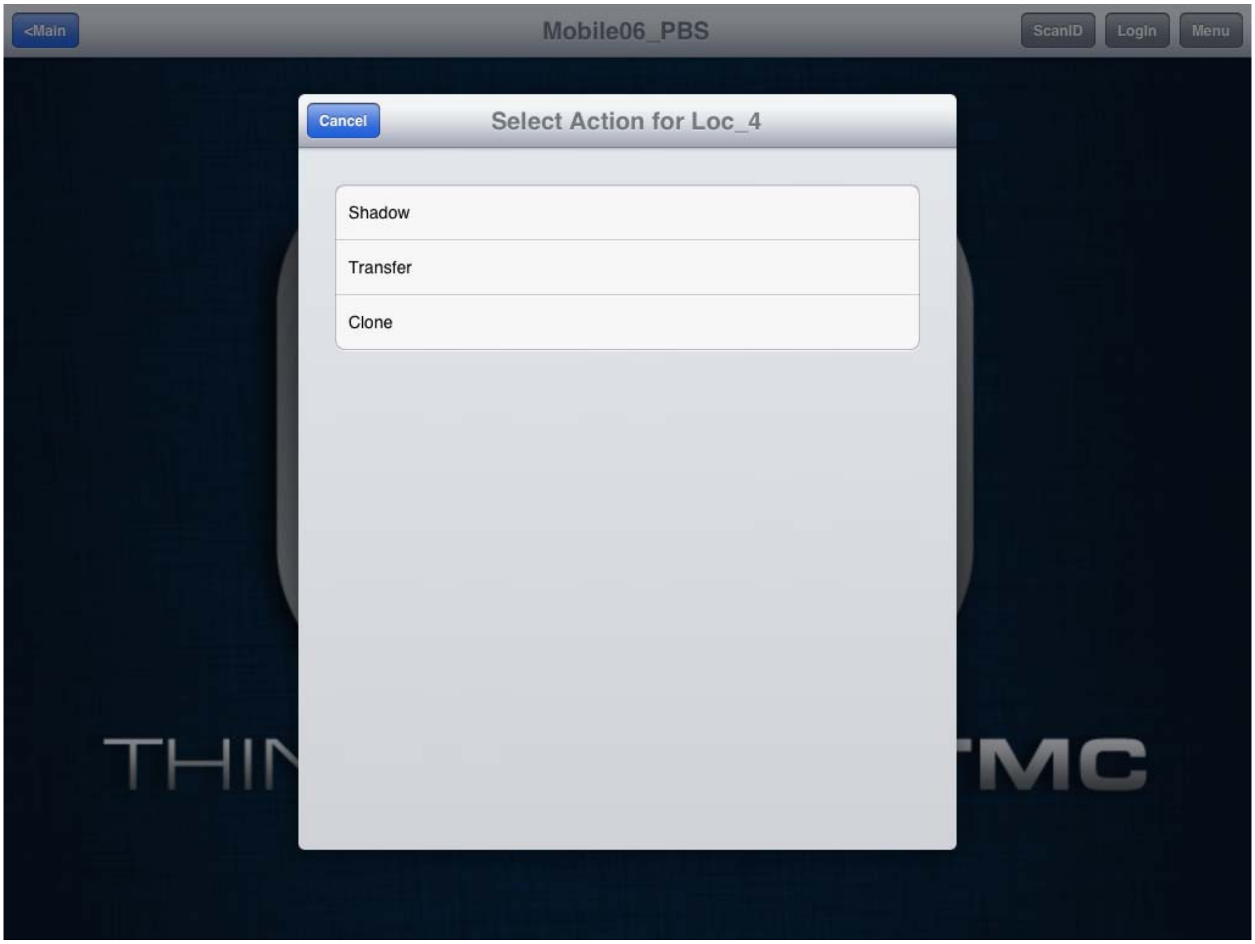
*Transfer*

This prevents someone from taking the session while the operator is busy with a process. It also allows a mobile user to take sole control of the location.

Open the iTMC program, select your ThinManager Server, and touch the ***Menu*** button in the upper right corner to launch the **Main Menu** window.

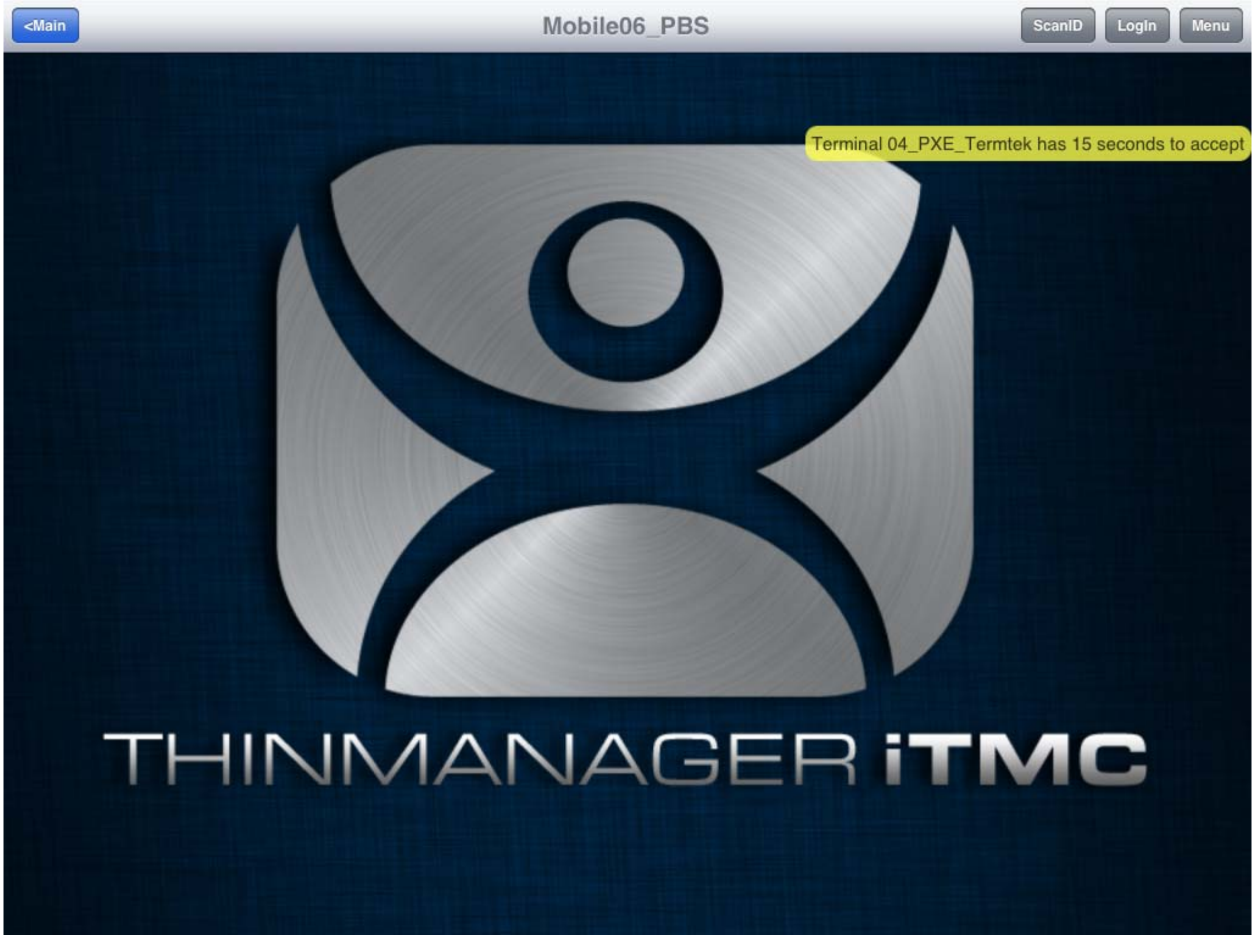
Touch the ***Login Locations*** on the menu to open the **Select Location** window.

Touch a location to open the **Select Action** window.



*Select Action Window*

Select ***Transfer*** from the **Select Action** window.



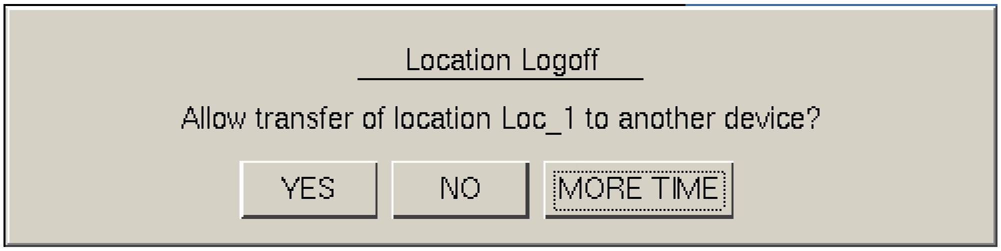
Terminal 04_PXE_Termtek has 15 seconds to accept

*Wait for Transfer Permission Message*

The user of the location will need to allow the transfer.

### 4.2.1. Transfer at the Location

A dialog box will be displayed at the location to allow the transfer.



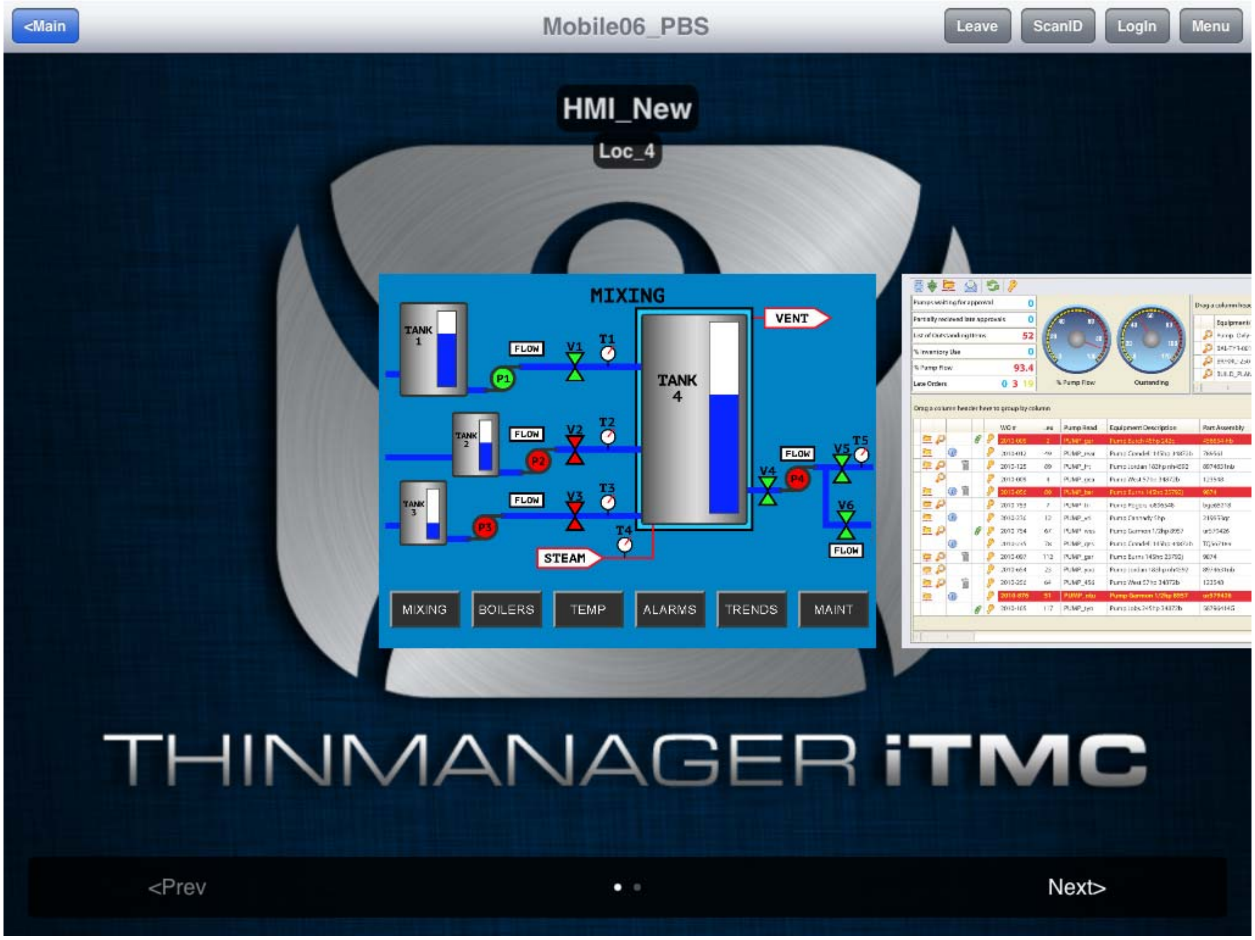
Location Logoff

Allow transfer of location Loc_1 to another device?

*Location Logoff Dialog Box*

Select the ***Yes*** button to allow the transfer.

The iTMC client will be allowed to display the location display.



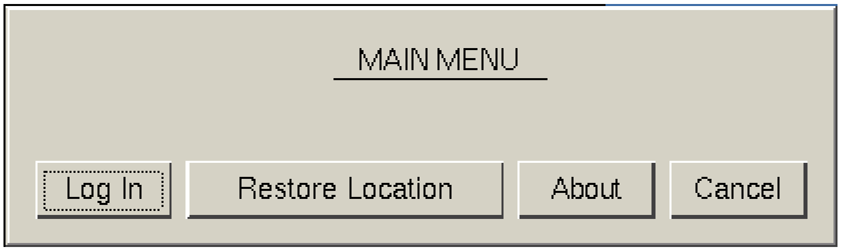
*Transferred Location Display*

The Transfer will show all the display clients on the location instead of just showing the display output of the location

The location display can be restored from the iTMC client or the location.

Selecting the ***Leave*** button on the iTMC client menu will restore the display back to the location.

Selecting the ***Restore Location*** button at the location will also restore the display.

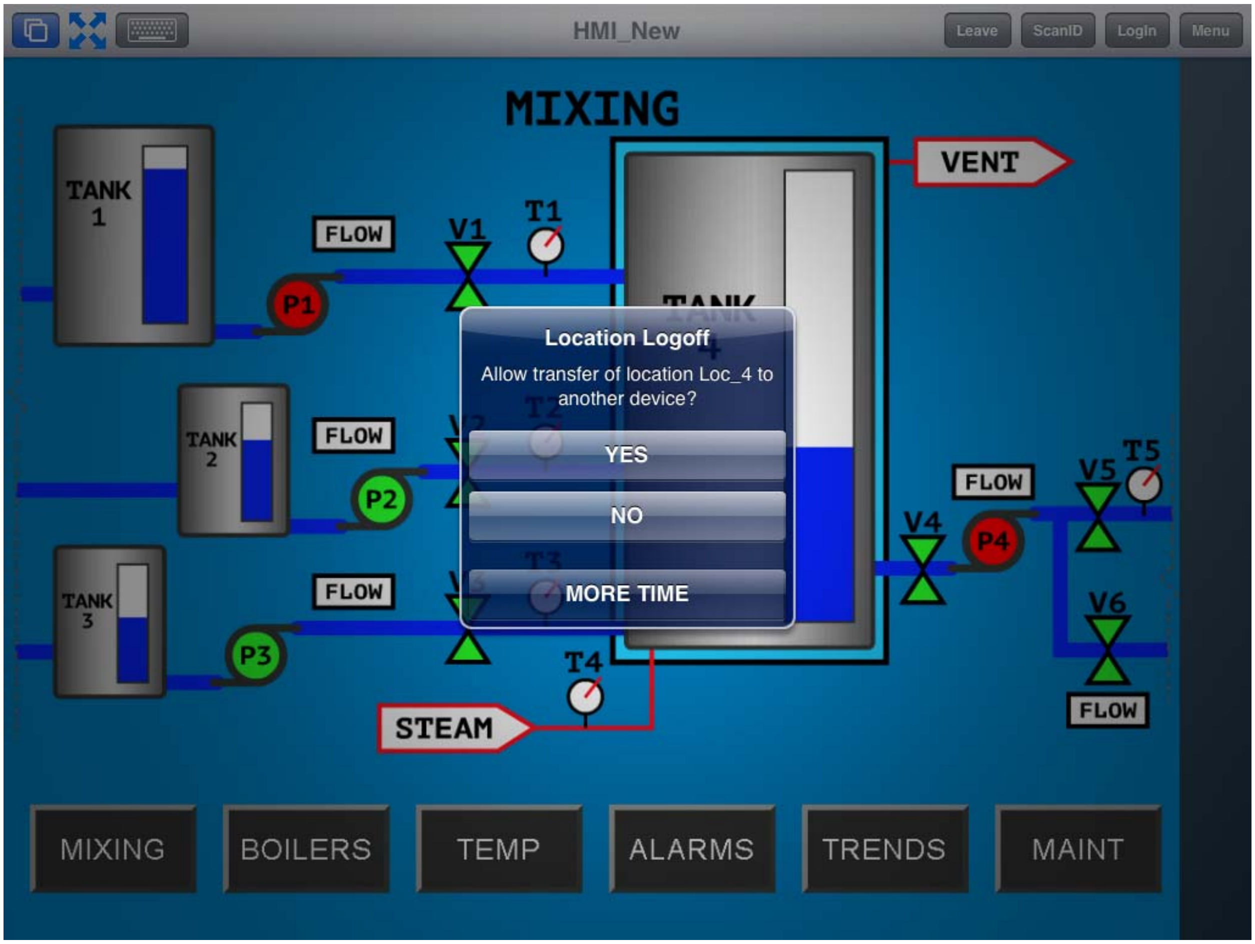


*Main Menu at the Location*

Go to the location.

Select ***Restore Location***.

This will launch a dialog box on the iTMC client to warn the mobile user that they will be losing the transfer.



Location Logoff

Allow transfer of location Loc_4 to another device?

*Location Logoff Dialog*

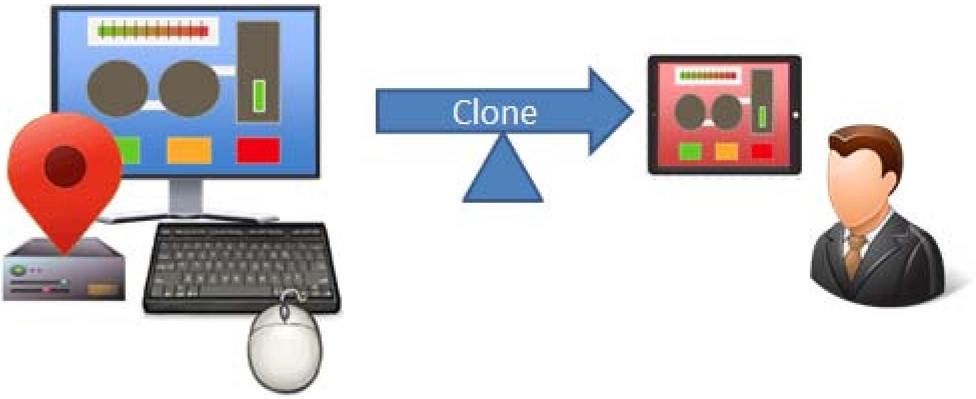
When the user at the location selects the Restore Transfer button a warning message will be sent to the mobile device.

The mobile user can select ***Yes*** to allow the transfer back to the original location, ***No*** to refuse the restoration, or they can select the ***More Time*** button to delay the restoration.

Select ***Yes*** to allow the transfer back to the location.

## 4.3. Clone

Clone will duplicate the display clients of the location on the mobile device but the sessions will be created with the mobile device Windows user account.



*Clone*

This allows a mobile user to get the HMI or other software and have independence from the user at the location.

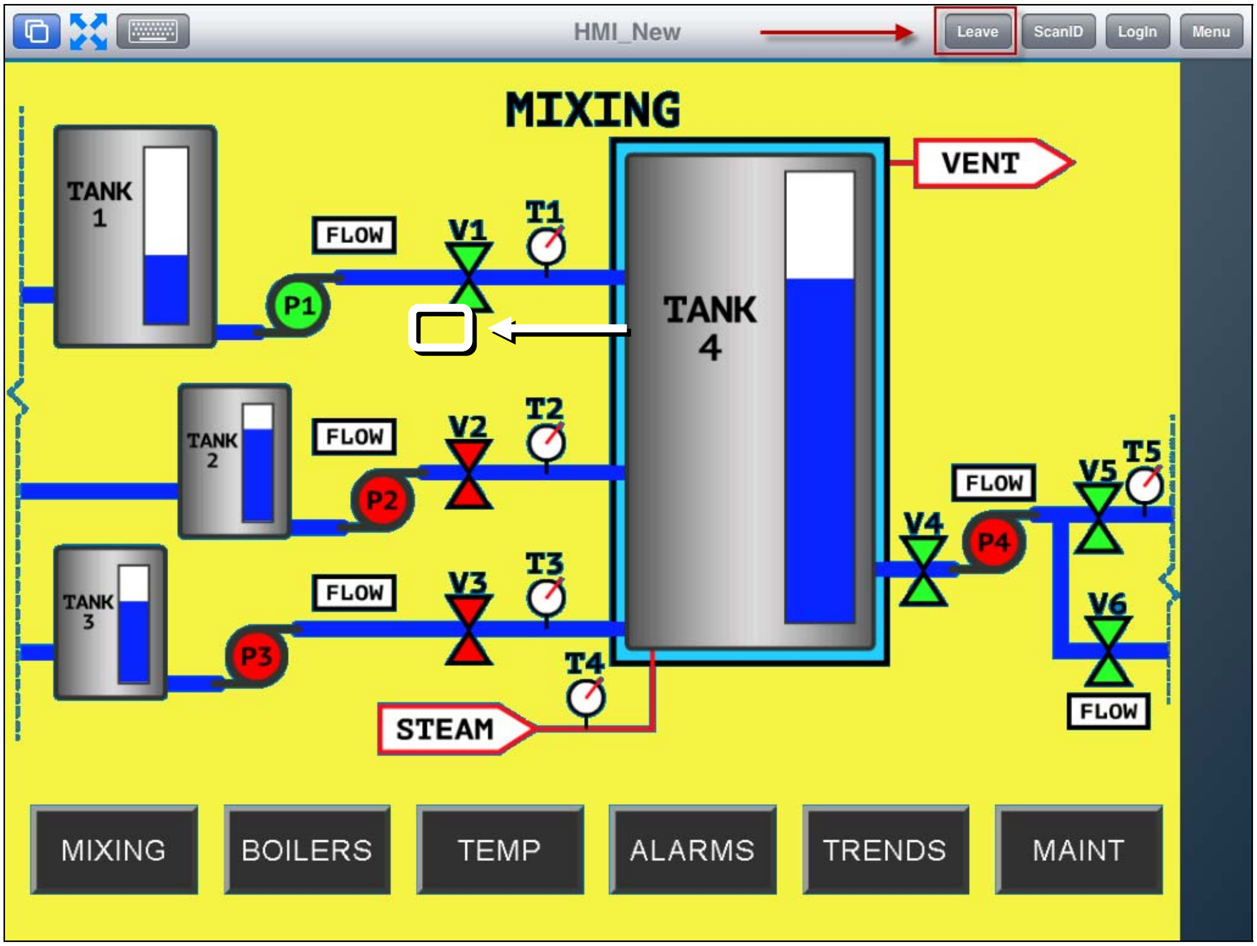
Open the iTMC program, select your ThinManager Server, and touch the ***Menu*** button in the upper right corner to launch the **Main Menu** window.

Touch the ***Login Locations*** on the menu to open the **Select Location** window.

Touch a location to open the **Select Action** window.

Select ***Clone***.

A new session will be created using the credentials from the iTMC configuration.



*Cloned Session*

Touch ***Leave*** in the top corner to close the iTMC client.

**Note on Licenses:**

Relevance requires a ThinManager system with a Relevance License installed.

Terminals connecting to Microsoft terminal servers and running applications will require TS/RDS CALs and application licenses.

Relevance requires a mobile device configured as a terminal. This mobile device requires a ThinManager XLi license.

An application license and a Microsoft TS/RDS CAL are needed for cloning as the terminal is starting a session on a terminal server and starting an application.

Transfer and shadow do not necessarily require an additional application license and TS/RDS CAL as they are only viewing the output already sent to the terminal/location

# 5. Using the Mobile Device to Add Resolver Codes

Resolvers help a mobile device know what location it is in. These can be configured to tell the mobile device what action to take.

Resolvers include

- QR Codes
- Bluetooth Beacons
- Wi-Fi Access Points
- GPS

**Assignment of Resolvers**

Resolvers can only be assigned to one location, but each location can have more than one Resolver and action assigned. Additionally, you may use Permissions and assign a resolver several times with a different action tied to each permission.

Fencing uses combinations of resolvers to limit actions to specific locations. An action may require being in an area can be covered by a Bluetooth beacon of GPS site before a QR code can be scanned. This can prevent a user from walking away from an area with a critical process. The Fence prevent the user from running the application out of the assigned ares.

## 5.1. QR Codes

Quick Response Codes are an improved barcode. They can store text, numeral data, and URLs. These can be read quickly and easily. There are many programs which generate them, including free sites on the web.

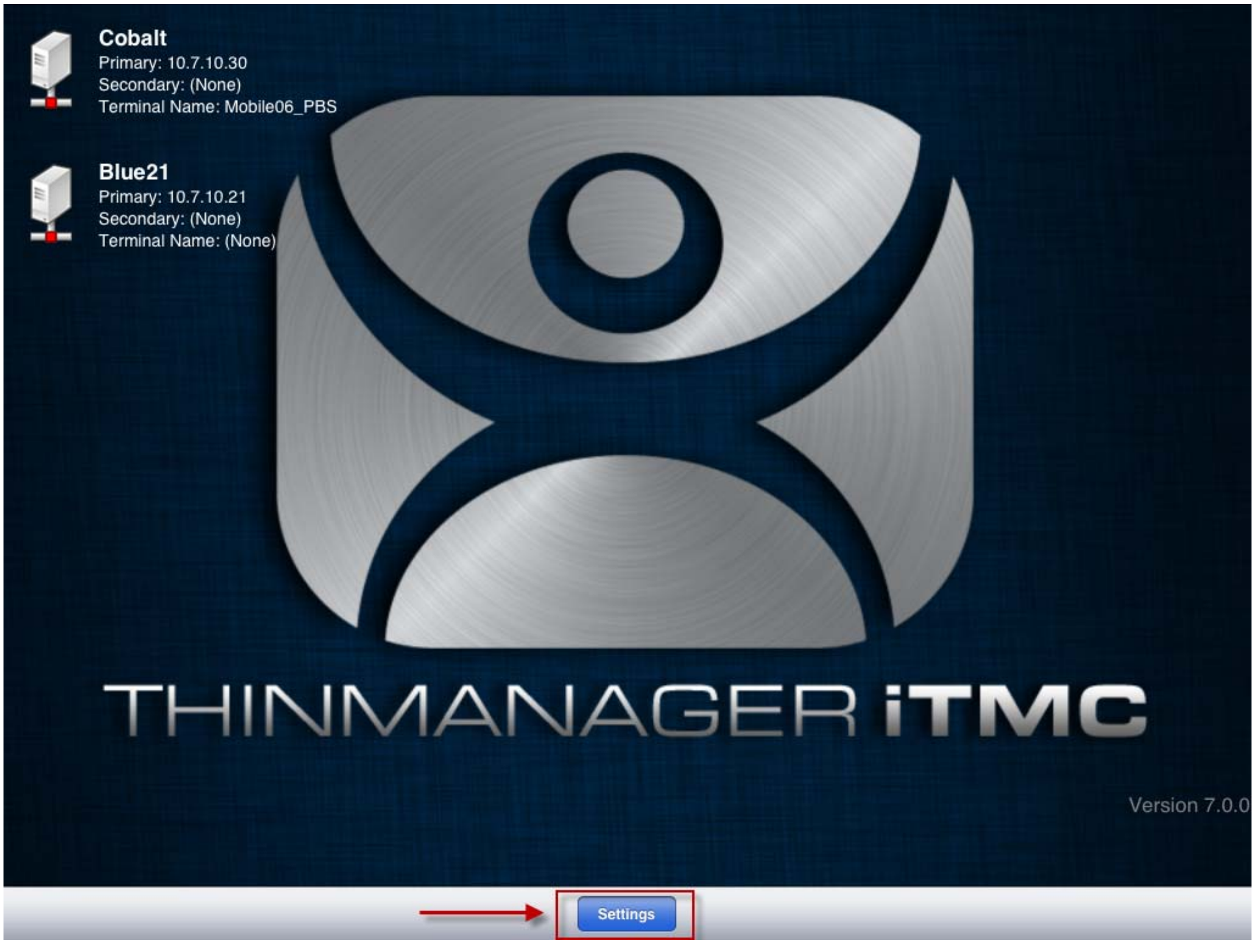
QR Codes provide pinpoint location as you need to be at the QR code to read it. This allows you a high degree of granularity in your configuration. You can put QR Codes anywhere, and not worry about overlap of signals or interference.

One issue with QR Codes is that they are easy to copy. If you rely on Relevance to make sure an operator is in a particular location, when you have some doubt about their trustworthiness, then QR Codes would likely need to be coupled with other devices like Wi-Fi, GPS, or Bluetooth, to provide some nesting or fencing, as we'll explain in detail later.

The iTMC program and AndroidTMC use the build in camera as a scanner to read the QR codes. The procedure is:

- Create the QR codes.
- Launch the iTMC program and select the ***Settings*** button.
- Select the Register QR Code command under Relevance Resolvers. If you have more than one ThinManager Server defined you will need to pick the ThinManager Server you want the QR code registered.
- Scan the QR code in the camera window.
- Enter a name and select Register.
- The QR code will be registered and entered in the **Resolver Management** window that is accessed by selecting ***Manage > Manage ID's***.

*Sample QR Code*

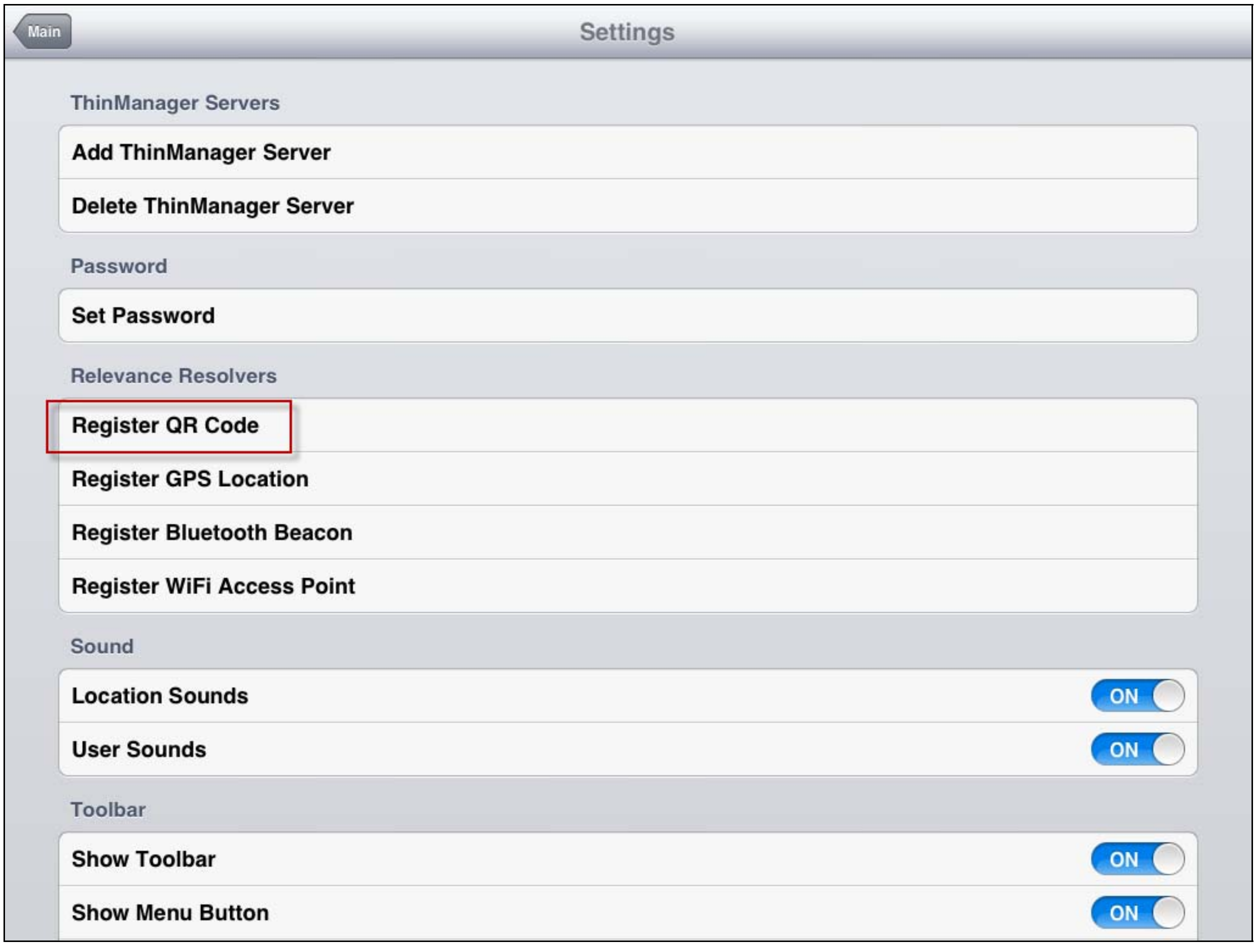

Cobalt
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile06_PBS

Blue21
Primary: 10.7.10.21
Secondary: (None)
Terminal Name: (None)

*ThinManager iTMC Program*

Open the **iTMC** program on the iPad.

Select the ***Settings*** button on the bottom to launch the **Settings** screen.



Settings

ThinManager Servers

Add ThinManager Server

Delete ThinManager Server

Password

Set Password

Relevance Resolvers

Register QR Code

Register GPS Location

Register Bluetooth Beacon

Register WiFi Access Point

Sound

Location Sounds ON

User Sounds ON

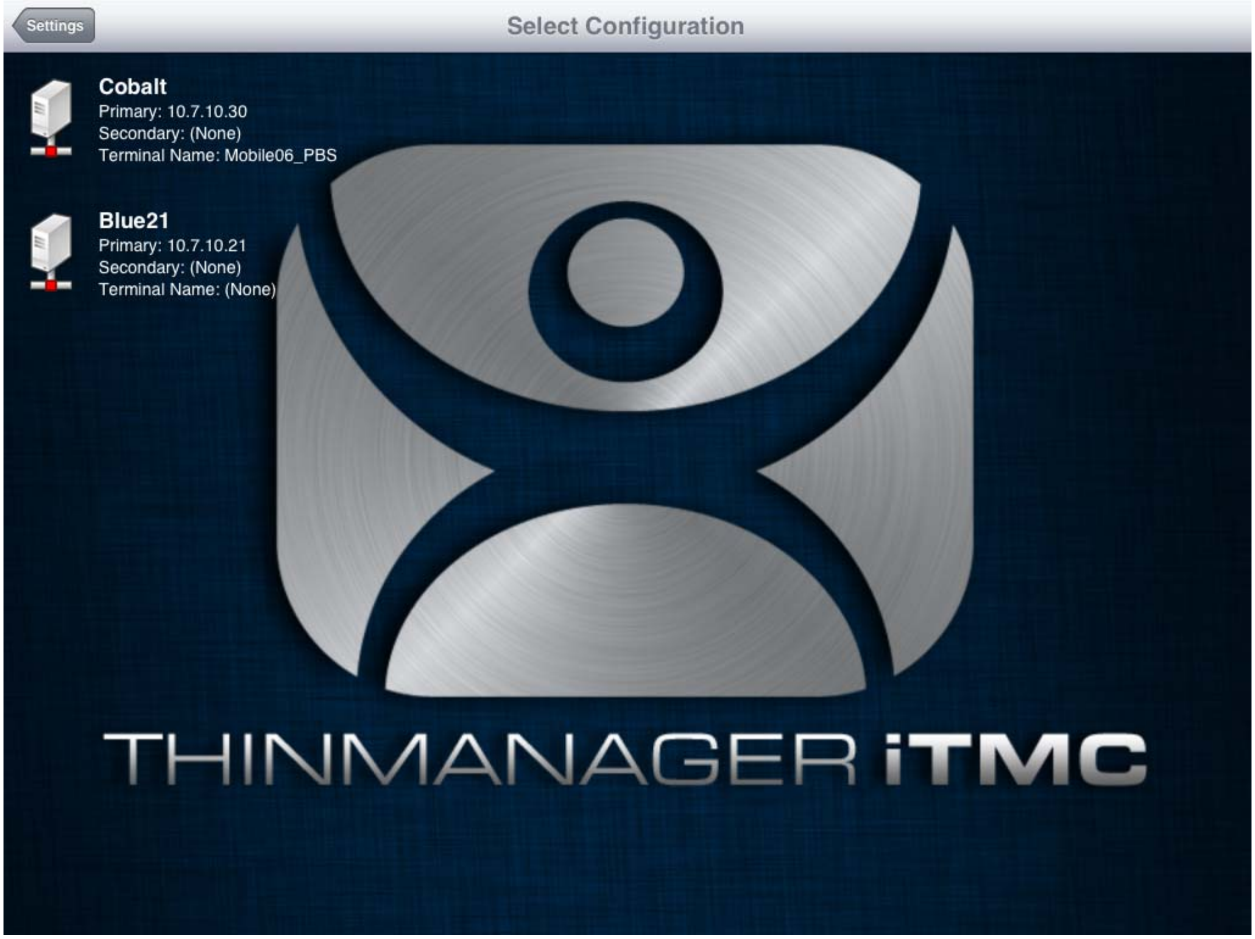
Toolbar

Show Toolbar ON

Show Menu Button ON

*Settings Screen*

Select ***Register QR Code*** from the **Relevance Resolvers** menu.



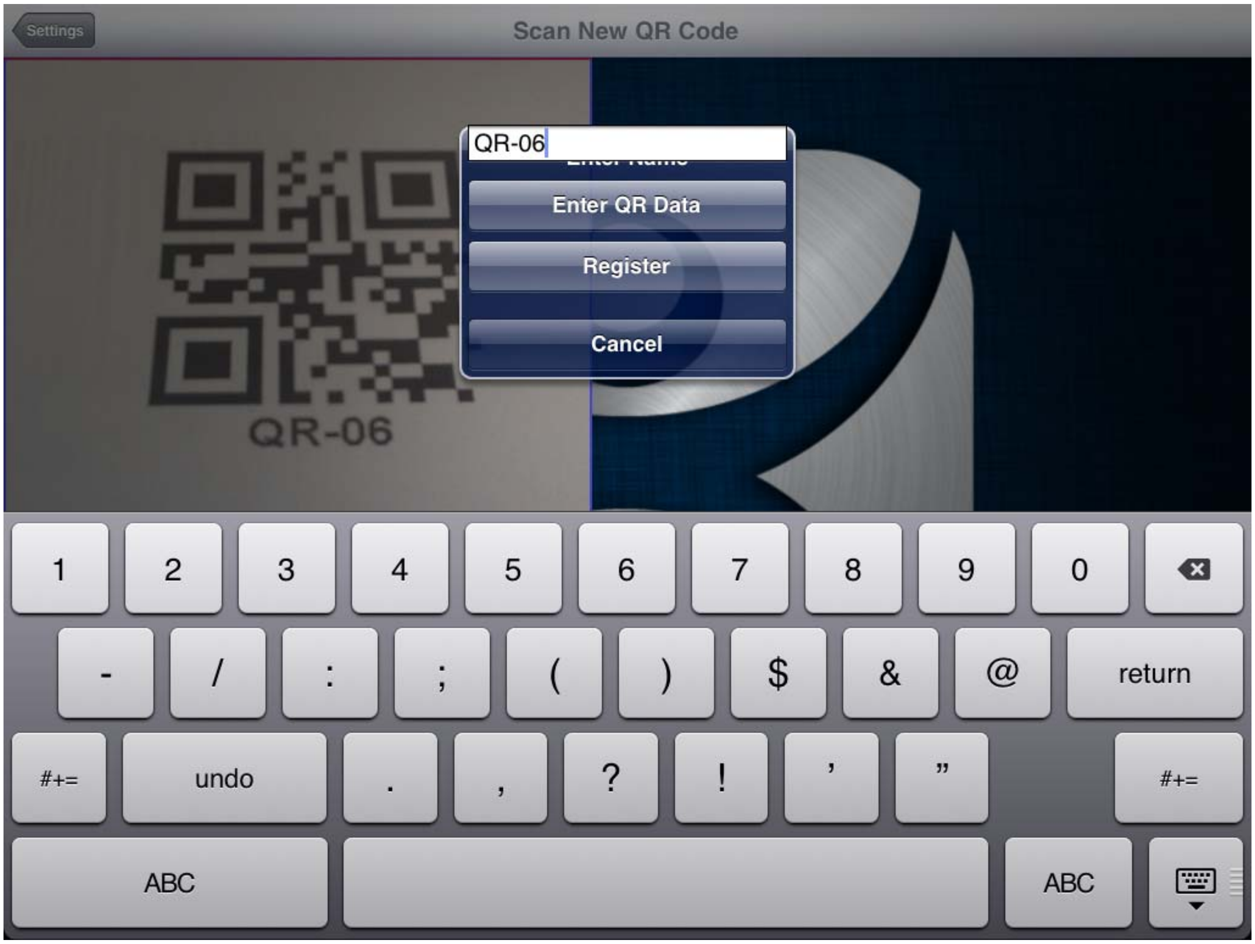
**Cobalt**
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile06_PBS

**Blue21**
Primary: 10.7.10.21
Secondary: (None)
Terminal Name: (None)

*Select Configuration*

The program will display the Configuration screen to allow you to pick which ThinManager Server to register the QR codes with.

Select your ThinManager Server from the list of ThinManager Servers.



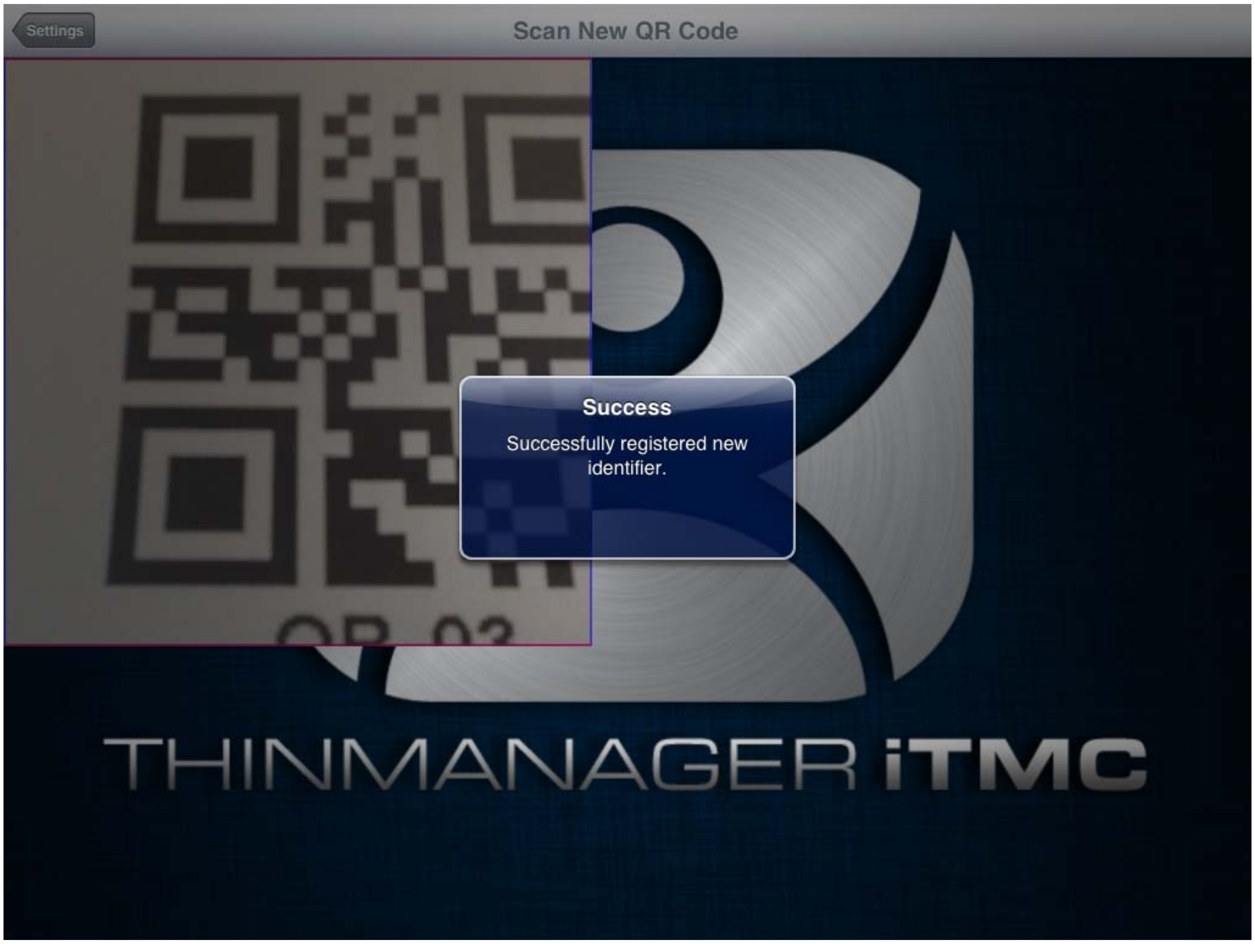
*Scan New QR Code and Enter Name*

The **Scan New QR Code** window will open the camera of the iPad.

Point the camera at the resolver. If you scan a QR code or bar code a dialog will open allowing you to enter a name and to register it.

Enter a name in the field.

Select the ***Register*** button.

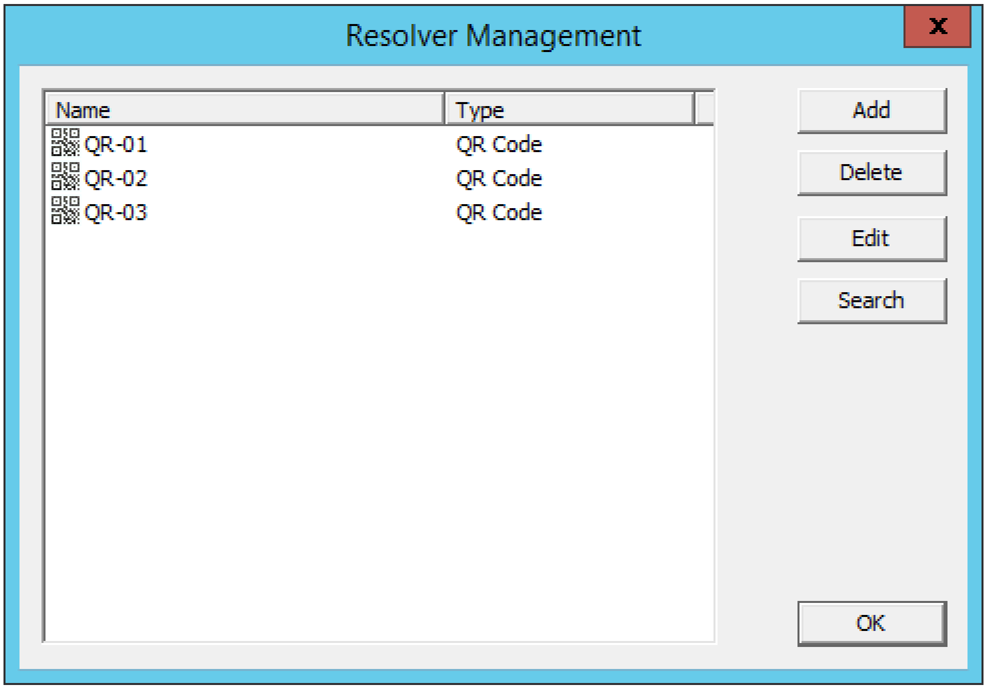


Success

Successfully registered new identifier.

*Successful QR Code Registration*

The dialog will tell you if the QR code registered successfully.


Resolver Management

| Name | Type |
|---|---|
| QR-01 | QR Code |
| QR-02 | QR Code |
| QR-03 | QR Code |

*Resolver Management Window*

The QR code will be registered and entered in the **Resolver Management** window that is accessed by selecting ***Manage > Manage ID's***.

## 5.2. Bluetooth Beacons

ACP supports Bluetooth Beacons that use the Bluetooth Low Energy (LE) standard, which is part of the Bluetooth Core Specification Version 4.0. In order to work with these beacons, your mobile device also needs to support Bluetooth Version 4.0 or newer. In the case of an iPad, this would be any iPad (regular, Mini, Air) that uses the Lightning (new, small) connector.

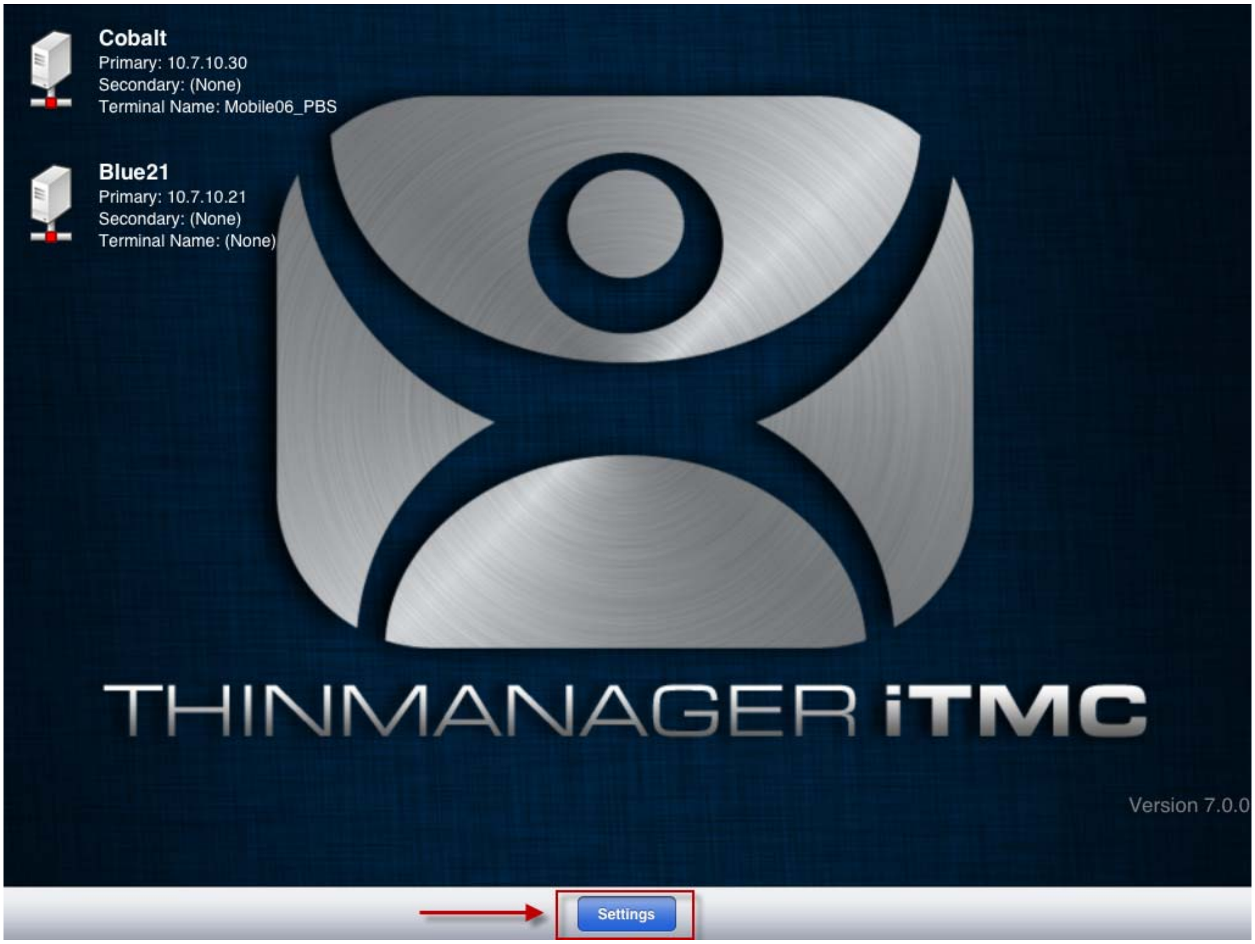
To add new beacons to the system, you can use the mobile device to find them, and add them in a manner similar to the other resolvers. In the case of these devices, you stand at the entry point, and allow the device to get a few readings so that it can get an average measure of the signal strength at that point. It will automatically add 10 to this number for the exit point. You can adjust these in ThinManager in the Manage Resolvers section.

Relevance can use Bluetooth beacons as location resolvers. These need to be Low Energy Bluetooth beacons that provide a unique name in the Advertising Packet.

See Fencing and Sub-Locations on page 124.

The procedure is:

- Add Bluetooth beacons.
- Launch the iTMC program and select the ***Settings*** button.
- Select the ***Register Bluetooth Beacon*** command under Relevance Resolvers. If you have more than one ThinManager Server defined you will need to pick the ThinManager Server you want the Bluetooth beacons registered.
- Select the desired Bluetooth beacon from the generated list.
- Enter a name and select ***Register***.
- The Bluetooth beacon will be registered and entered in the **Resolver Management** window that is accessed by selecting ***Manage > Manage ID's***.



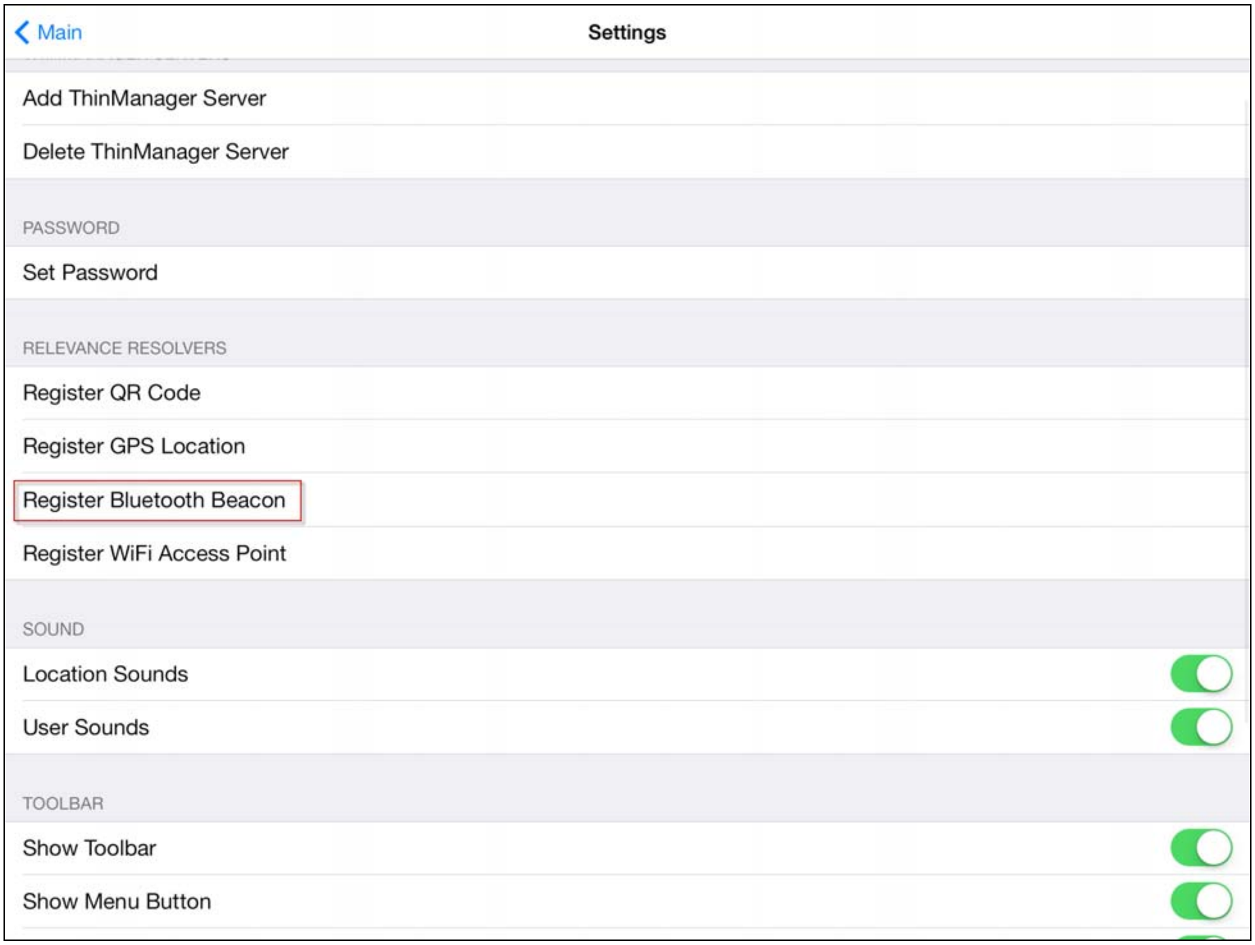
Cobalt
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile06_PBS

Blue21
Primary: 10.7.10.21
Secondary: (None)
Terminal Name: (None)

*ThinManager iTMC Program*

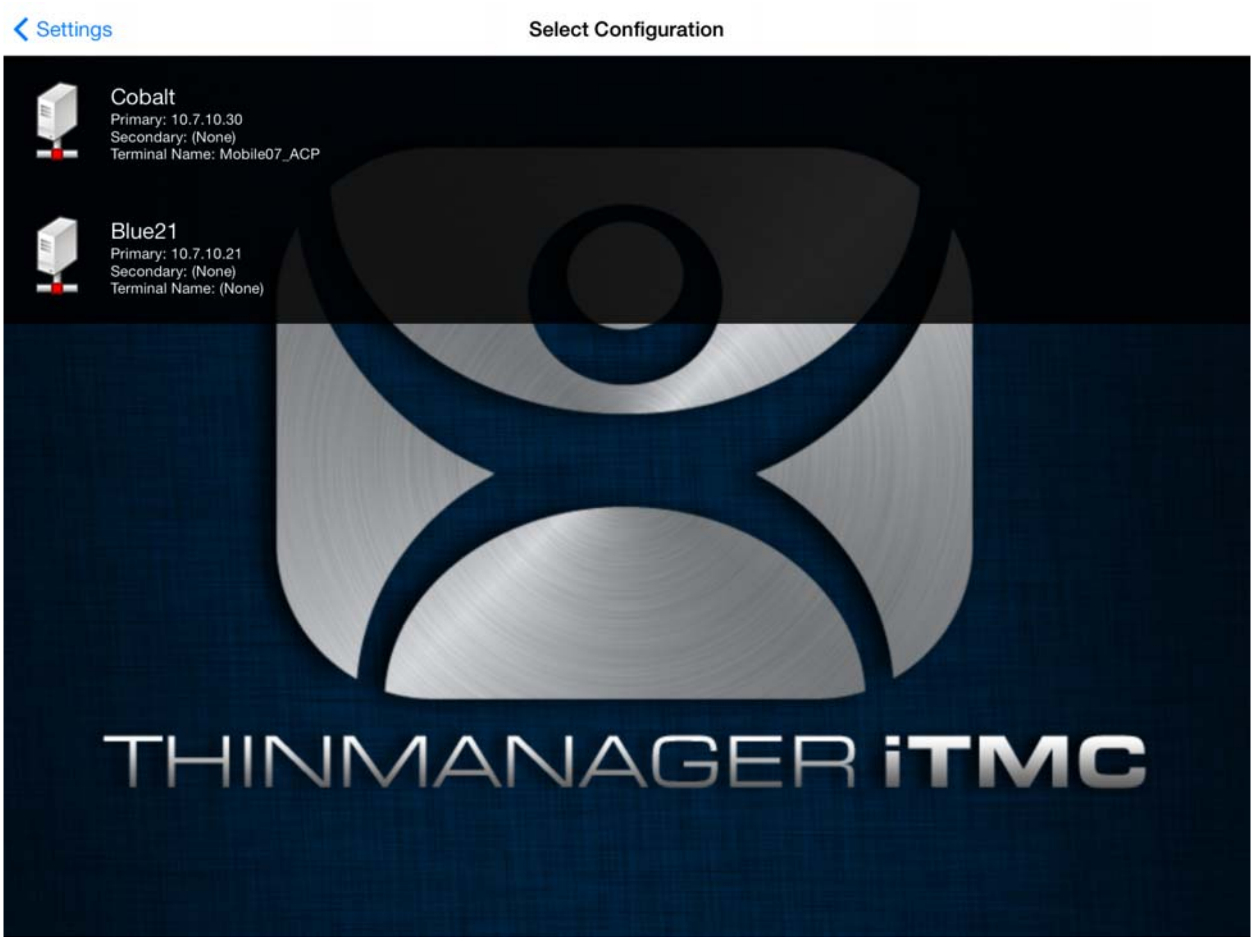
Open the **iTMC** program on the iPad.

Select the ***Settings*** button on the bottom to launch the **Settings** screen.



*Register Bluetooth Beacon Command on the Settings Page*

Select the *Register Bluetooth Beacon* command on the **Settings** page.

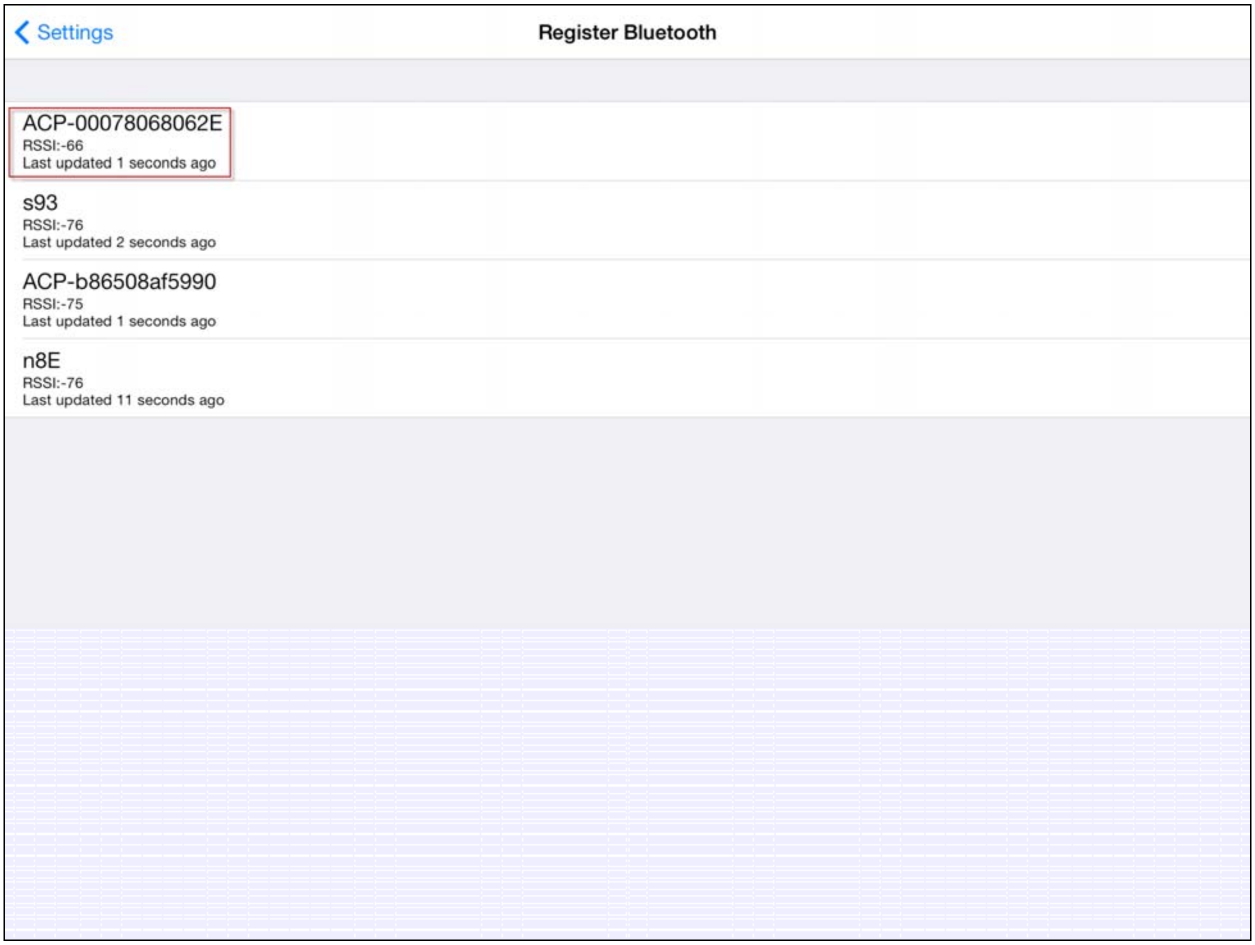


Cobalt
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile07_ACP

Blue21
Primary: 10.7.10.21
Secondary: (None)
Terminal Name: (None)

*Select Configuration*

Select the ThinManager Server you want to register the Bluetooth beacon on.



ACP-00078068062E
RSSI:-66
Last updated 1 seconds ago

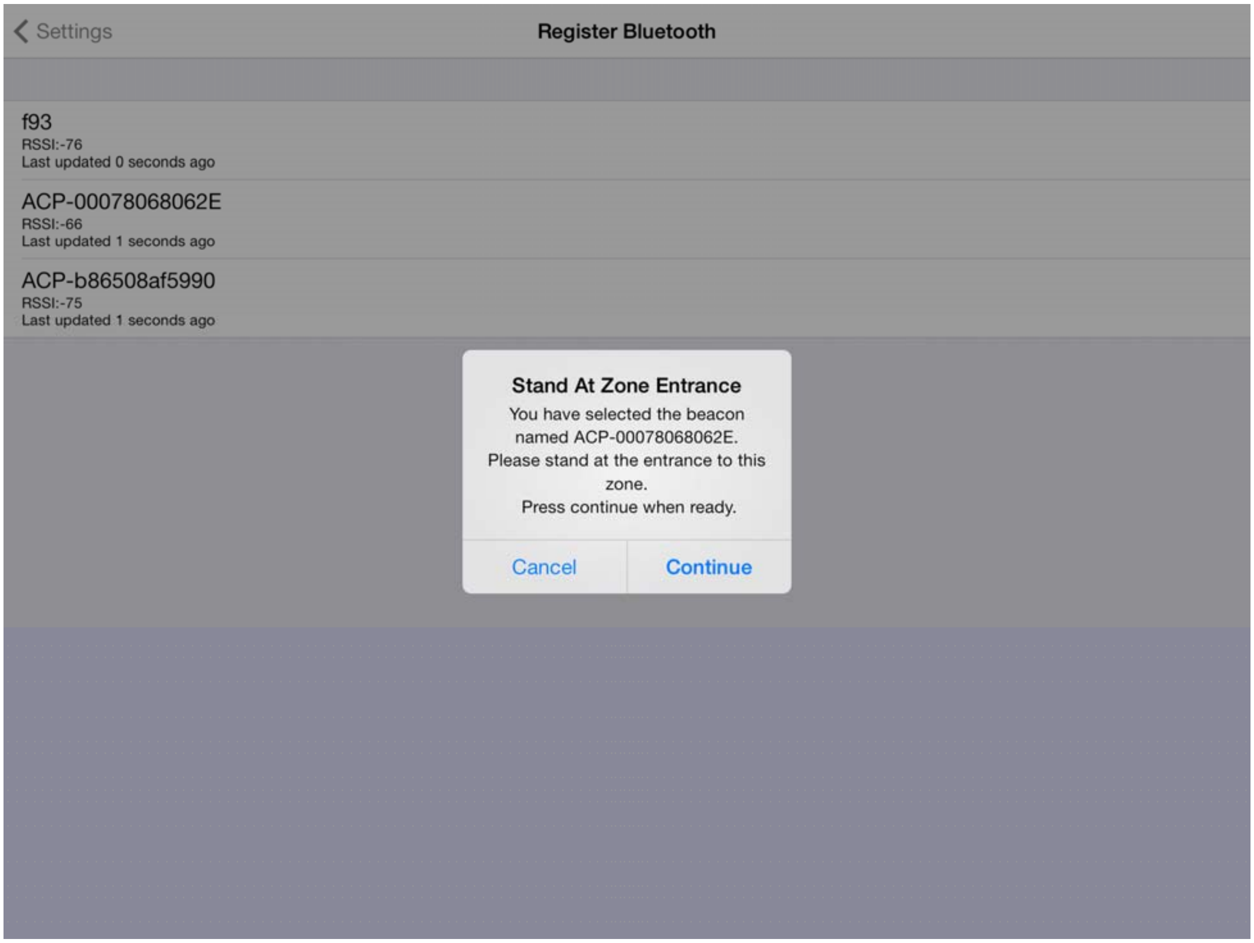
s93
RSSI:-76
Last updated 2 seconds ago

ACP-b86508af5990
RSSI:-75
Last updated 1 seconds ago

n8E
RSSI:-76
Last updated 11 seconds ago

*Available Bluetooth Beacons*

The mobile device will search for the Bluetooth beacons and list them on the Register Bluetooth page. Select the desired Bluetooth beacon.



f93
RSSI:-76
Last updated 0 seconds ago

ACP-00078068062E
RSSI:-66
Last updated 1 seconds ago

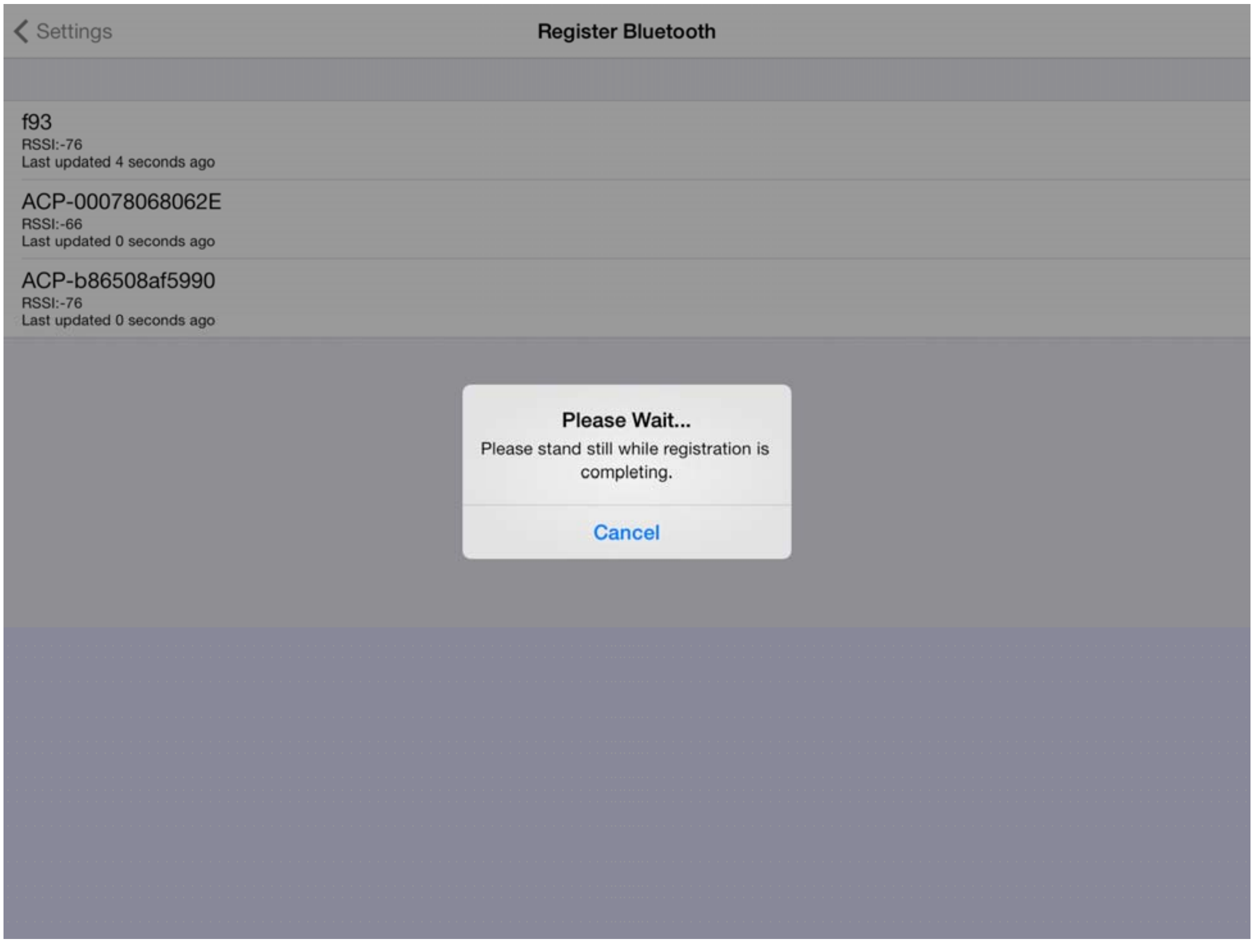
ACP-b86508af5990
RSSI:-75
Last updated 1 seconds ago

**Stand At Zone Entrance**

You have selected the beacon named ACP-00078068062E. Please stand at the entrance to this zone.
Press continue when ready.

*Stand At Zone Entrance Dialog*

The mobile device will prompt you to go to the location that you want as the entrance point for the zone. Select ***Continue***.



Register Bluetooth

f93
RSSI:-76
Last updated 4 seconds ago

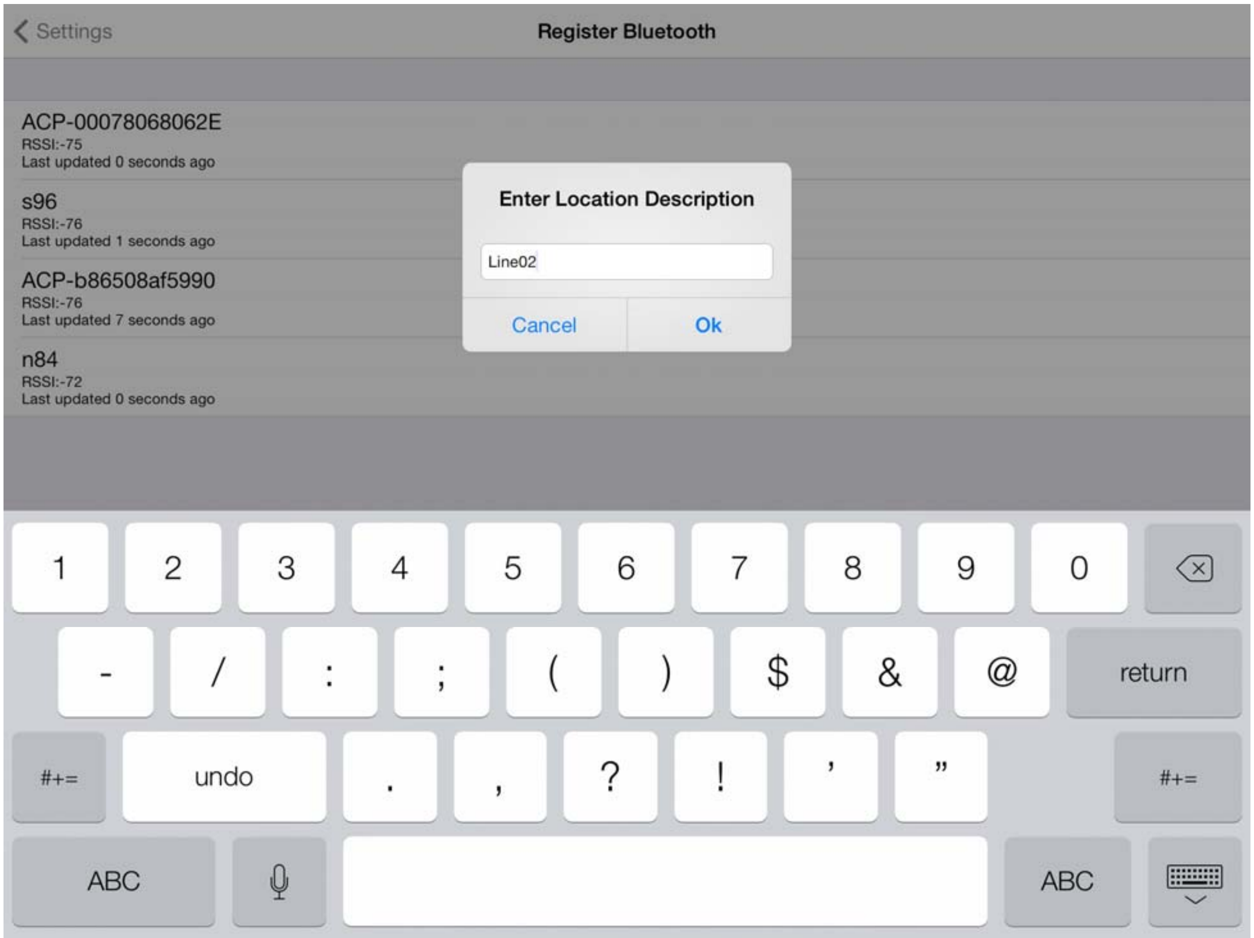
ACP-00078068062E
RSSI:-66
Last updated 0 seconds ago

ACP-b86508af5990
RSSI:-76
Last updated 0 seconds ago

Please Wait...
Please stand still while registration is completing.

*Please Wait Message*

It may take a few seconds to allow the device to read the signal strength to create the resolver data.



ACP-00078068062E
RSSI:-75
Last updated 0 seconds ago

s96
RSSI:-76
Last updated 1 seconds ago

ACP-b86508af5990
RSSI:-76
Last updated 7 seconds ago

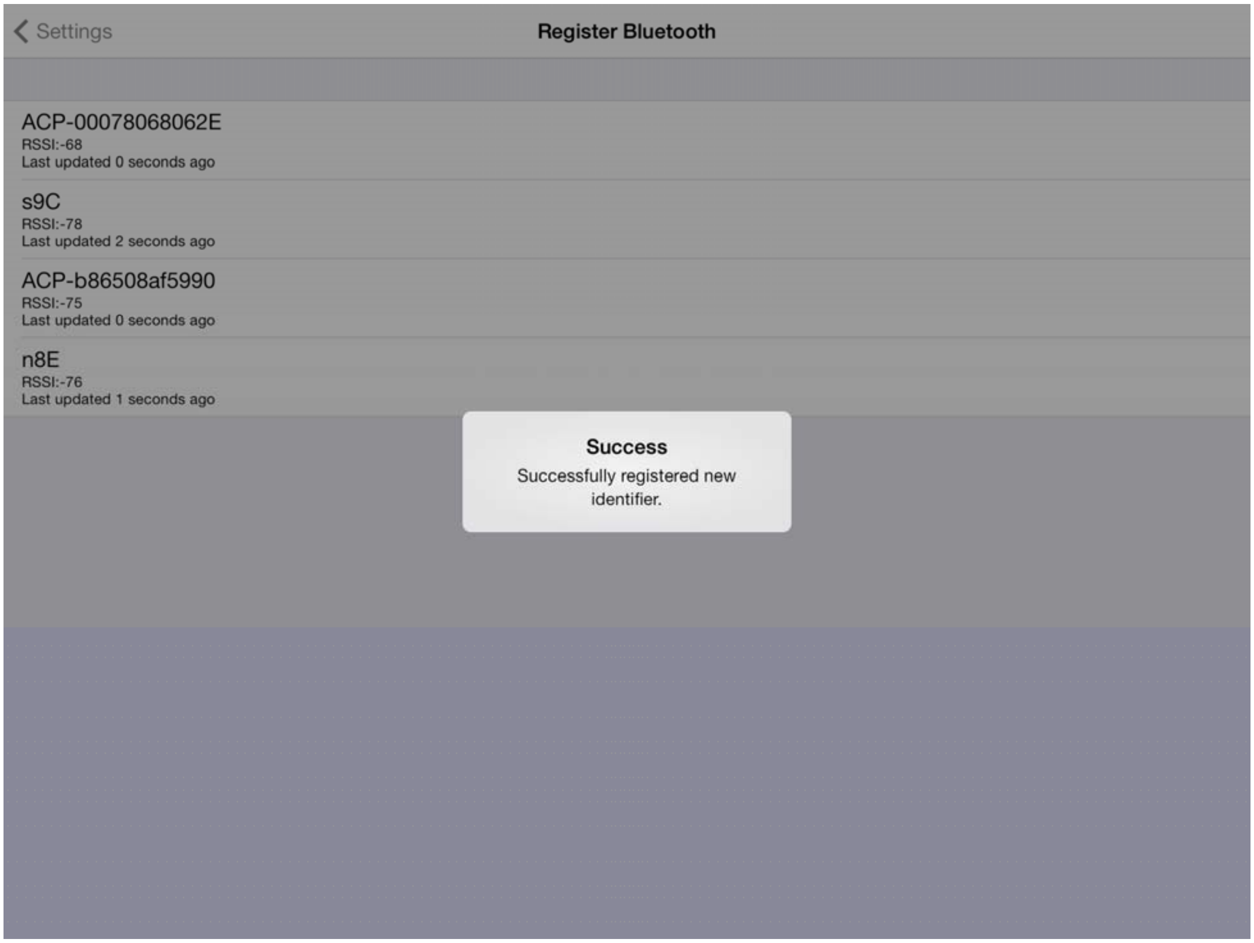
n84
RSSI:-72
Last updated 0 seconds ago

Enter Location Description

Line02

*Enter Location Description*

Once the data has been collected and the Bluetooth beacon is registered you will be prompted to name the location.



ACP-00078068062E
RSSI:-68
Last updated 0 seconds ago

s9C
RSSI:-78
Last updated 2 seconds ago

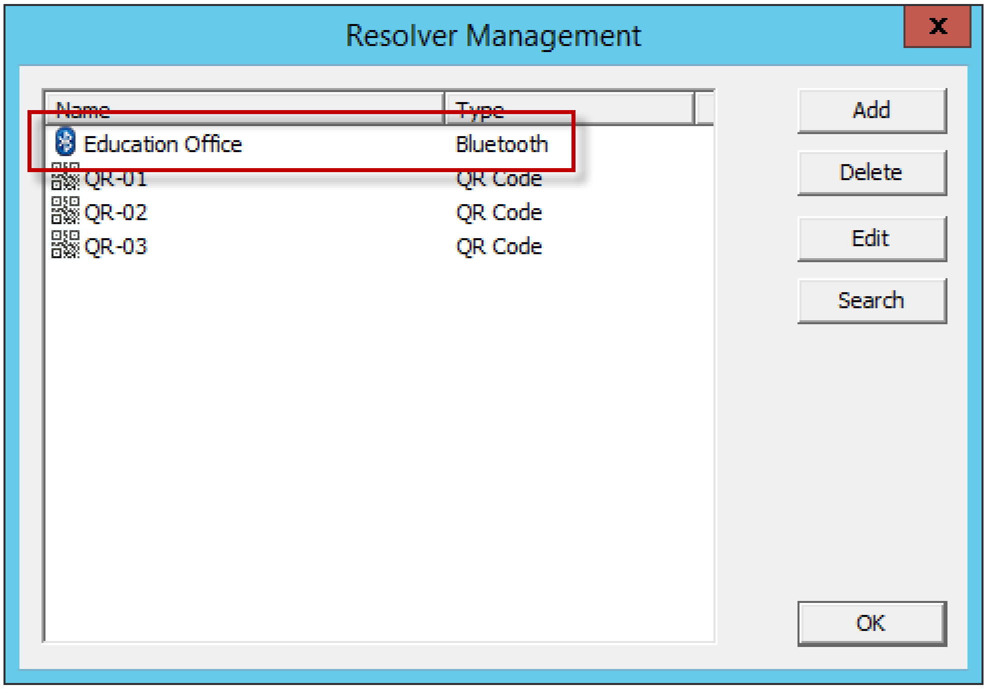
ACP-b86508af5990
RSSI:-75
Last updated 0 seconds ago

n8E
RSSI:-76
Last updated 1 seconds ago

Success
Successfully registered new identifier.

*Success Dialog*

The program will confirm successful Bluetooth registrations.



| Name | Type |
|---|---|
| Education Office | Bluetooth |
| QR-01 | QR Code |
| QR-02 | QR Code |
| QR-03 | QR Code |

*Resolver Management Window*

The QR code will be registered and entered in the **Resolver Management** window that is accessed by selecting ***Manage > Manage ID's***.

## 5.3. Wi-Fi Access Points

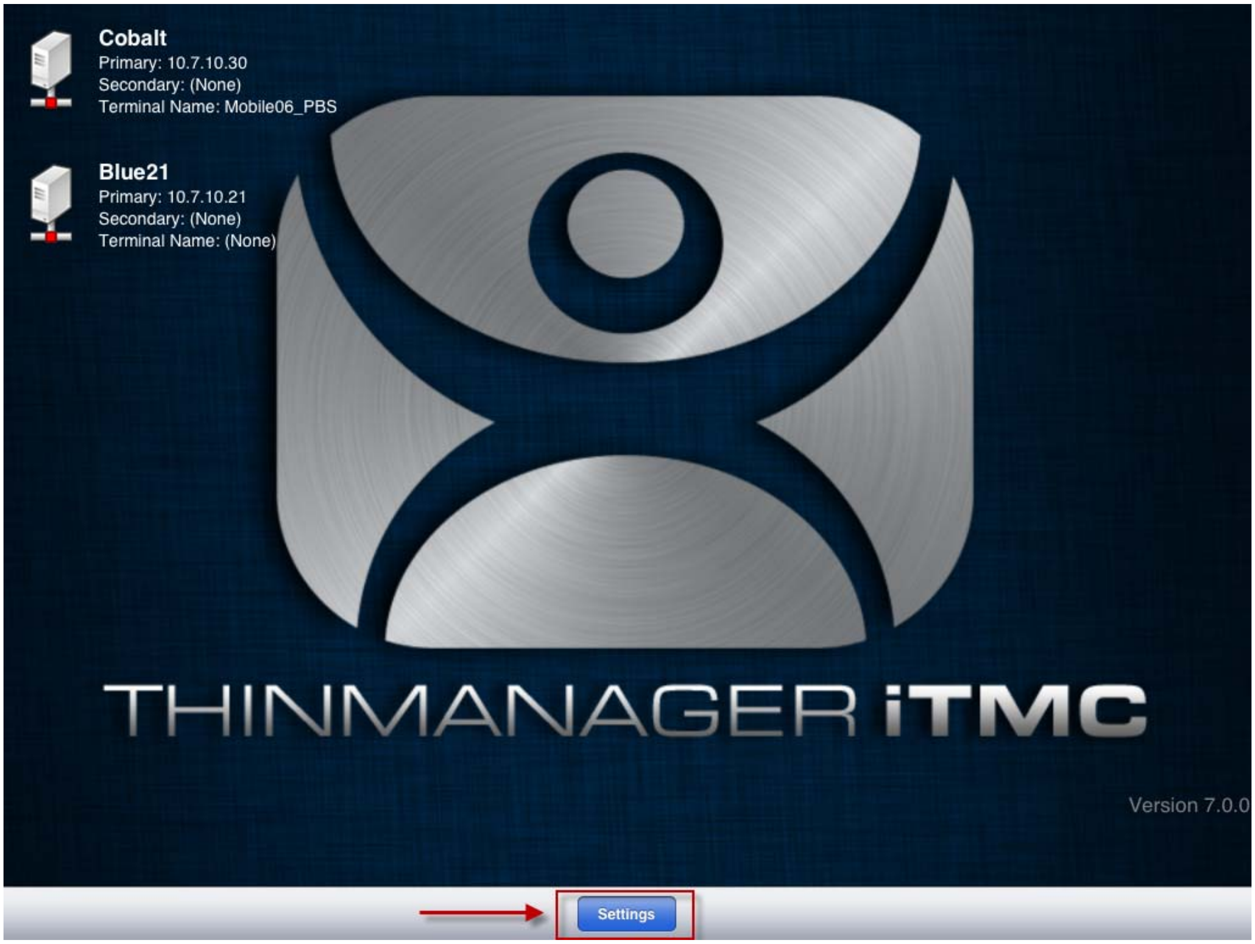
This resolver is based on the BSSID (a MAC type address) of the Wireless Access Point (WAP) that the mobile device is connected to at the time.

Relevance can use Wi-Fi access points as location resolvers. Wi-Fi Resolvers work well in situations where there are multiple access points. Membership of a network will give you a access to functions in that area.

See Fencing and Sub-Locations on page 124.

The procedure is:

- Add Wi-Fi access points.
- Launch the iTMC program and select the ***Settings*** button.
- Select the ***Register Wi-Fi Access Point*** command under Relevance Resolvers. If you have more than one ThinManager Server defined you will need to pick the ThinManager Server you want the QR code registered.
- Select the access point from the generated list.
- Enter a name and select Register.
- The Wi-Fi Access Point will be registered and entered in the **Resolver Management** window that is accessed by selecting ***Manage > Manage ID's***.



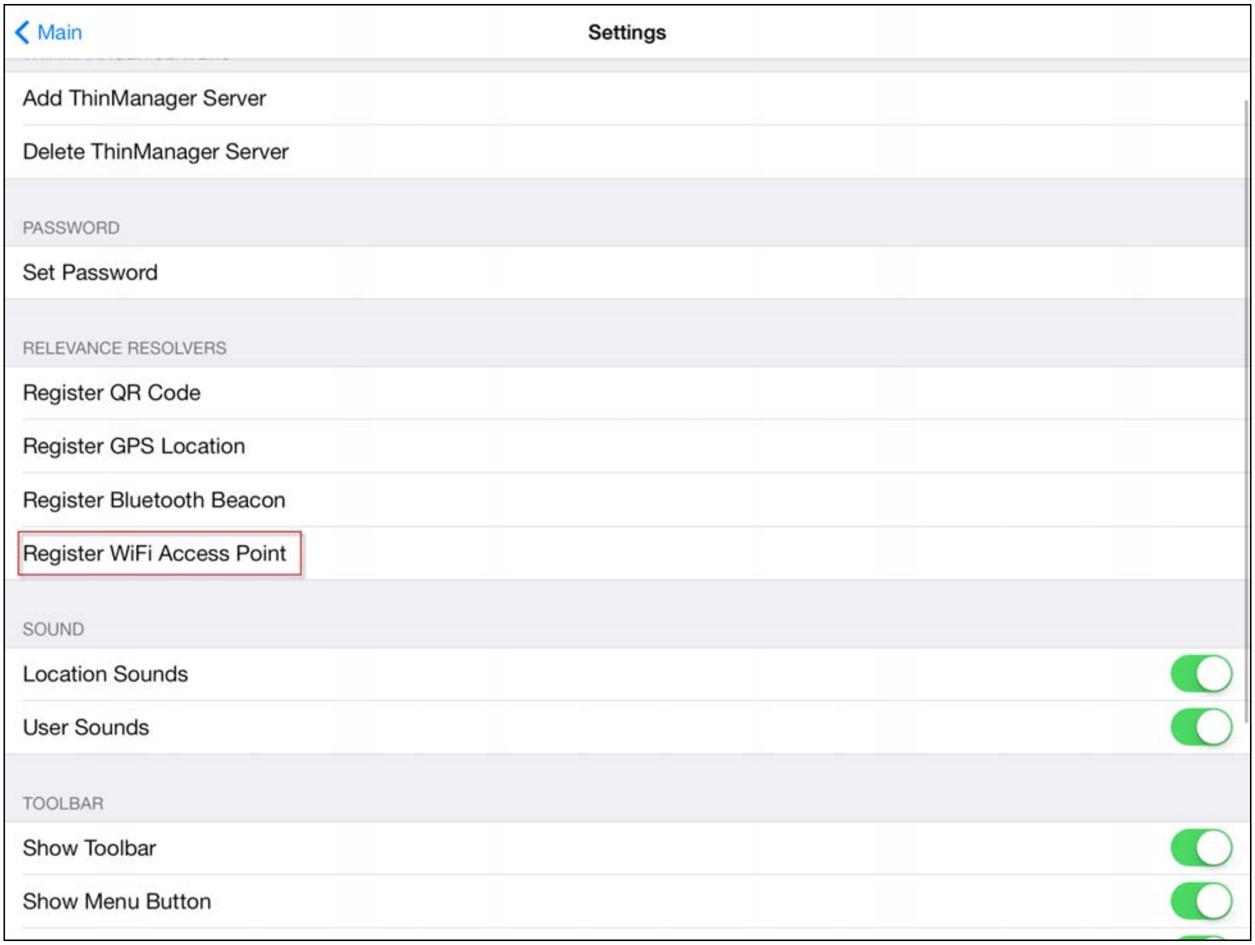
**Cobalt**
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile06_PBS

**Blue21**
Primary: 10.7.10.21
Secondary: (None)
Terminal Name: (None)

*ThinManager iTMC Program*

Open the **iTMC** program on the iPad.

Select the ***Settings*** button on the bottom to launch the **Settings** screen.



Location Sounds ●

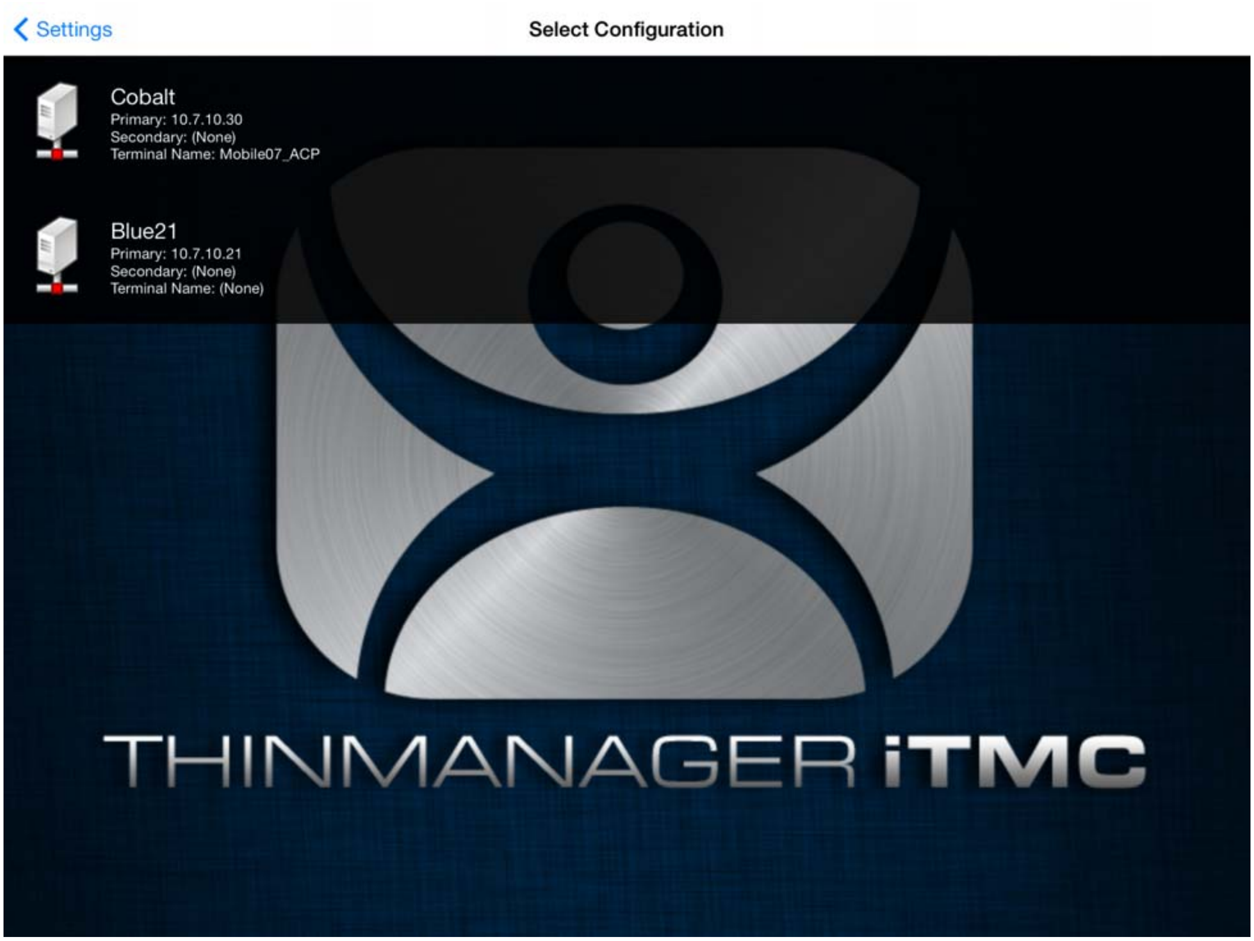
User Sounds ●

Show Toolbar ●

Show Menu Button ●

*Register Wi-Fi Access Point Command on the Settings Page*

Select the ***Register Wi-Fi Access Point*** command on the **Settings** page.

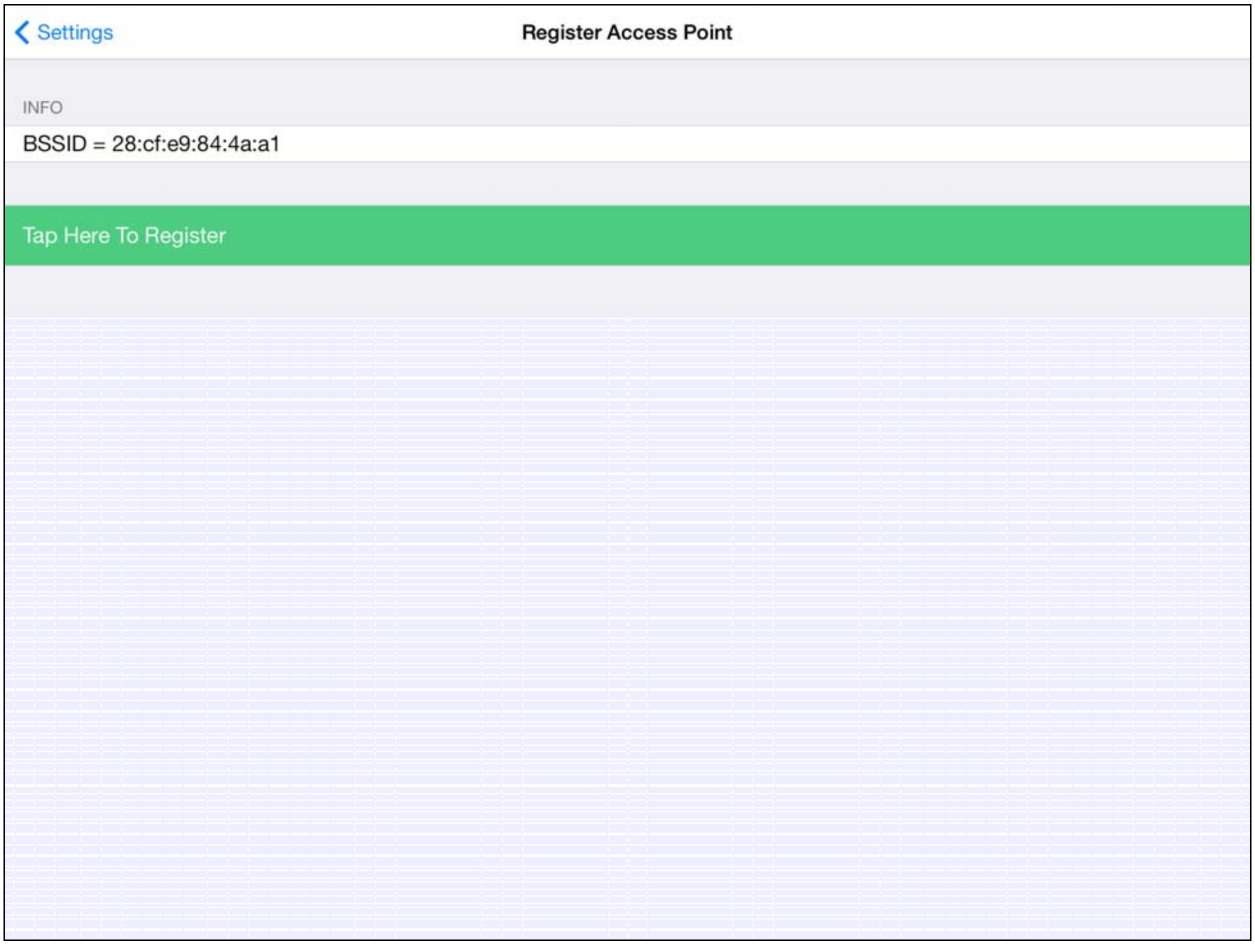


Cobalt
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile07_ACP

Blue21
Primary: 10.7.10.21
Secondary: (None)
Terminal Name: (None)

*Select Configuration*

Select the ThinManager Server you want to register the Wi-Fi access point on.

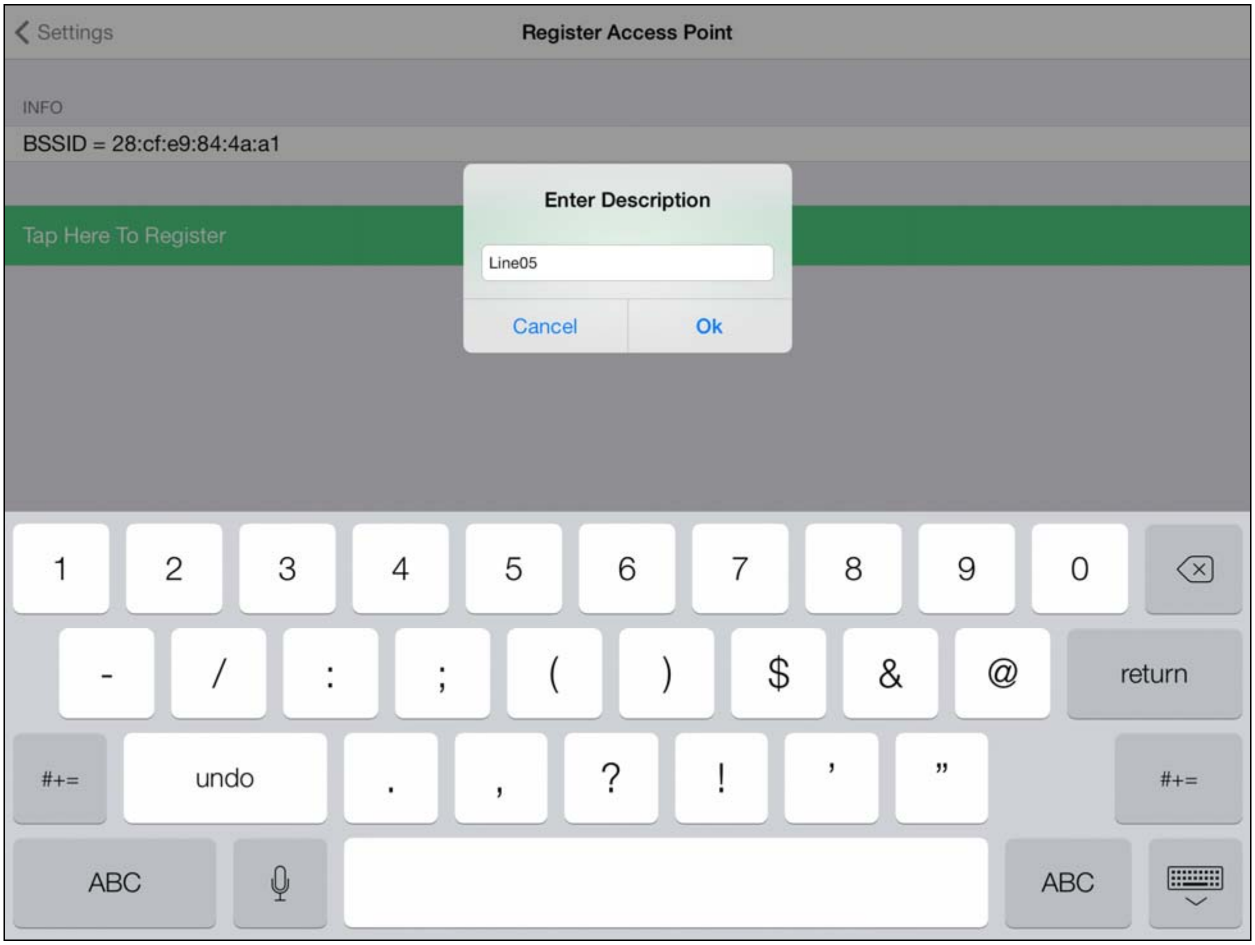


BSSID = 28:cf:e9:84:4a:a1

*Available Wi-Fi Access Points*

The mobile device will search for Wi-Fi Access Points and list them on the **Register Access Points** page.

Select the desired access point.



Register Access Point

INFO

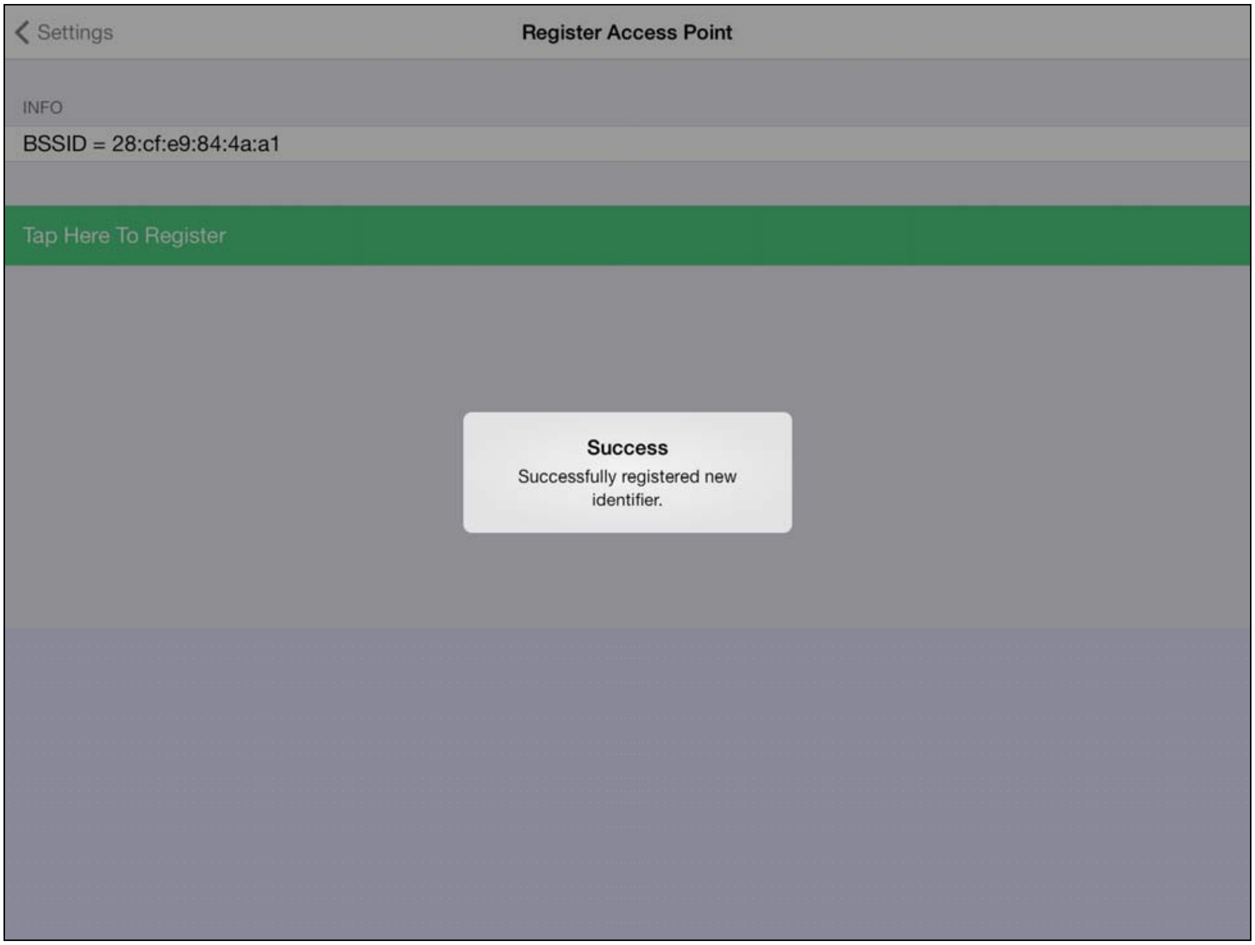
BSSID = 28:cf:e9:84:4a:a1

Enter Description

Line05

*Enter Location Description*

Once the data has been collected and the Wi-Fi access point is registered you will be prompted to name the location.

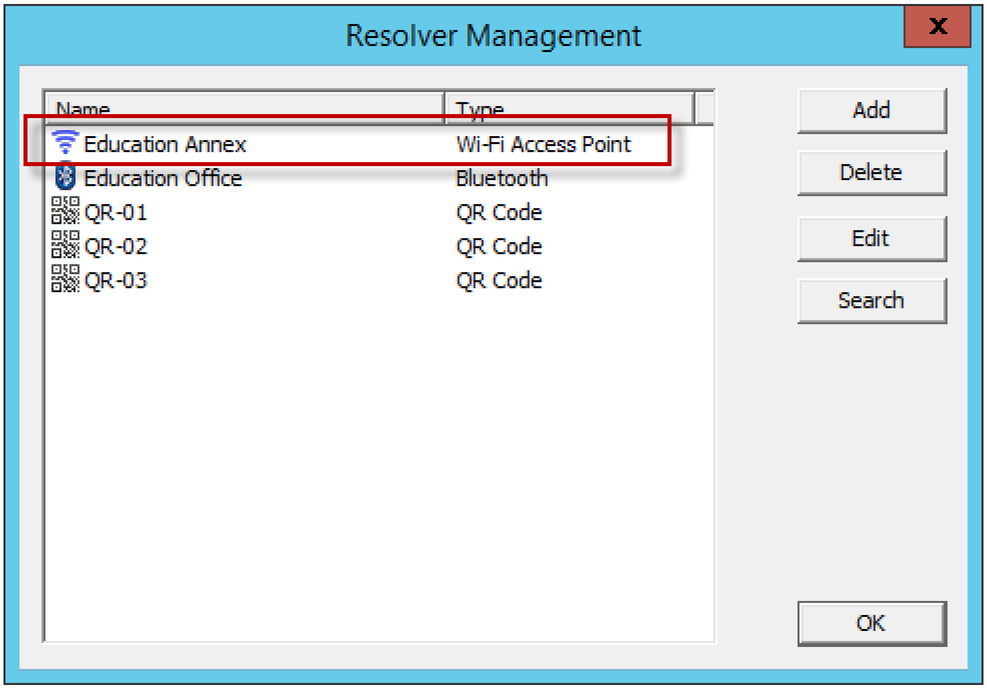


BSSID = 28:cf:e9:84:4a:a1

Success
Successfully registered new identifier.

*Success Dialog*

The program will confirm successful Wi-Fi registrations.



| Name | Type |
|---|---|
| Education Annex | Wi-Fi Access Point |
| Education Office | Bluetooth |
| QR-01 | QR Code |
| QR-02 | QR Code |
| QR-03 | QR Code |

*Resolver Management Window*

The QR code will be registered and entered in the **Resolver Management** window that is accessed by selecting ***Manage > Manage ID's***.

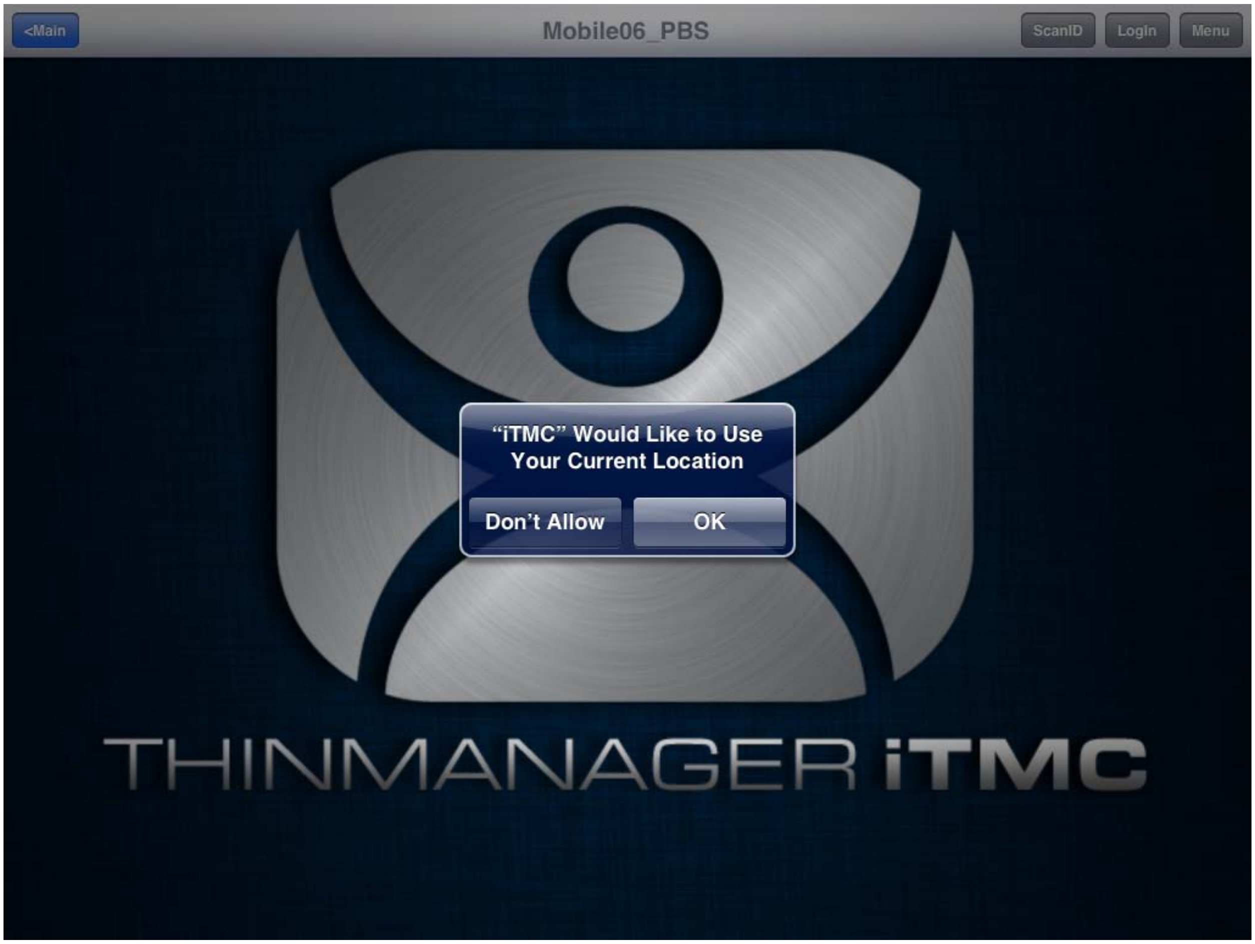
## 5.4. GPS

Relevance can use Global Positioning, or GPS, as a location resolver. The iTMC program uses the build in GPS system to identify the location.

The Global Positioning System resolver type works well for outdoor areas. It can be used to create a large Parent Location. You set up so that you must be within the GPS area for other actions to take place.

When you assign the GPS resolver to a Location, you can set the range for altitude and radius from your initial point. This will give you the ability to create a rather large area for something like an oil field, a large processing facility, or an entire building complex. You could also use it for finer resolution of individual buildings, tanks, pump jacks, or other smaller outdoor areas.

As you assign these types of resolvers, it would be best to try and avoid overlap of GPS areas.



*ThinManager iTMC Home Screen*

When a mobile device first connects to ThinManager to receive its configuration a dialog will open stating that “iTMC Would Like to Use Your Current Location”. This enables the GPS location tool.

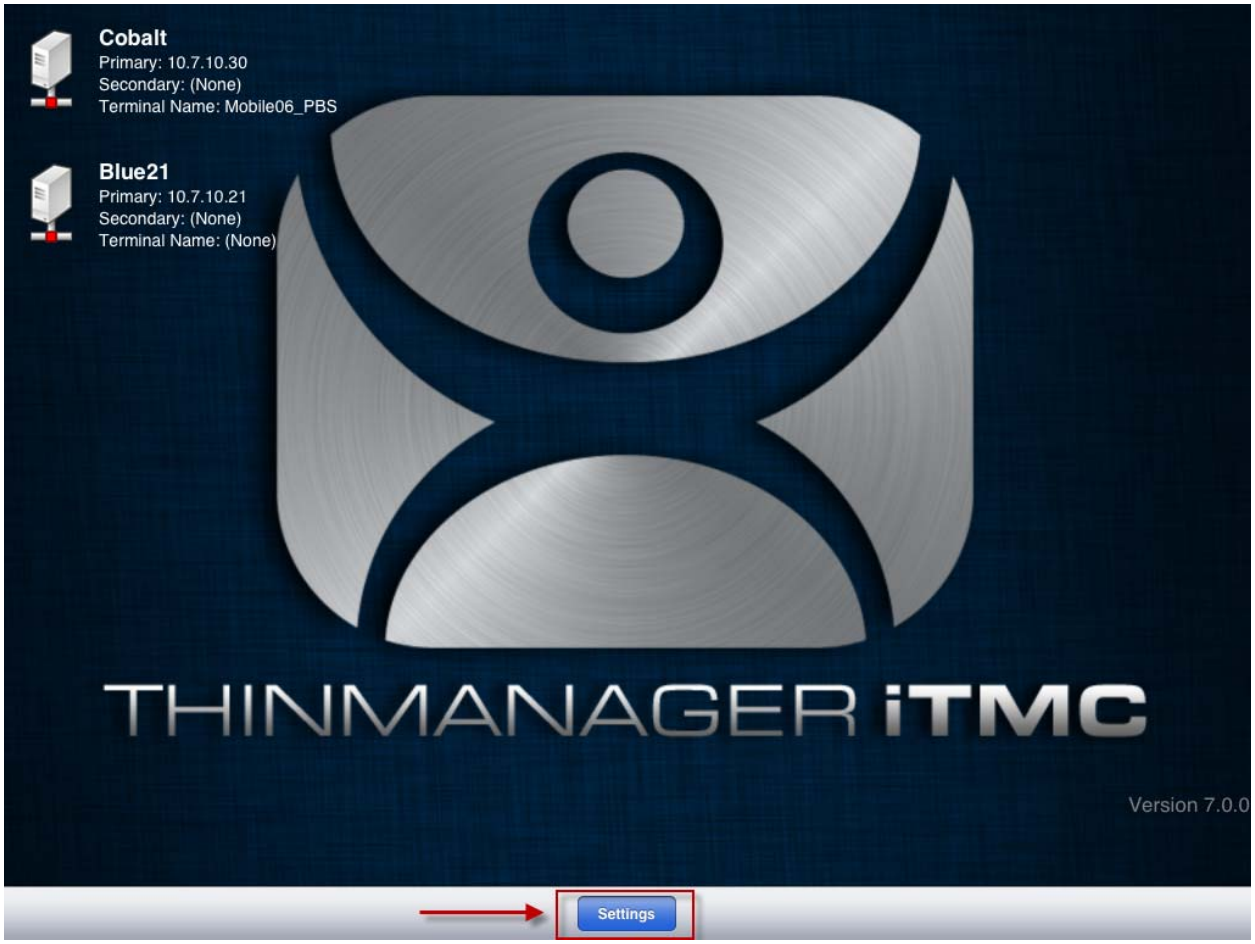
- ✓ **Allow the “Use Current Location” to enable GPS as a resolver on this mobile device.**

Select the ***OK*** button to allow GPS as a resolver.

See Fencing and Sub-Locations on page 124.

The procedure for using GPS is:

- Allow GPS on the mobile device and in the iTMC program.
- Launch the iTMC program and select the Settings button.
- Select the ***Register GPS Location*** command under **Relevance Resolvers**. If you have more than one ThinManager Server defined you will need to pick the ThinManager Server you want the QR code registered.
- Select the location to register.
- Enter a name for the location.
- The GPS location will be registered and entered in the **Resolver Management** window that is accessed by selecting ***Manage > Manage ID's***.



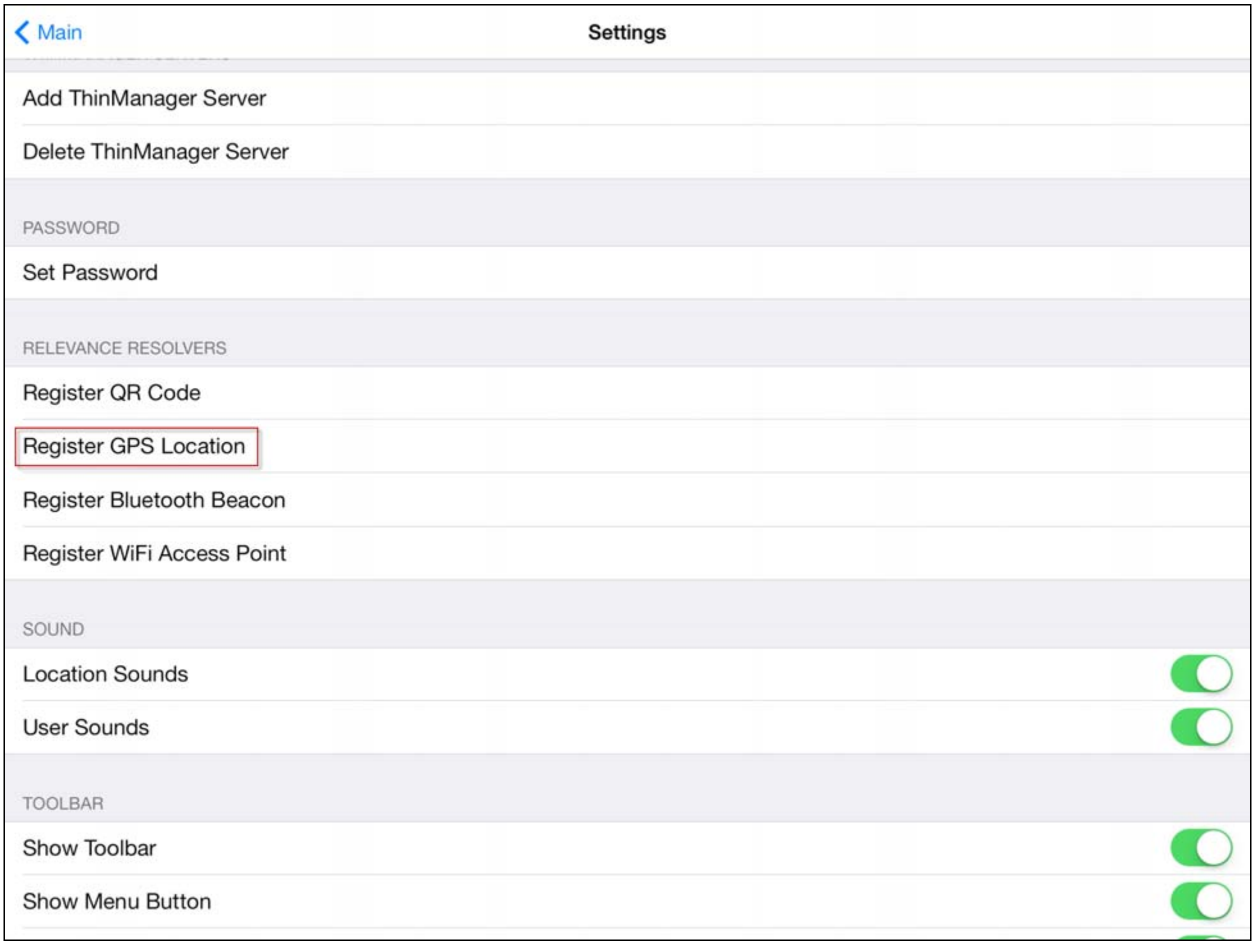
**Cobalt**
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile06_PBS

**Blue21**
Primary: 10.7.10.21
Secondary: (None)
Terminal Name: (None)

*ThinManager iTMC Program*

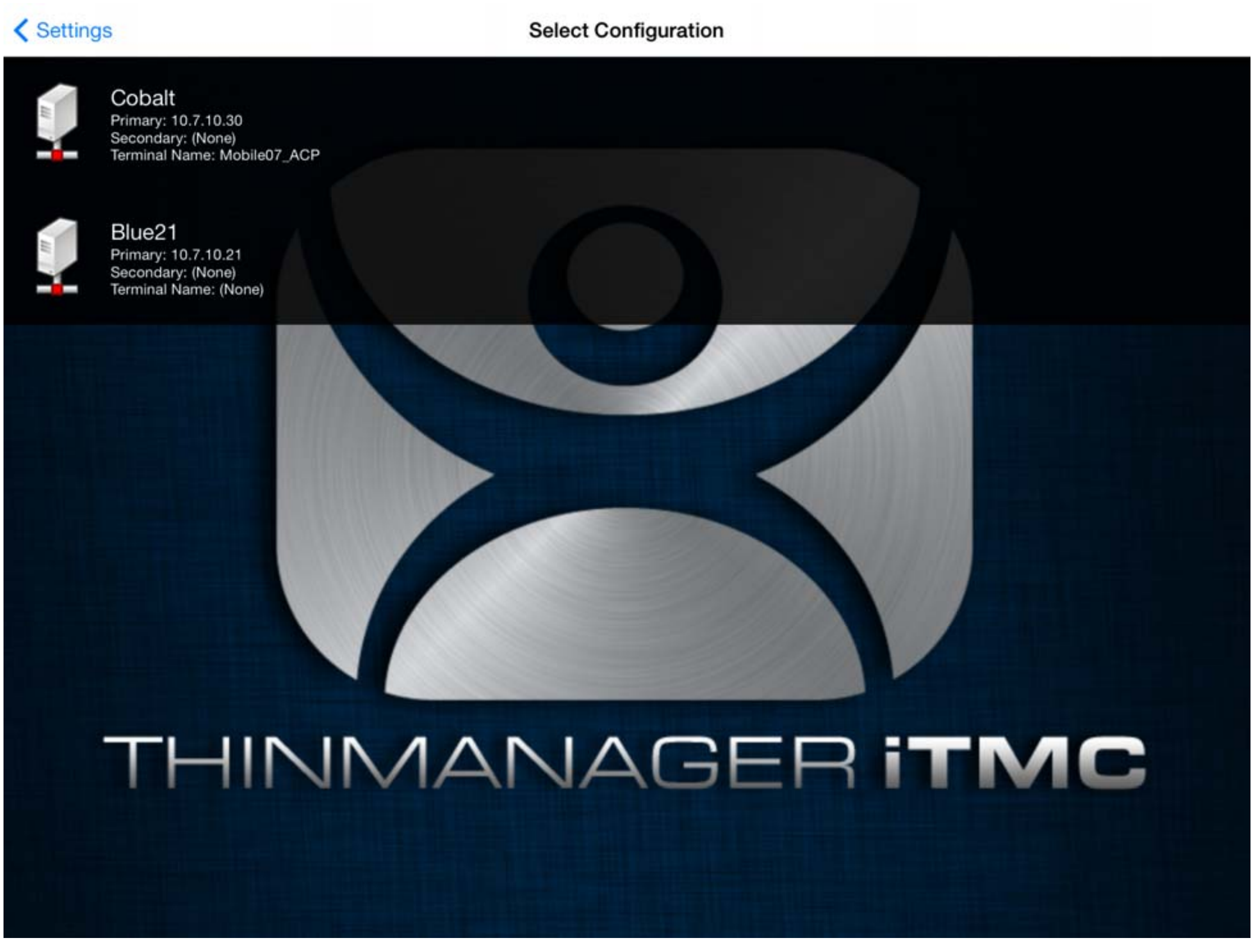
Open the **iTMC** program on the iPad.

Select the ***Settings*** button on the bottom to launch the **Settings** screen.



*Register GPS Location Command on the Settings Page*

Select the ***Register GPS Location*** command on the **Settings** page.

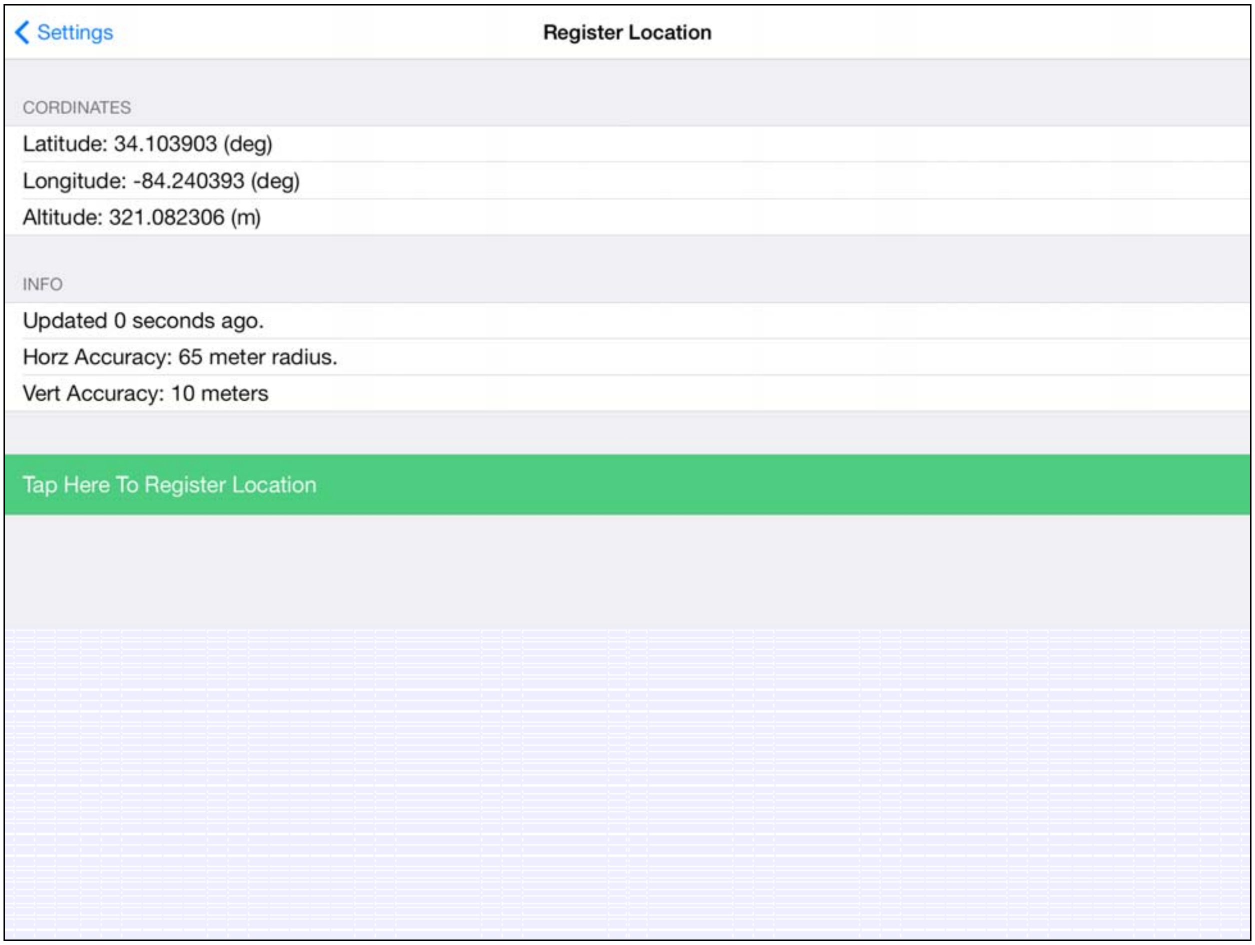


Cobalt
Primary: 10.7.10.30
Secondary: (None)
Terminal Name: Mobile07_ACP

Blue21
Primary: 10.7.10.21
Secondary: (None)
Terminal Name: (None)

*Select Configuration*

Select the ThinManager Server you want to register the GPS location.



CORDINATES

Latitude: 34.103903 (deg)

Longitude: -84.240393 (deg)

Altitude: 321.082306 (m)

INFO

Updated 0 seconds ago.

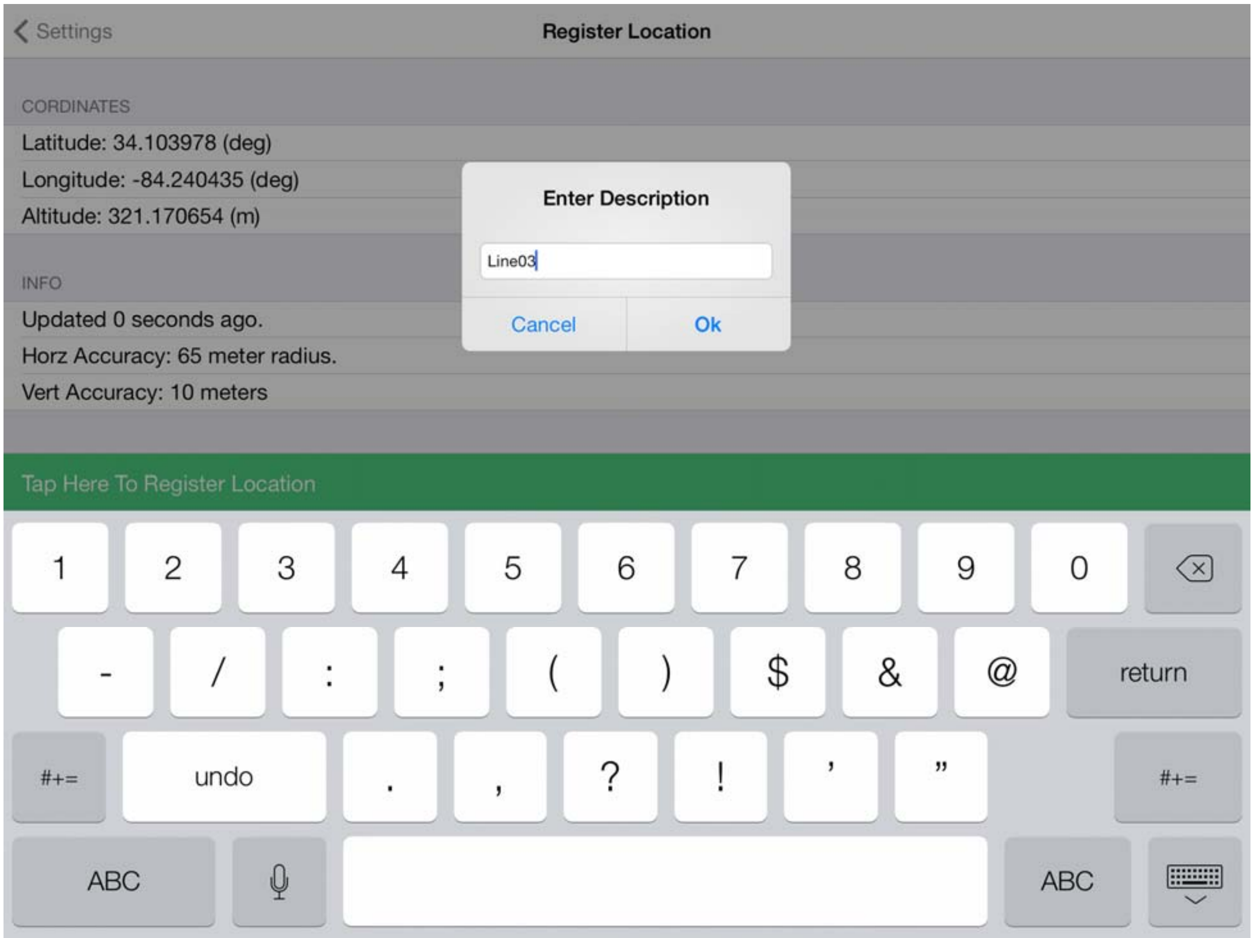
Horz Accuracy: 65 meter radius.

Vert Accuracy: 10 meters

*GPS Location*

The mobile device will access the GPS location and list tit on the **Register Location** page.

Select the ***Register Location*** command.



CORDINATES

Latitude: 34.103978 (deg)

Longitude: -84.240435 (deg)

Altitude: 321.170654 (m)

INFO

Updated 0 seconds ago.

Horz Accuracy: 65 meter radius.

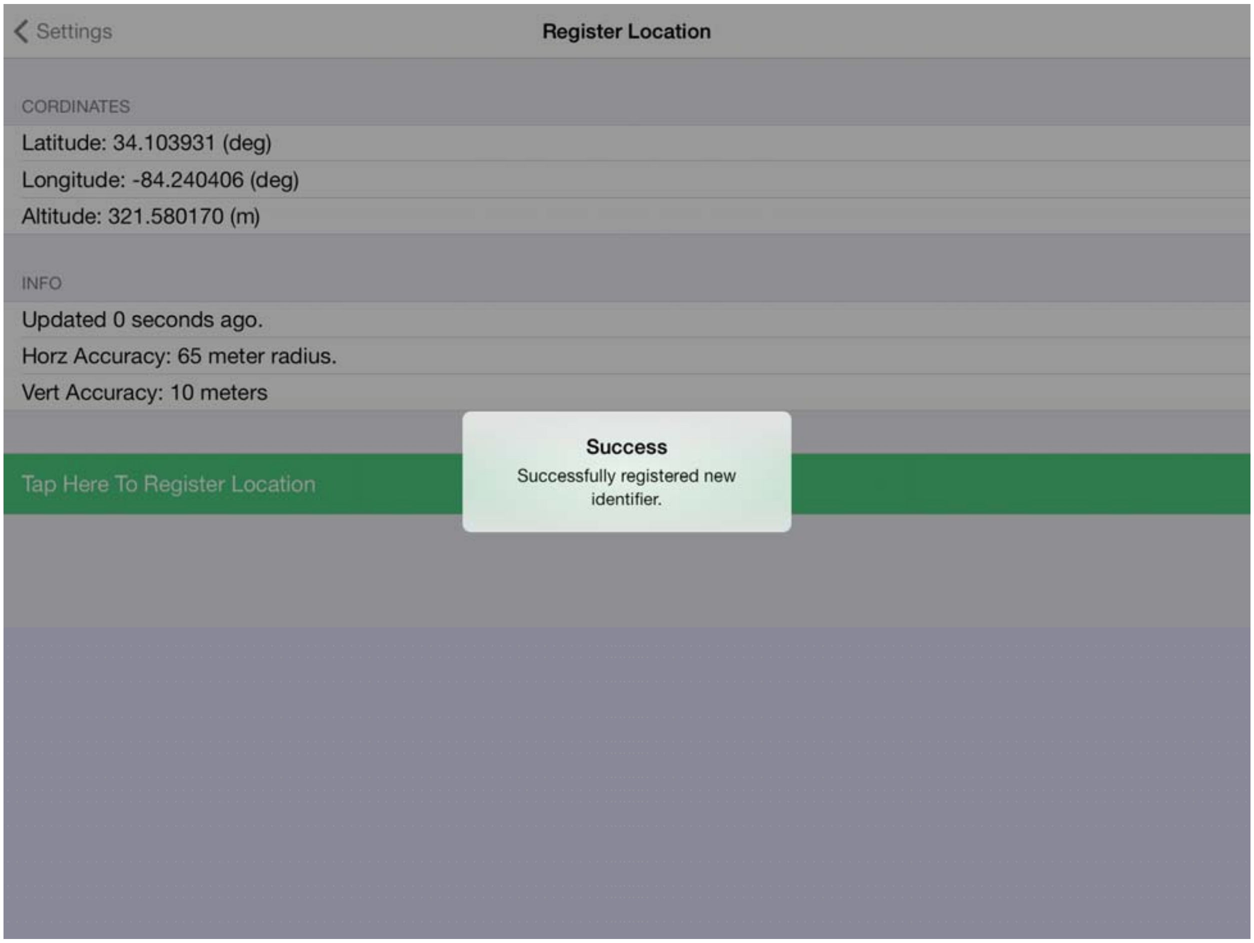
Vert Accuracy: 10 meters

Enter Description

Line03

*Enter Location Description*

Once the data has been collected and the GPS coordinates are registered you will be prompted to name the location.



Latitude: 34.103931 (deg)

Longitude: -84.240406 (deg)

Altitude: 321.580170 (m)

Updated 0 seconds ago.

Horz Accuracy: 65 meter radius.

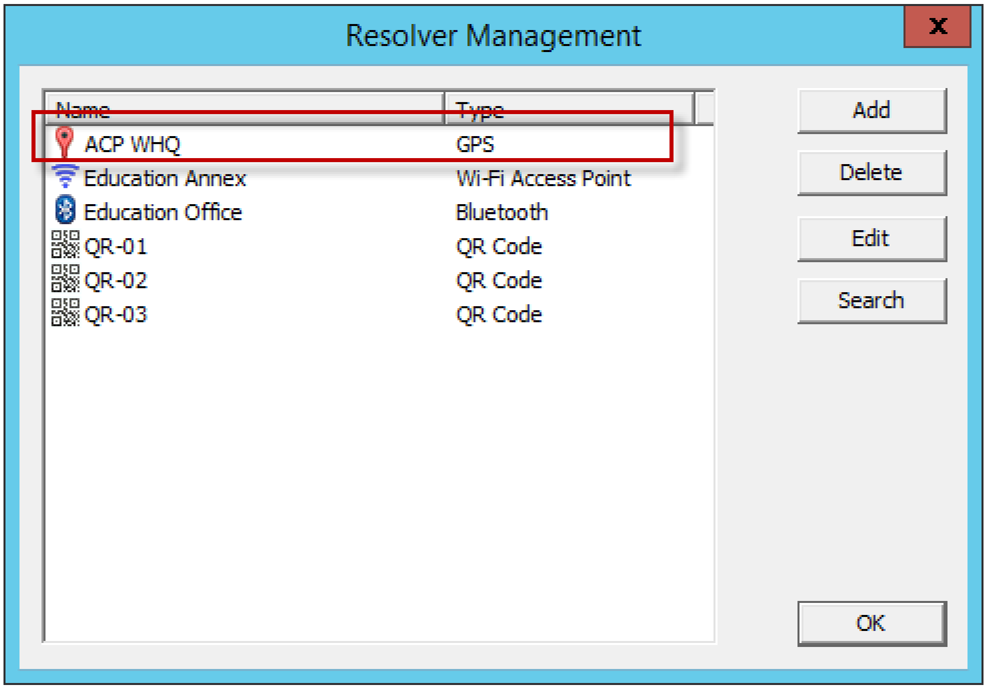
Vert Accuracy: 10 meters

**Success**

Successfully registered new identifier.

*Success Dialog*

The program will confirm successful GPS registrations.



| Name | Type |
|---|---|
| ACP WHQ | GPS |
| Education Annex | Wi-Fi Access Point |
| Education Office | Bluetooth |
| QR-01 | QR Code |
| QR-02 | QR Code |
| QR-03 | QR Code |

*Resolver Management Window*

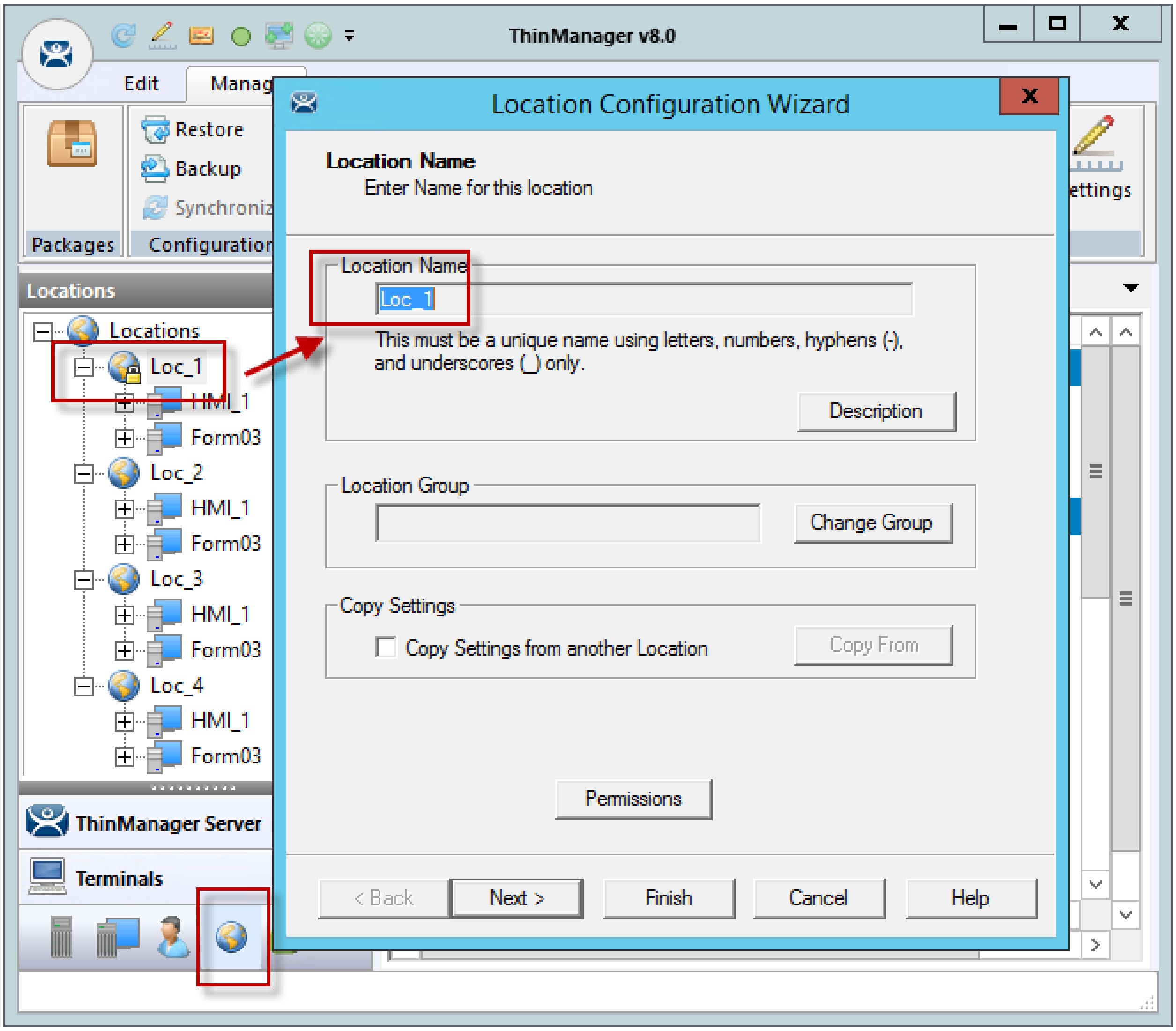
The GPS location will be registered and entered in the **Resolver Management** window that is accessed by selecting ***Manage > Manage ID’s***.

See Fencing and Sub-Locations on page 124.

# 6. Adding Actions to Resolver Codes

The Resolvers can be applied to a location and can have an action associated with it so that using a resolver will launch a particular action.

Select a **Location** tree from the Tree selector at the bottom of the ThinManager tree.

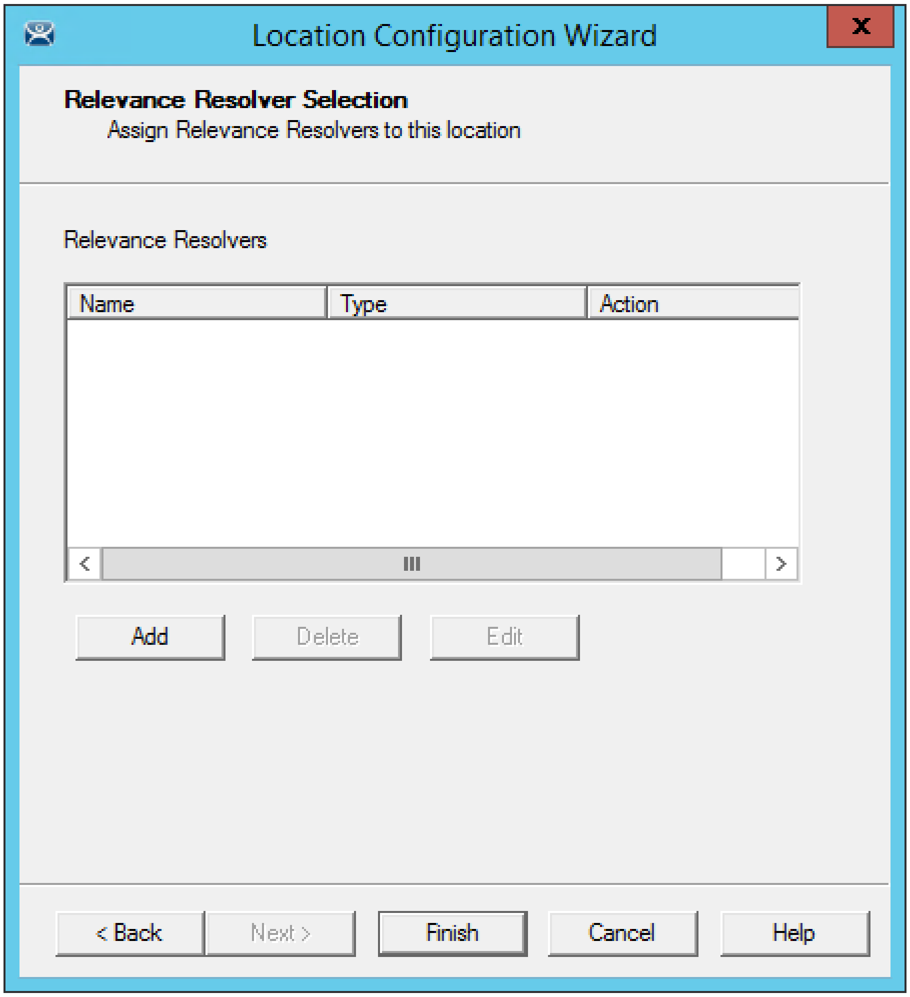


Location Name: Loc_1

☐ Copy Settings from another Location

*Location Configuration Wizard*

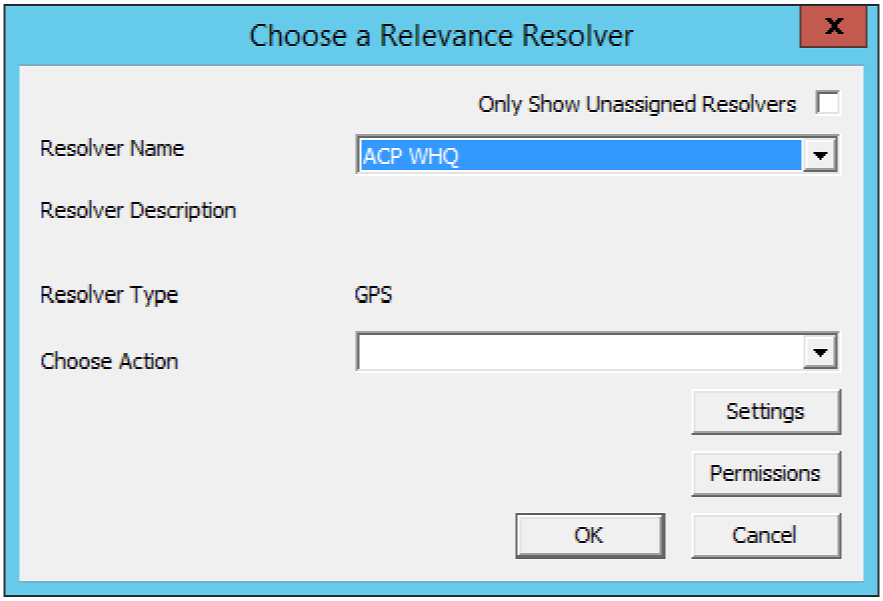
Double click a location to open the Location Configuration Wizard.


Location Configuration Wizard
Relevance Resolver Selection
Assign Relevance Resolvers to this location
Relevance Resolvers
Name
Type
Action
Add
Delete
Edit
< Back
Next >
Finish
Cancel
Help

*Relevance Resolver Selection Page*

Navigate to the **Relevance Resolver Selection** page.

Select the ***Add*** button to open the **Choose a Relevance Resolver** window.



Choose a Relevance Resolver

Only Show Unassigned Resolvers □

Resolver Name: ACP WHQ

Resolver Description

Resolver Type: GPS

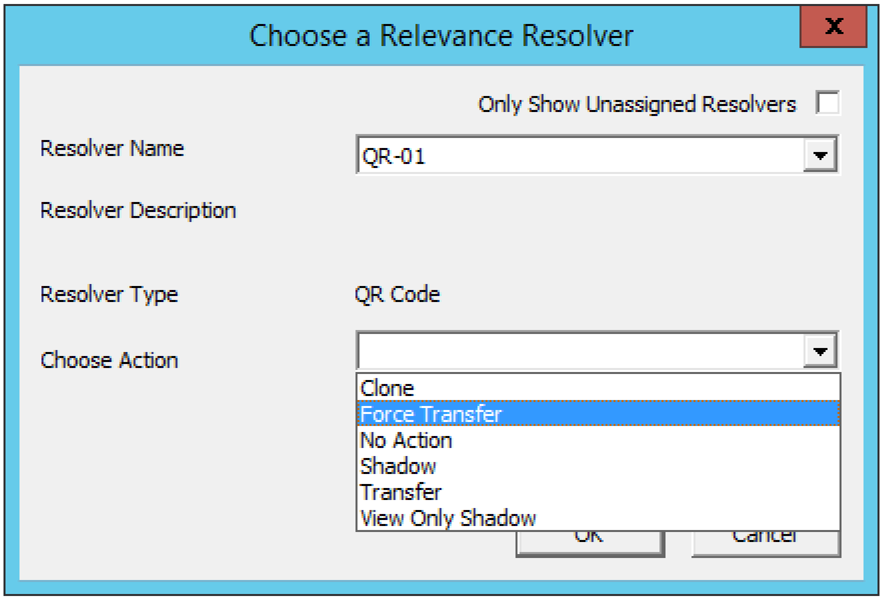
Choose Action

*Choose a Relevance ID Window*

The **Choose a Relevance ID** window has a drop-down to let you select which resolver to configure.

You can limit the list to unassigned resolvers by checking the ***Only Show Unassigned Resolvers*** checkbox. This prevents duplication.

Select a resolver in the ***Resolver Name*** drop-down.



Choose a Relevance Resolver

Only Show Unassigned Resolvers □

Resolver Name: QR-01

Resolver Description

Resolver Type: QR Code

Choose Action

*Choose Action Selection*

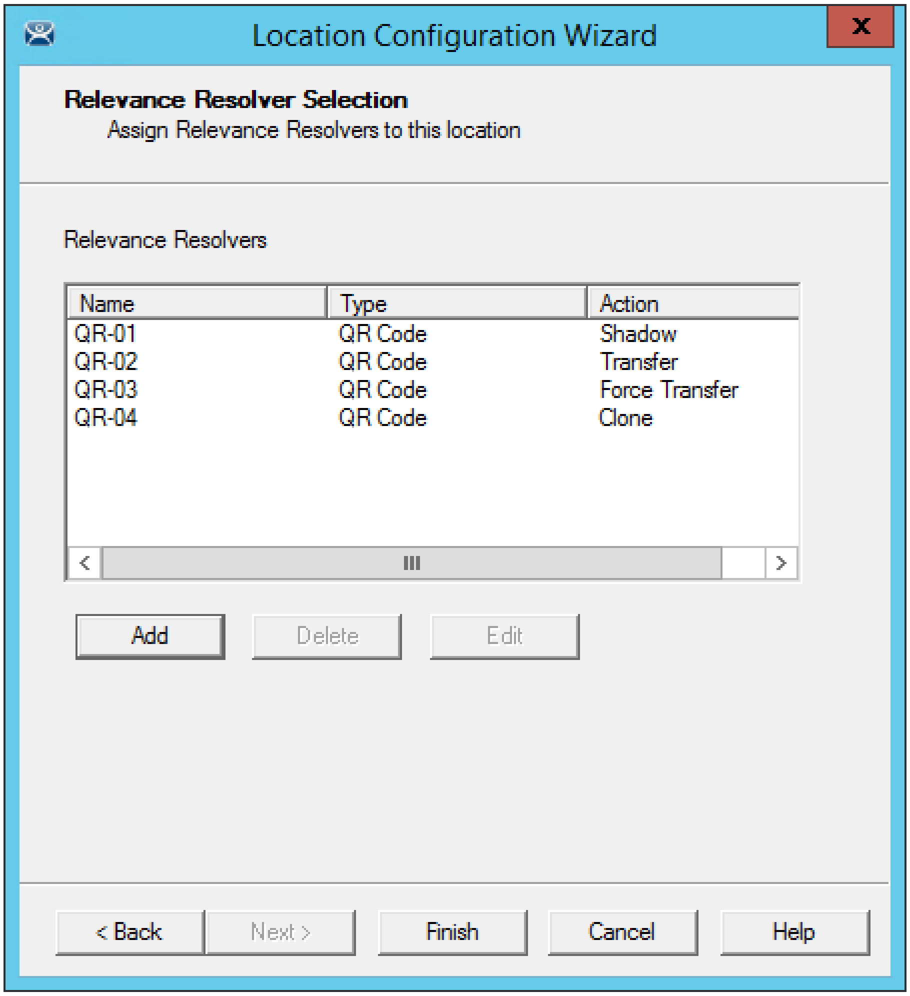
The ***Resolver Type*** will show whether it is a QR code, Bluetooth beacon, GPS, or Wi-Fi resolver.

There are six actions that can be applied to the Relevance ID:

- **Clone** – This creates a new duplicate session using the mobile device Windows account.
- **Force Transfer** – This automatically diverts the location graphic to the mobile device.
- **No Action** – This initiates no new action.
- **Shadow** – This provides an interactive shadow on the mobile device.

- **Transfer** – This diverts the location graphic to the mobile device after operator input.
- **View Only Shadow** – This provides a shadow without allowing any input from the mobile device.

Each location can have several Relevance IDs with different actions.



Location Configuration Wizard

**Relevance Resolver Selection**

Assign Relevance Resolvers to this location

Relevance Resolvers

| Name | Type | Action |
|---|---|---|
| QR-01 | QR Code | Shadow |
| QR-02 | QR Code | Transfer |
| QR-03 | QR Code | Force Transfer |
| QR-04 | QR Code | Clone |

*Relevance ID Selection Page*

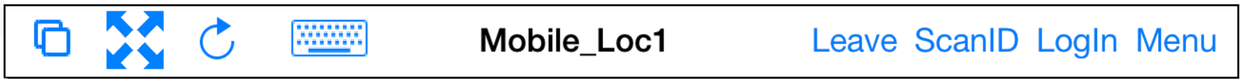
This example shows a location with four QR codes, each with their own action. Scanning a code will initiate the associated action.

| ***QR Code Resolver*** | ***Action*** |
|---|---|
| **QR-01** | Shadow |
| **QR-02** | Transfer |
| **QR-03** | Force Transfer |
| **QR-04** | Clone |

# 7. Interacting with the Location

The iTMC client can be used to interact with the location by scanning the four resolvers configured with different actions in the previous example.

The iTMC window has a menu bar at the top with several command buttons.

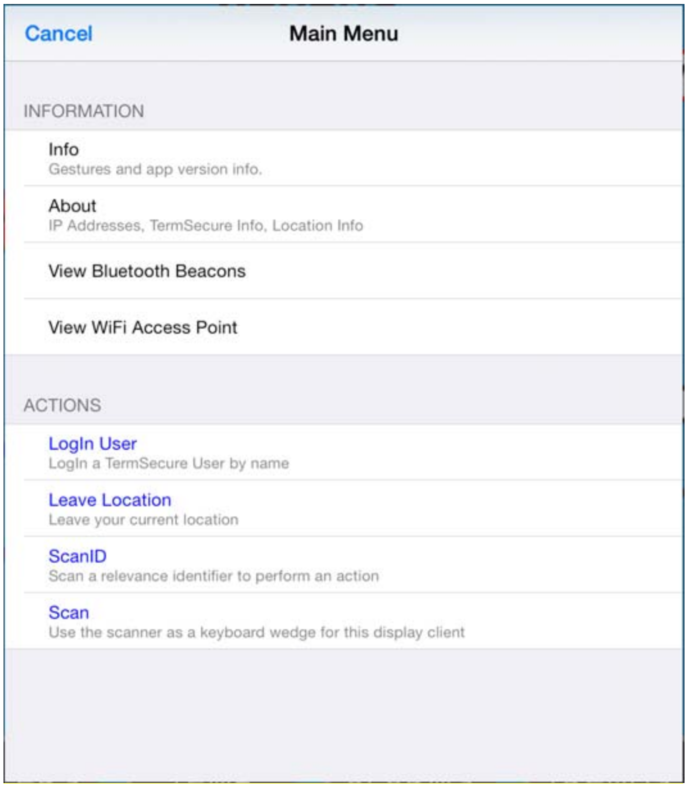


*iTMC Menu Bar*

The buttons are, from right to left:

- **Switch** – The cascaded square icon will allow you to switch between two or more Display Clients.
- **Full Screen** – The four arrow icon will make the display client full screen. Touching the screen with three fingers will restore the view.
- **Keyboard** – The keyboard icon will launch an on-screen keyboard.
- **Name** – The center space will show the name of the terminal, the name of the Relevance user, or the name of the display client, depending on the state of the terminal.
- **Leave** – This will end the action that was initiated by the original scan.
- **Scan ID** – This will open the Scan Identified window to use the scanner.
- **Login** – This opens the Relevance login window to allow you to login with a Relevance user name.
- **Menu** – This will launch the Main Menu screen.

Touch the ***Main Menu*** button to launch the main menu.



Cancel Main Menu

INFORMATION

Info
Gestures and app version info.

About
IP Addresses, TermSecure Info, Location Info

View Bluetooth Beacons

View WiFi Access Point

ACTIONS

LogIn User
LogIn a TermSecure User by name

Leave Location
Leave your current location

ScanID
Scan a relevance identifier to perform an action

Scan
Use the scanner as a keyboard wedge for this display client

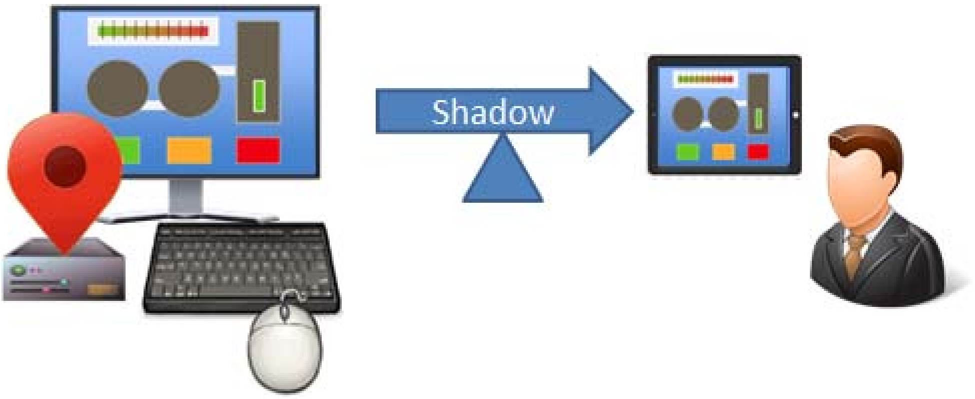
*Main Menu*

The **Main Menu** has a variety of functions.

- **Info** – This gives version numbers and lists gestures for navigating the program.
- **About** – This launches a dialog box with user and network information.
- **Login User** – this launches a dialog box for logging in as a TermSecure user.
- **Location Logoff** – This disconnects the mobile terminal from its location.
- **Scan Identifier** – This launches the code reader window.
- **Locations List** – This lists the locations that allow manual selection to let you choose a location manually.
- **Scan in Session** – This allows the scan window to act as a keyboard wedge to pull data into the session.
- **Hide Map When Zoomed** – Normally zooming on the screen provides a map so you can see what part of the screen you are looking at. This hides the map during zooming.

## 7.1. Shadow

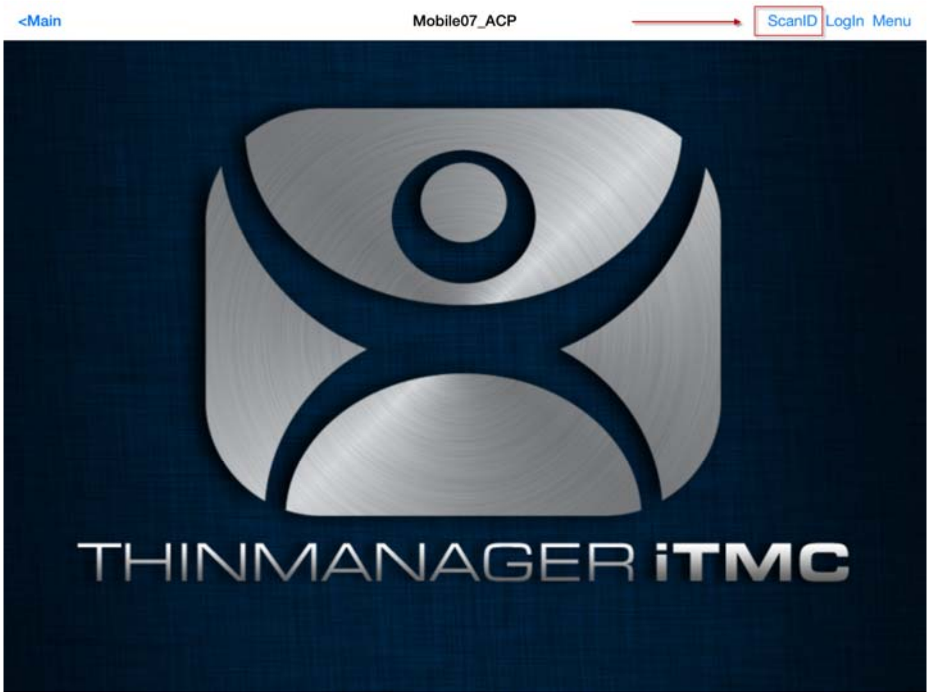
**Shadowing** duplicates the graphic output of the location and sends it to the mobile device.



*Shadowing*

Launch the iTMC application.

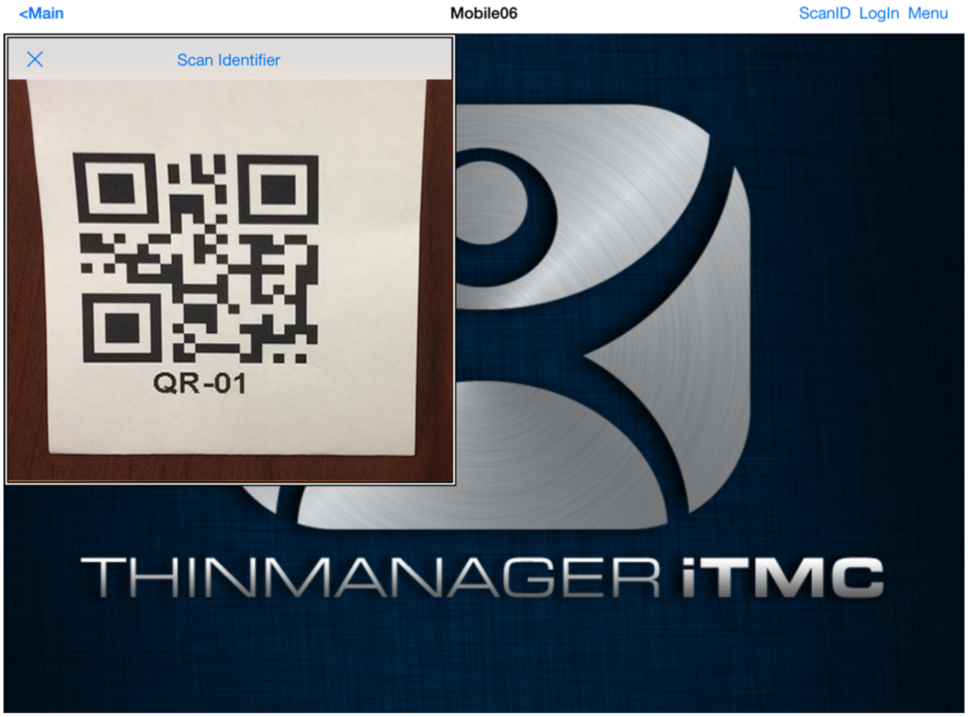
Select your ThinManager Server on the configuration screen to run your iPad as a terminal.



*ThinManager iTMC Main Screen*

The Main Screen has a menu bar at the top with ***<Main***, ***ScanID***, ***Login***, and ***Menu***.

Touch the ***ScanID*** button in the upper right to launch the **Scan Identifier** window.

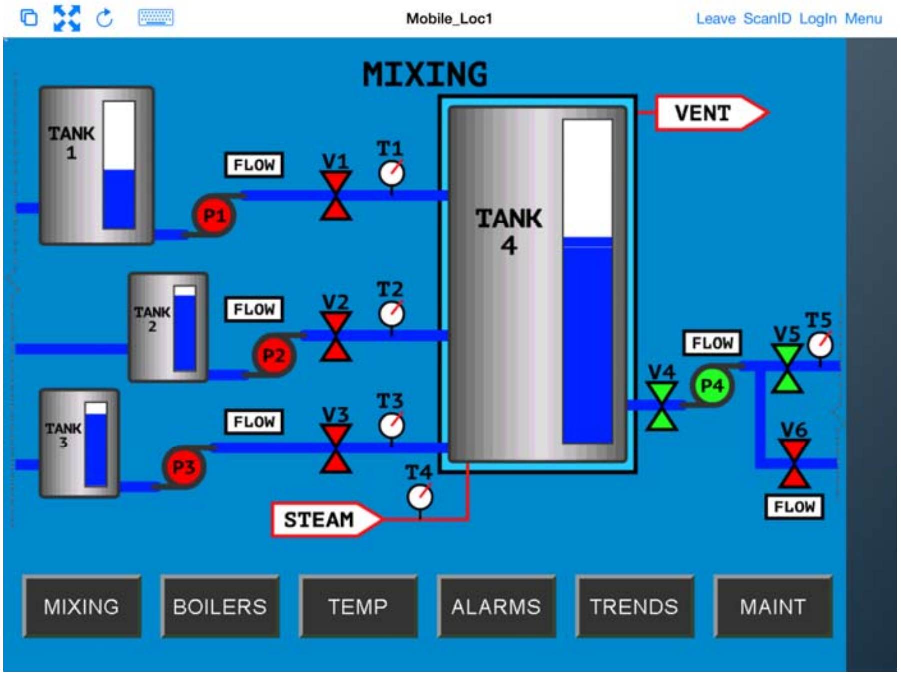


*Scan Identifier Window*

Touching the ***Scan ID*** button will launch the onboard camera as the **Scan Identifier** window.

Position the camera over the resolver code.

The device will read the code and act on it.

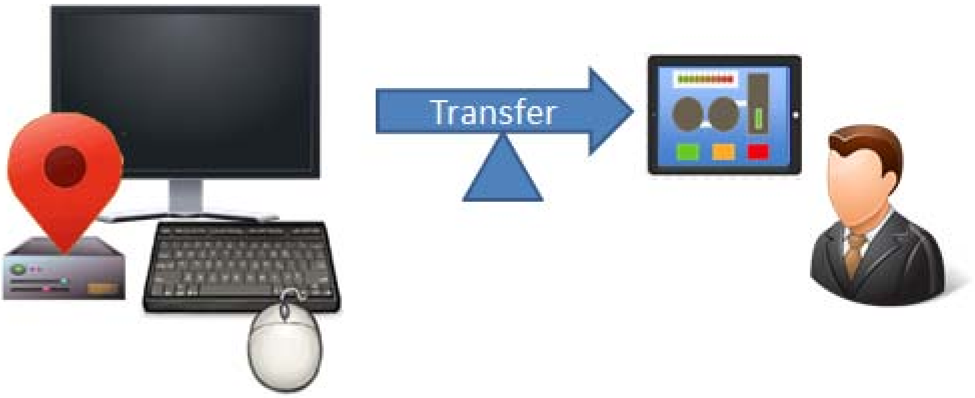


*Shadowed Session on iTMC Client*

The iTMC client is now be shadowing the location because the resolver had the shadow action applied to it.

Press ***Leave*** to end the **Shadow** action.

## 7.2. Forced Transfer



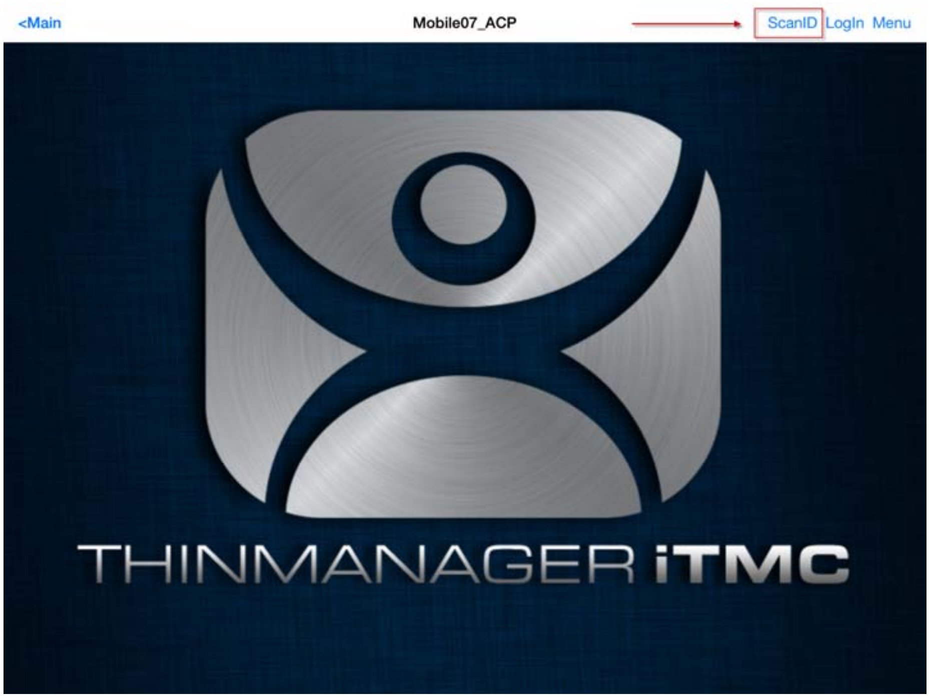
*Transferring*

**Transferring** sends the graphic output of the location to the mobile device instead of the location. This can be done automatically with Forced Transfer or set to require the operator to manually allow the transfer.

Forced Transfer takes control without operator input.

Launch the iTMC application.

Select your ThinManager Server on the configuration screen to run your iPad as a terminal.

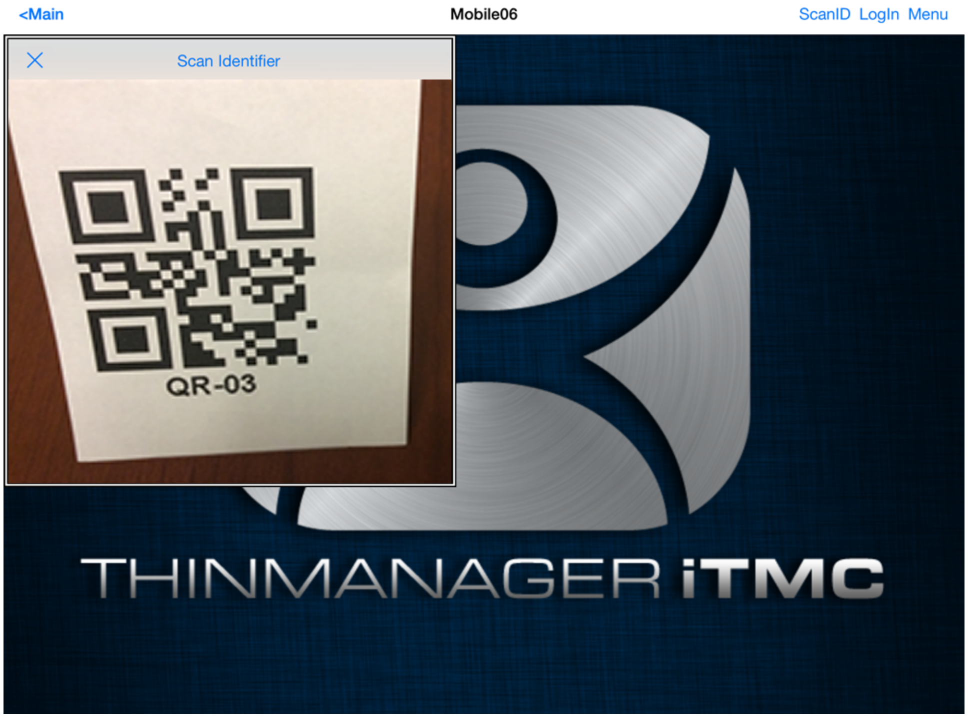


*ThinManager iTMC Main Screen*

The Main Screen has a menu bar at the top with ***<Main***, ***ScanID***, ***Login***, and ***Menu***.

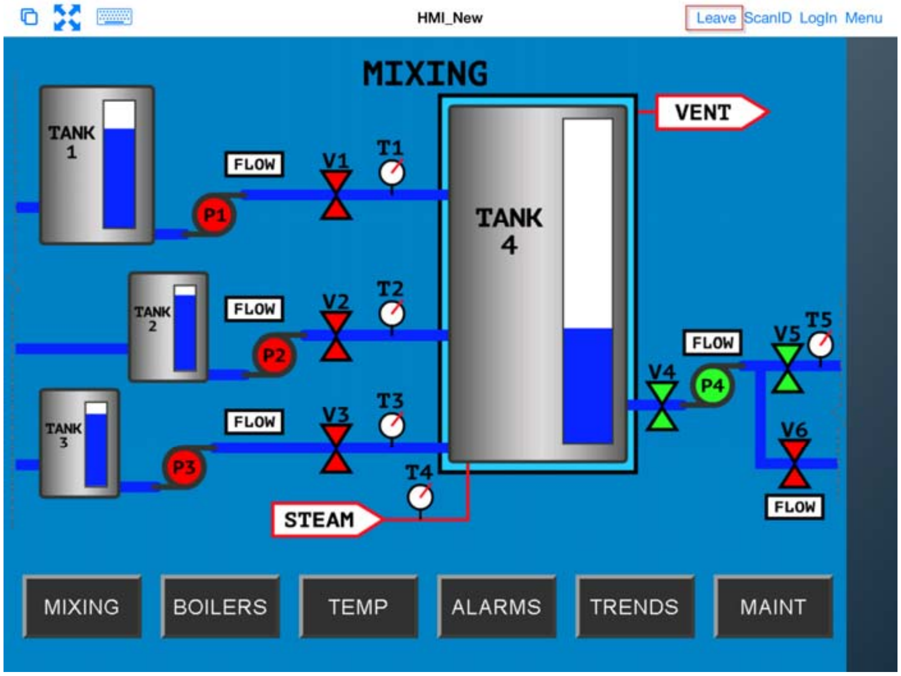
Touch the ***ScanID*** button in the upper right to launch the **Scan Identifier** window.

Touching the ***Scan ID*** button will launch the onboard camera as the **Scan Identifier** window.



*Scan Identifier Window*

Scan the resolver associated with Forced Transfer. The display will be ported to the mobile device.

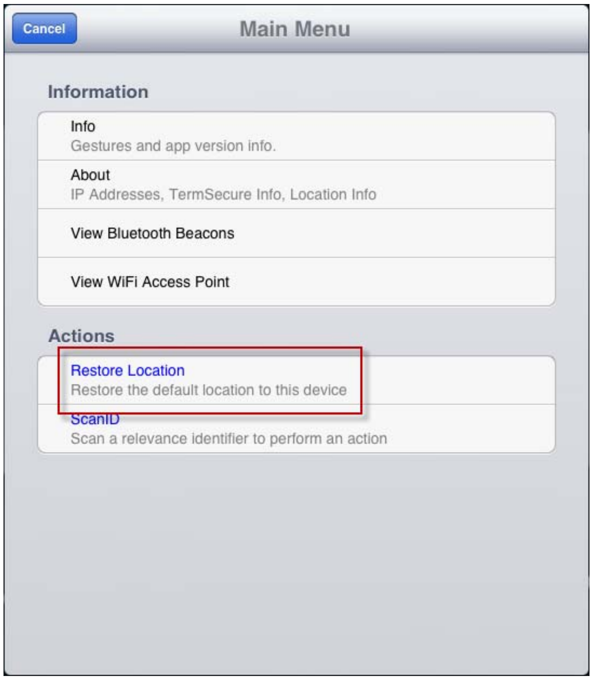


*Transfer on the Mobile Device*

The display from the location will be moved to the mobile device.

The mobile user can end the transfer by selecting the ***Leave*** command form the top menu bar.

When the action of the resolver is “**Forced Transfer**” the display at the location will automatically be transferred to the scanning iTMC client



Info
Gestures and app version info.

About
IP Addresses, TermSecure Info, Location Info

View Bluetooth Beacons

View WiFi Access Point

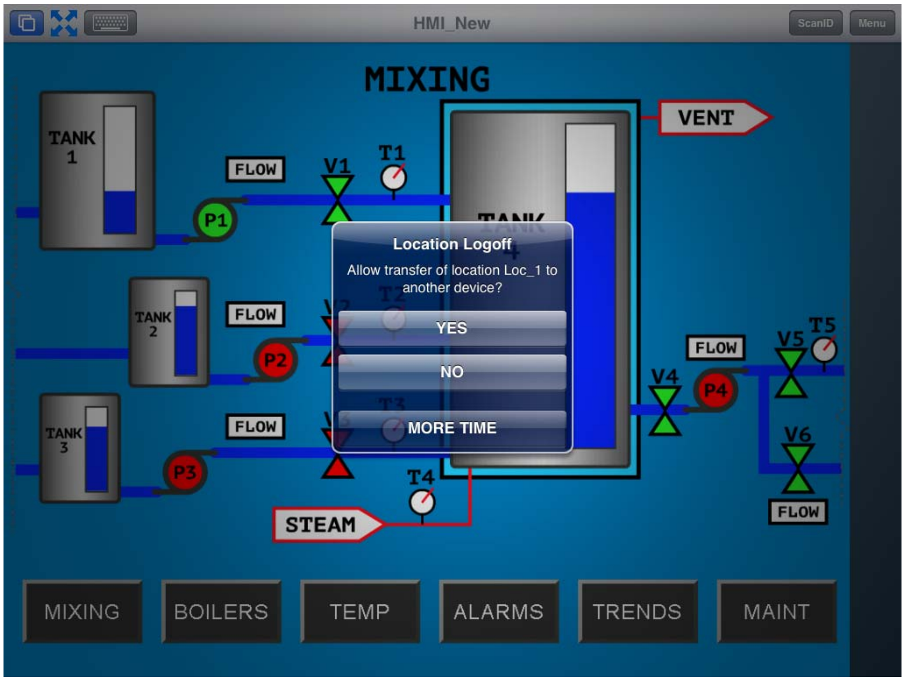
Restore Location
Restore the default location to this device

ScanID
Scan a relevance identifier to perform an action

*Forced Transfer at Location*

. A message box will be displayed on the client to explain that the display is transferred. You can recall the display with the ***Restore Transfer*** button.

Select the ***Restore Location*** button at the location to recall the transferred display.



Location Logoff

Allow transfer of location Loc_1 to another device?

YES

NO

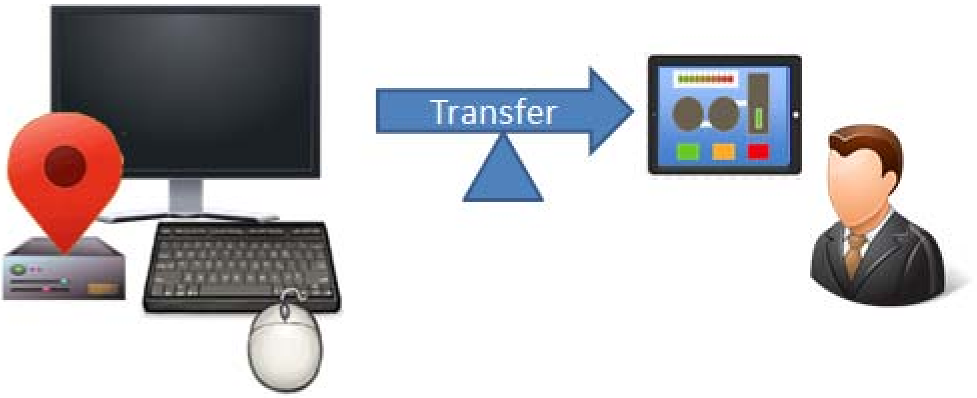
MORE TIME

*Location Logoff Dialog Box*

The iTMC client will display a Location Logoff dialog box when a restoration is initiated.

- ***Yes*** – This allows the restoration of the display.
- ***No*** – This refuses the restoration of the display.
- ***More Time*** – This sends a request to the location asking for more time. The location gets a message with Yes and No that gives them the power to allow more time or to end the transfer.

## 7.3. Transfer

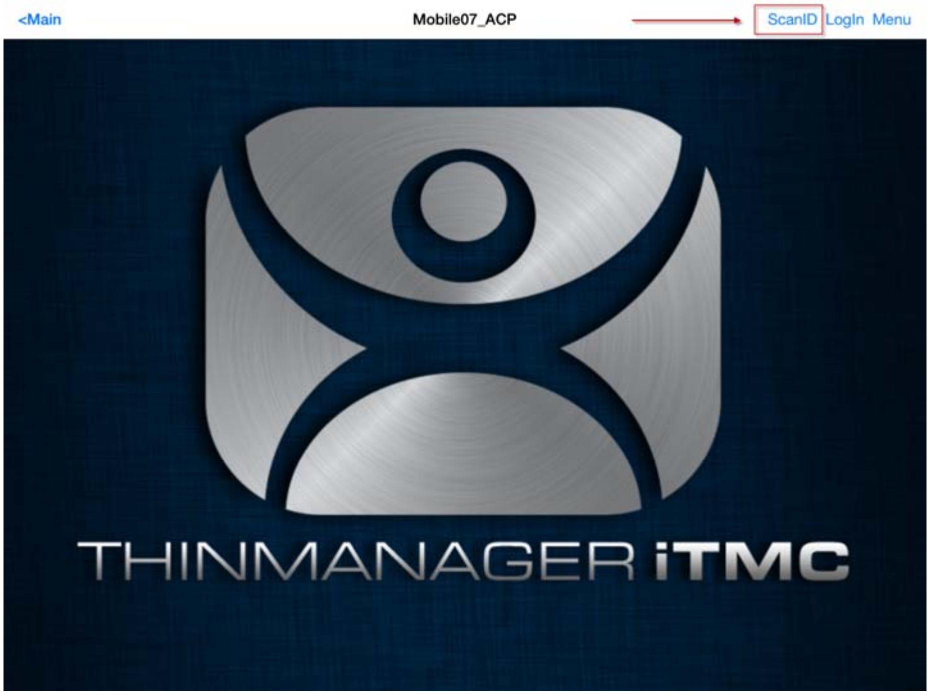


*Transferring*

**Transferring** sends the graphic output of the location to the mobile device instead of the location. This can be done automatically as Forced Transfer or set to require the operator to manually allow the transfer.

Launch the iTMC application.

Select your ThinManager Server on the configuration screen to run your iPad as a terminal.

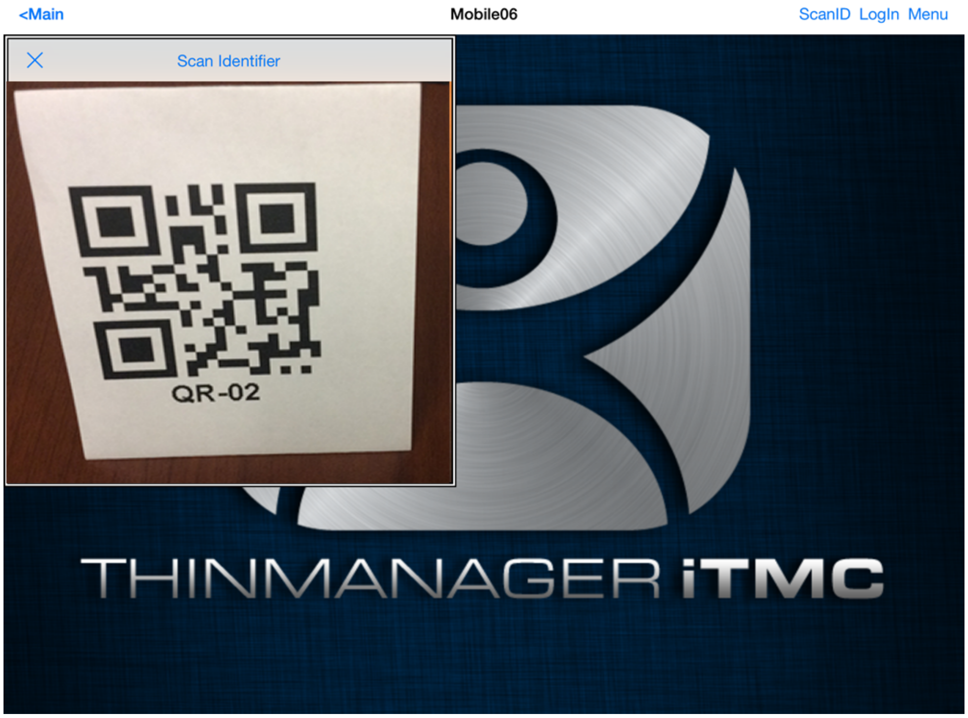


*ThinManager iTMC Main Screen*

The Main Screen has a menu bar at the top with ***<Main***, ***ScanID***, ***Login***, and ***Menu***.

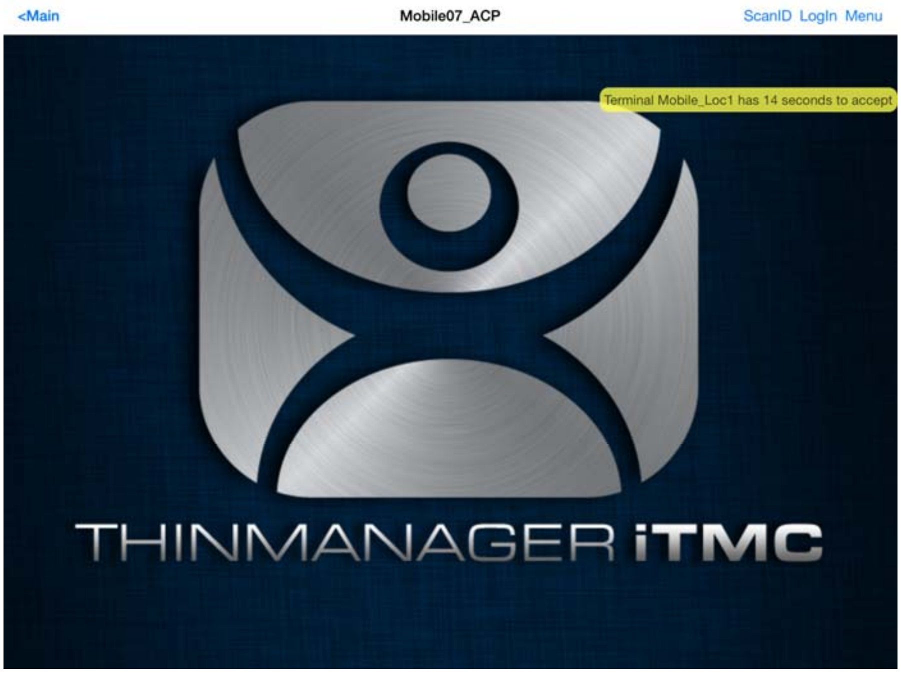
Touch the ***ScanID*** button in the upper right to launch the **Scan Identifier** window.

Touching the ***Scan ID*** button will launch the onboard camera as the **Scan Identifier** window.



*Scan Identifier Window*

Scan the resolver associated with **Transfer**. A request for transfer will be sent to the location.

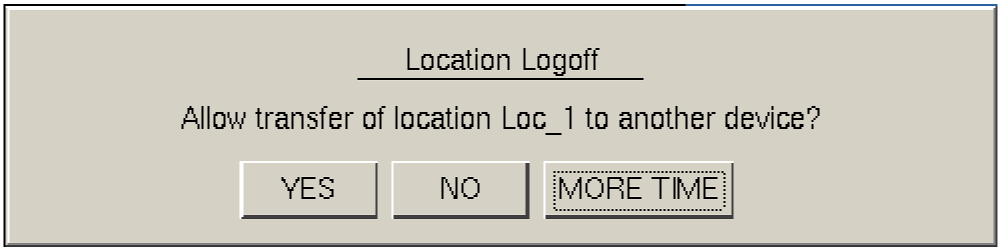


Terminal Mobile_Loc1 has 14 seconds to accept

*Transfer Notification*

A message will be sent to the mobile device telling it that the location has to respond.

The scan will initiate the transfer but this isn’t a forced transfer, but a manual transfer. This requires confirmation at the location.



Location Logoff

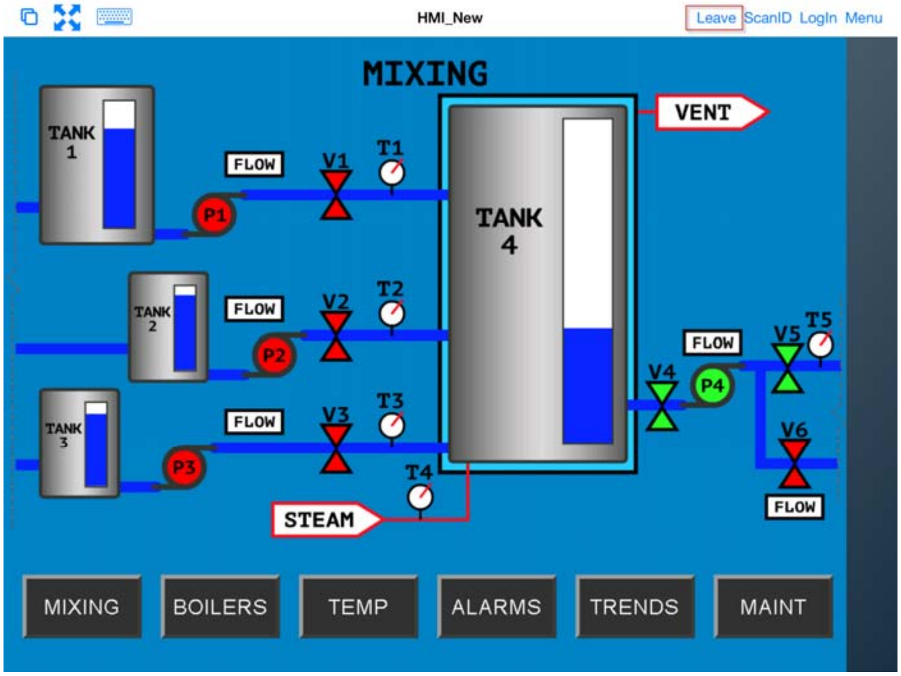
Allow transfer of location Loc_1 to another device?

*Location Logoff Dialog Box*

The operator at the location will be shown a dialog box that requires approval to transfer.

Selecting the ***Yes*** button to allow the transfer.

The iTMC client will be allowed to display the location display.



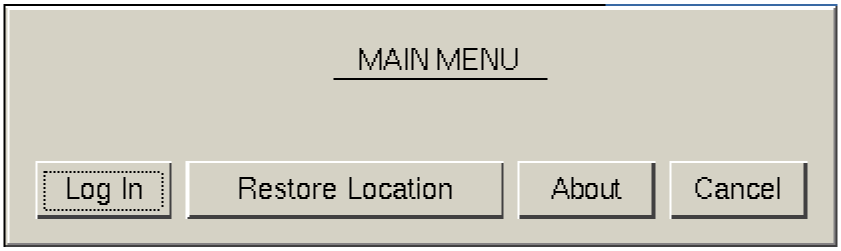
*Transfer on the Mobile Device*

The display from the location will be moved to the mobile device.

The location display can be restored from the iTMC client or the location.

Selecting the ***Leave*** button on the iTMC client menu will restore the display back to the location.

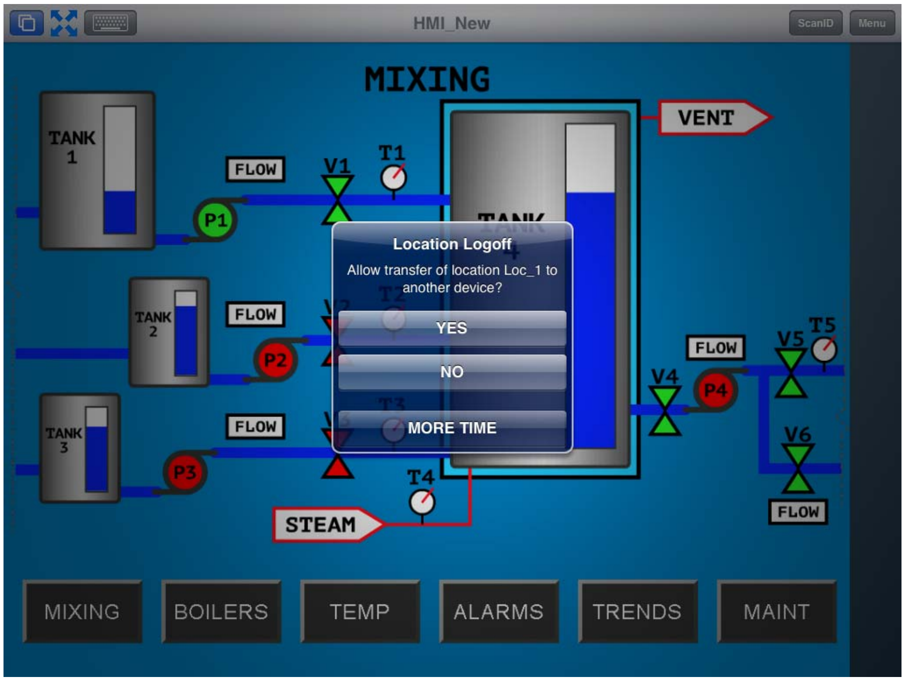
Selecting the ***Restore Location*** button at the location will also restore the display.



*Main Menu at the Location*

Go to the location and ***Select Restore Location***.

This will launch a dialog box on the iTMC client.


Location Logoff

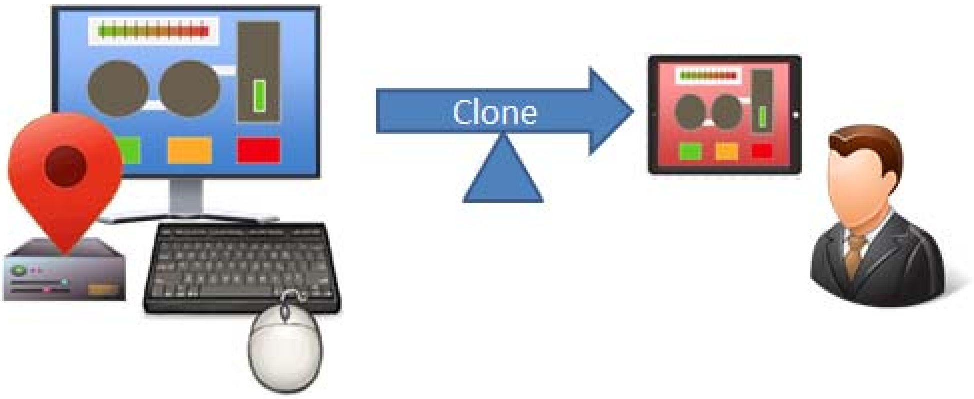
Allow transfer of location Loc_1 to another device?

*Location Logoff on the Mobile Device*

Go to the iTMC client.

Select ***Yes*** to allow the transfer back to the location.

## 7.4. Clone

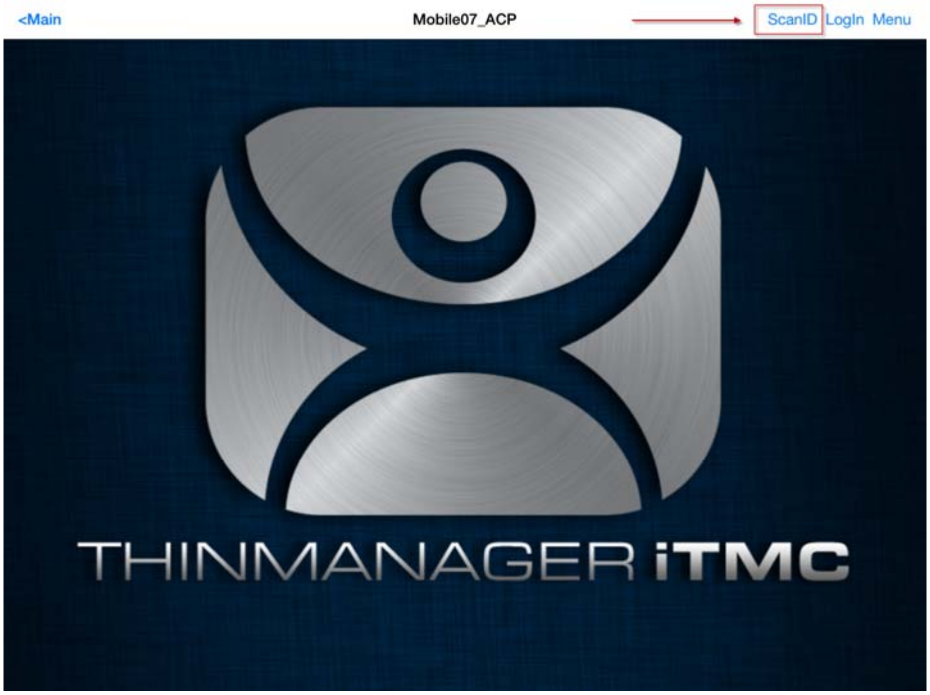


*Clone*

**Cloning** will create a duplicate session for the mobile device using the configuration of the location and the user credentials of the mobile device.

Launch the iTMC application.

Select your ThinManager Server on the configuration screen to run your iPad as a terminal.

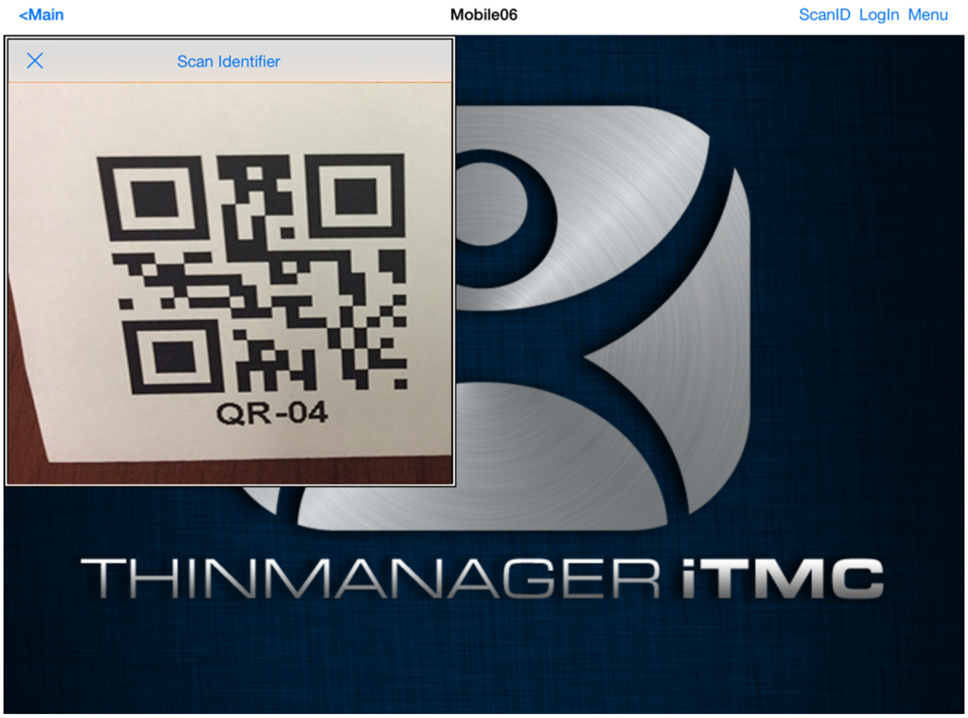


*ThinManager iTMC Main Screen*

The Main Screen has a menu bar at the top with ***<Main***, ***ScanID***, ***Login***, and ***Menu***.

Touch the ***ScanID*** button in the upper right to launch the **Scan Identifier** window.

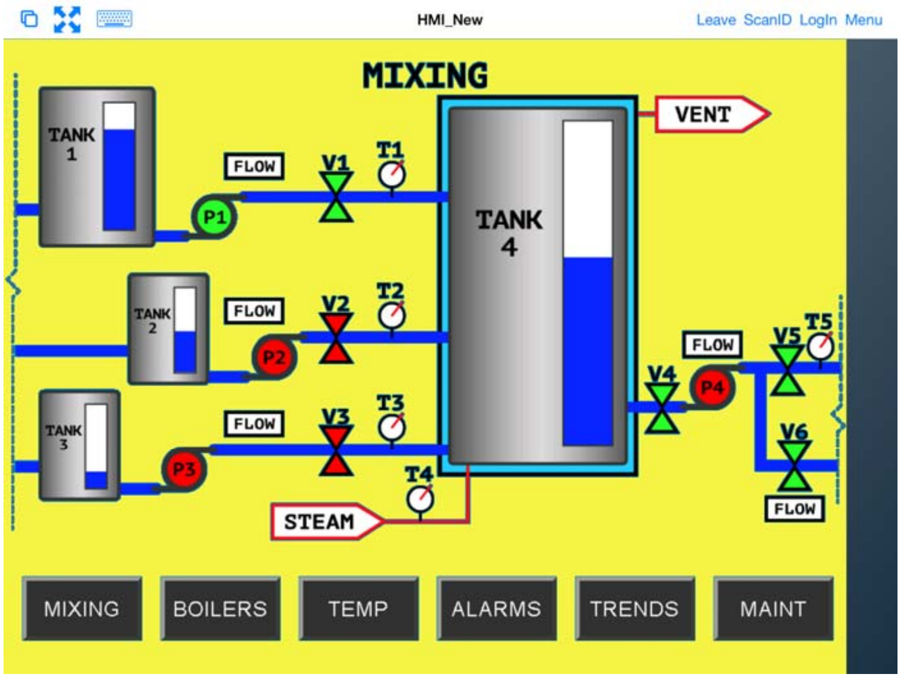
Touching the ***Scan ID*** button will launch the onboard camera as the **Scan Identifier** window.



*Scan Identifier Window*

Scan the resolver associated with **Clone**. Relevance will launch the display clients used at the location on the mobile device but using the mobile device account.

This gives a mobile user the same applications but with an independent session instead of sharing as in Shadow, or taking it as in Transfer and Forced Transfer.



*Cloned Session*

Cloning will duplicate the sessions on the location but create them with the Windows user account of the mobile device.

# 8. Unassigned Locations

### Deploy applications to locations that don’t have assigned terminals.

The big change in application deployment in Relevance is that you no longer have to deploy applications to a tethered terminal. You can create a location, deploy apps to it, and access these apps with a mobile device when you are at that location.

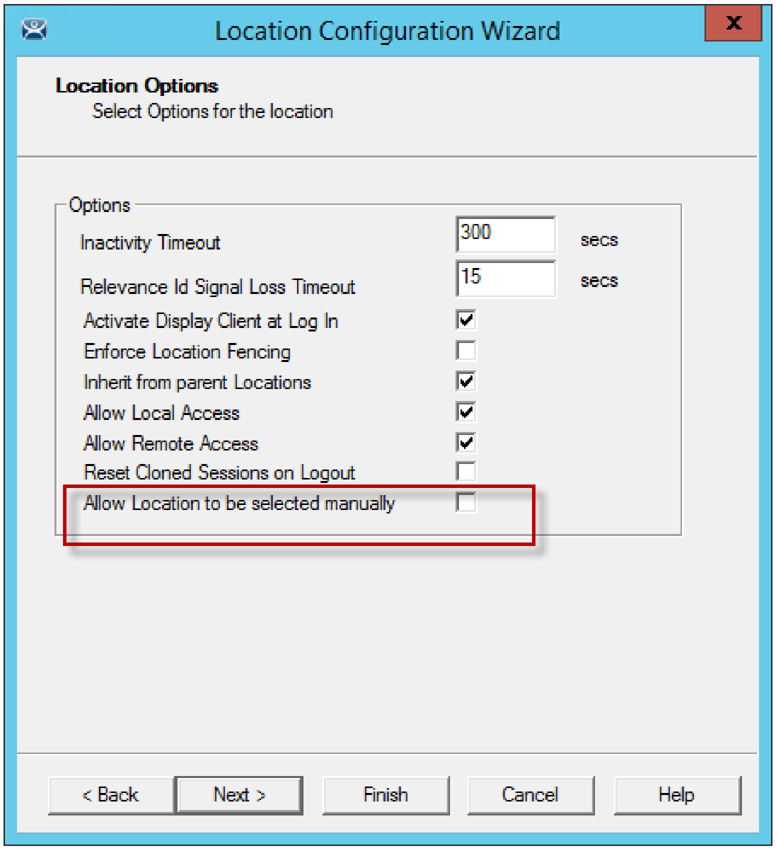
## 8.1. Create a Location

This example will use GPS so that when the mobile user enters the area the appropriate applications are delivered to the user.

Open the **Locations** branch of the tree by selecting the **Location** icon from the Tree Selector.

Right click on the **Locations** branch and select ***Add Location***.

Navigate to the **Locations Options** page of the **Location Configuration Wizard**.



Location Configuration Wizard

**Location Options**

Select Options for the location

Options

Inactivity Timeout: 300 secs

Relevance Id Signal Loss Timeout: 15 secs

☑ Activate Display Client at Log In

☐ Enforce Location Fencing

☑ Inherit from parent Locations

☑ Allow Local Access

☑ Allow Remote Access

☐ Reset Cloned Sessions on Logout

☐ Allow Location to be selected manually

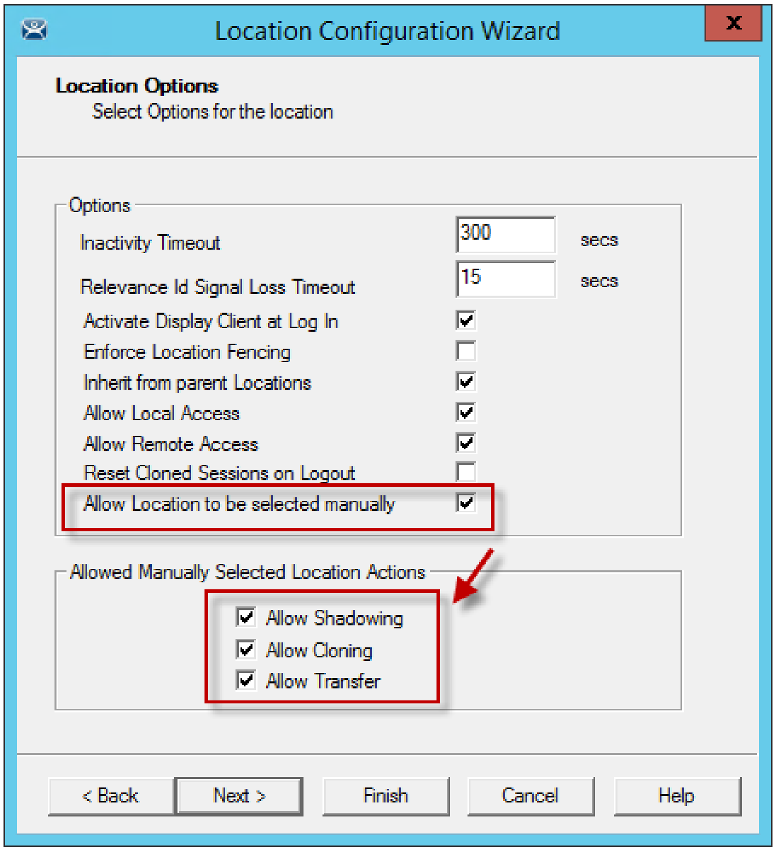
*Location Options*

Check the ***Allow Location to be selected manually***, ***Allow Shadowing***, ***Allow Cloning***, and ***Allow Transfer*** check boxes on the Location Options page.

The **Location Options** page has several configurable options that control the remote access.

- ***Inactivity Timeout –*** A Relevance user will be logged off after this interval if inactive.
- ***Relevance ID Signal Loss Timeout –*** This is the interval before a Relevance user is logged off due to lack of a signal.
- ***Activate Display Client at Log In –*** This brings the display client to the forefront when the Relevance user logs in.
- ***Enforce Location Fencing –*** This controls access in an area with nested locations. If local fencing is enforced the user has to be within the fence to access the sub-locations.
- ***Inherit from parent Locations –*** This allows nested sub-locations to inherit the parent display clients.
- ***Allow Local Access –*** This allows a Relevance user to access the location from that location. Unchecking this will only allow remote access.
- ***Allow Remote Connection -*** This allows a Relevance user to access the location from a remote site. Unchecking this will only allow access at the location.
- ***Reset Cloned Sessions on Logout –*** This will close any cloned sessions once they are disconnected.
- ***Allow Location to be selected manually –*** This allows a location to be manually selected. Unchecking this will require the Relevance user to use a Resolver like QR Codes, Wi-Fi, or Bluetooth to initiate the location access.

Checking the ***Allow Location to be selected manually*** checkbox reveals other settings.



**Location Options**

Select Options for the location

Options

Inactivity Timeout: 300 secs

Relevance Id Signal Loss Timeout: 15 secs

- Activate Display Client at Log In ☑
- Enforce Location Fencing □
- Inherit from parent Locations ☑
- Allow Local Access ☑
- Allow Remote Access ☑
- Reset Cloned Sessions on Logout □
- Allow Location to be selected manually ☑

Allowed Manually Selected Location Actions

- ☑ Allow Shadowing
- ☑ Allow Cloning
- ☑ Allow Transfer

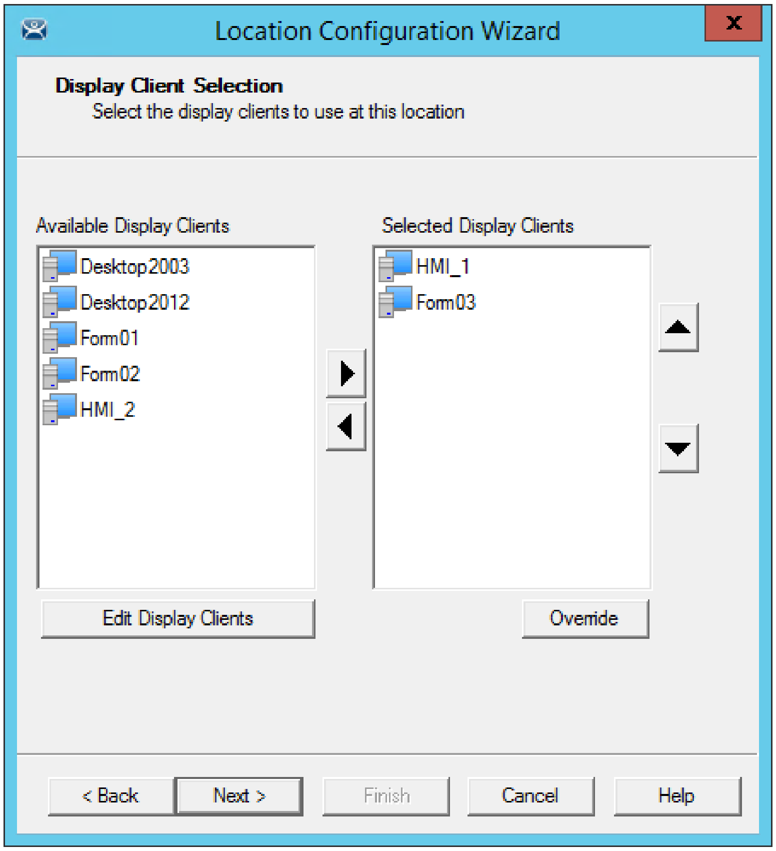
*Location Options Page*

***Allow Manually Selected Location Actions –*** These are the actions you can manually select. You can allow all, or none.

- ***Allow Shadowing*** – This allows a duplicate of the display to be shown on the mobile device.
- ***Allow Cloning*** – This allows the user to launch the same applications as the location but using their Windows account.
- ***Allow Transfer*** – This allows the display to be moved from the location to the mobile device.

The defaults are fine but you have the option to customize the settings as needed.

Select ***Next*** to continue.



**Display Client Selection**

Select the display clients to use at this location

Available Display Clients

Desktop2003
Desktop2012
Form01
Form02
HMI_2

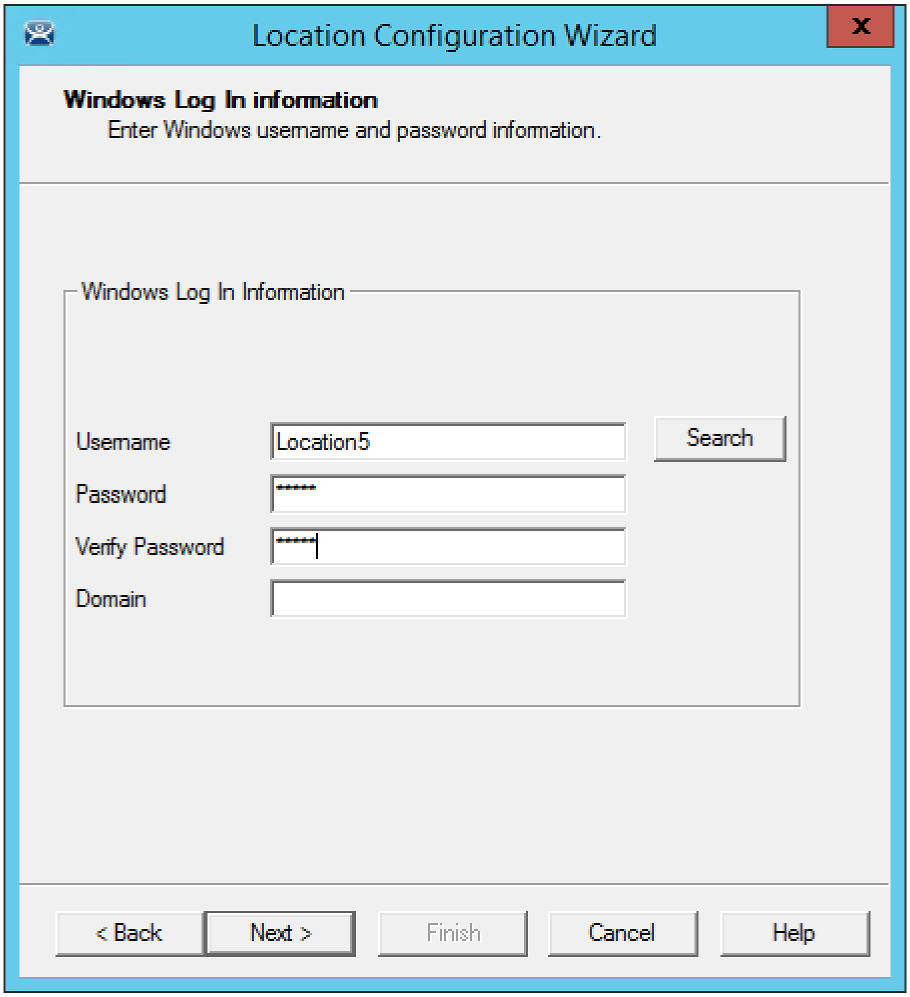
Selected Display Clients

HMI_1
Form03

*Terminal Server Selection Page*

Add the display clients you want on the **Terminal Server Selection** page. This could be an HMI, a maintenance record, equipment manuals, or combinations of these and other applications.

Select ***Next*** to continue.


Location Configuration Wizard

**Windows Log In information**

Enter Windows username and password information.

Windows Log In Information

Username: Location5

Password: ******

Verify Password: ******

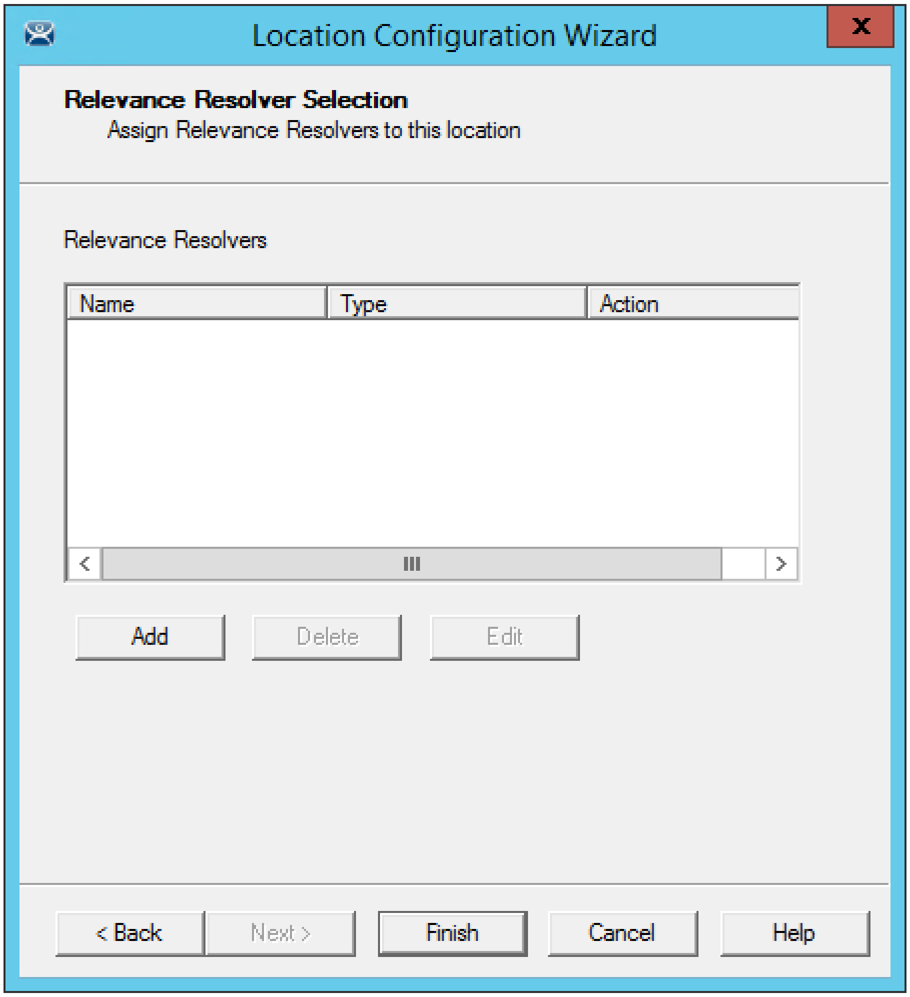
Domain:

*Windows Log In Information Page*

The Location will need a Windows user account entered in the ***Username*** field on the **Windows Log In Information** page.

You may use the ***Search*** button to use an Active Directory user as described in Location Configuration Wizard on page 11.

Select ***Next*** to continue.


Location Configuration Wizard

Relevance Resolver Selection

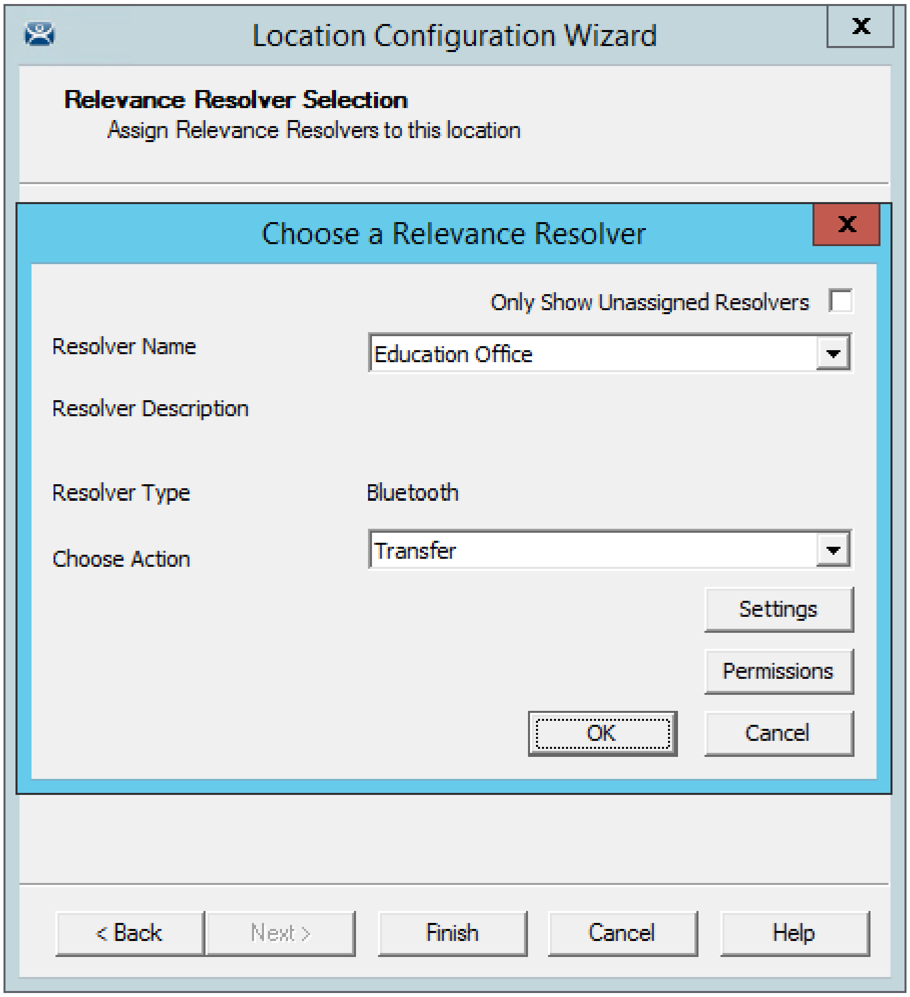
Assign Relevance Resolvers to this location

Relevance Resolvers

| Name | Type | Action |
|---|---|---|

*Relevance ID Selection Page*

Select the ***Add*** button to add the resolver on the **Relevance ID Selection** page and add an action.


Location Configuration Wizard
Relevance Resolver Selection
Assign Relevance Resolvers to this location
Choose a Relevance Resolver
Only Show Unassigned Resolvers □
Settings
Permissions
OK
Cancel
< Back
Next >
Finish
Cancel
Help

Resolver Name: Education Office

Resolver Description:

Resolver Type: Bluetooth

Choose Action: Transfer

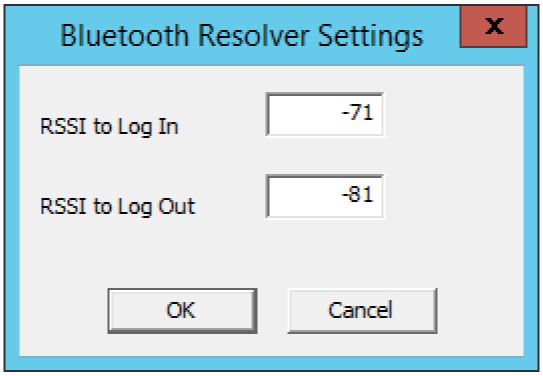
*Choose a Relevance Resolver Page*

Select a resolver from the ***Resolver Name*** dropdown.

Chose the action from the Choose Action dropdown.

Select ***OK*** to accept the configuration.

There is a ***Settings*** button for the resolvers.

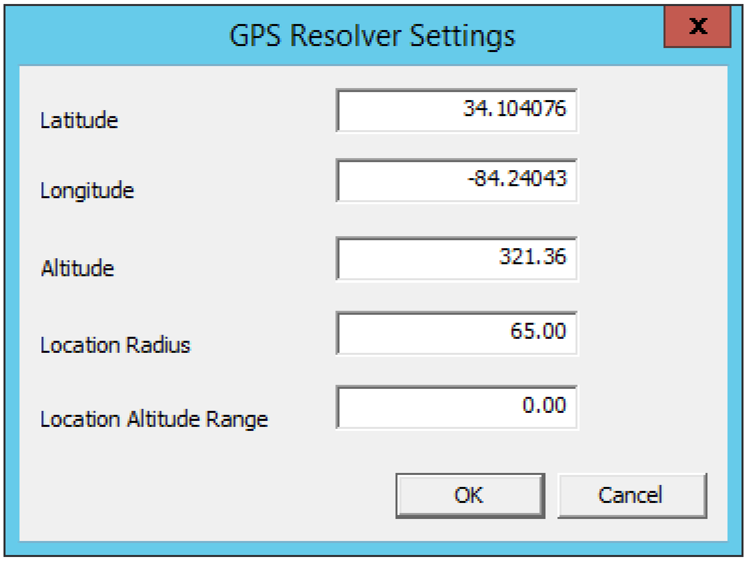


RSSI to Log In -71

RSSI to Log Out -81

*Bluetooth Resolver Settings*

The Bluetooth Resolver settings show the signal strength that was measured when the Bluetooth beacon was registered as the ***RSSI to Log In***. The log out strength is automatically added as the ***RSSI to Log Out***.



Latitude 34.104076

Longitude -84.24043

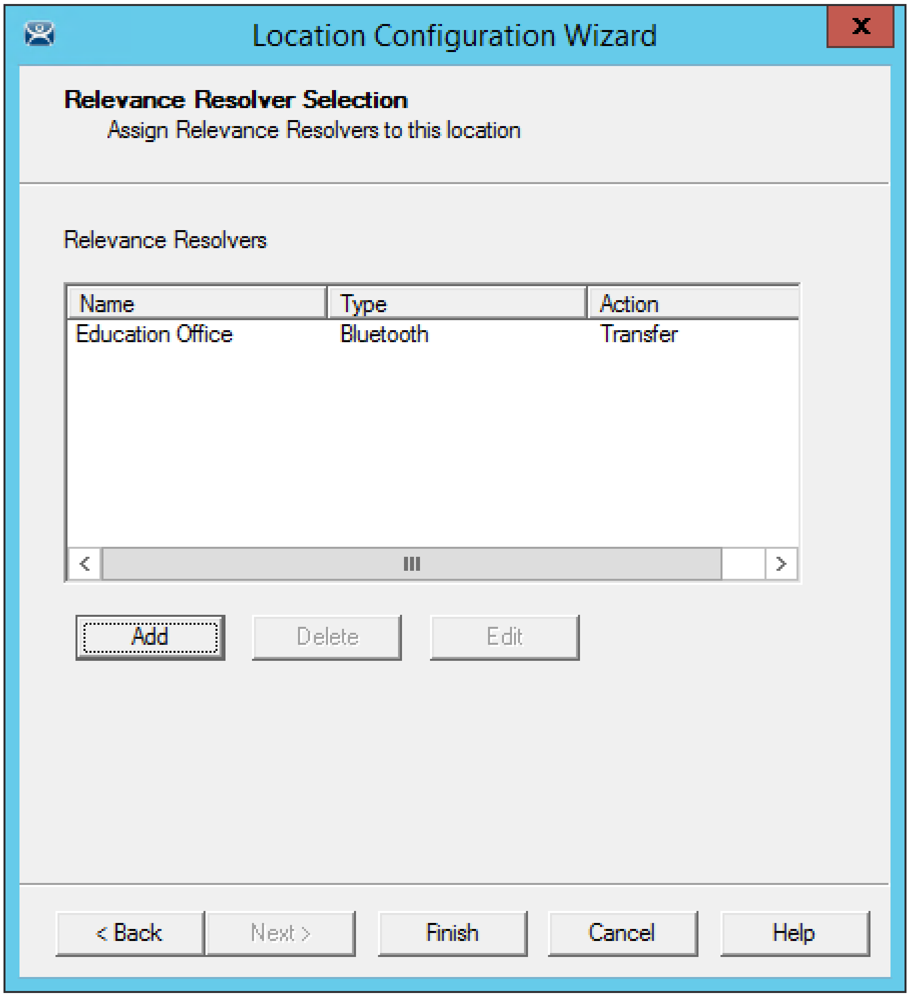
Altitude 321.36

Location Radius 65.00

Location Altitude Range 0.00

*GPS Settings*

The GPS setting shows the ***Latitude***, ***Longitude***, and ***Altitude*** that was measured when the GPS was registered. The ***Location Radius*** and ***Location Altitude R***ange are added automatically.

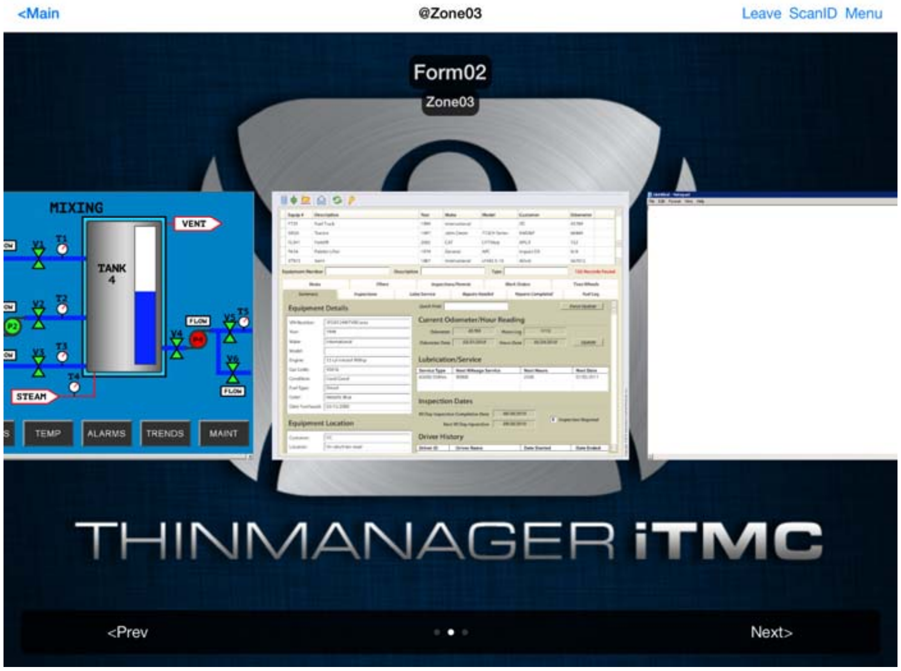


Location Configuration Wizard
Relevance Resolver Selection
Assign Relevance Resolvers to this location
Relevance Resolvers
Add
Delete
Edit
< Back
Next >
Finish
Cancel
Help

| Name | Type | Action |
|---|---|---|
| Education Office | Bluetooth | Transfer |

*Selected Resolver*

Once a resolver is added you can click Finish to close the wizard and accept the configuration.



*Display Clients Launched by GPS*

Launch the iTMC client.

The display clients will appear on the mobile device once the resolver is triggered, either by scanning a QR code or bar code, or entering within the range of the Bluetooth beacons, Wi-Fi area, or GPS zone.

This allows you to deploy applications without deploying permanent terminal hardware.

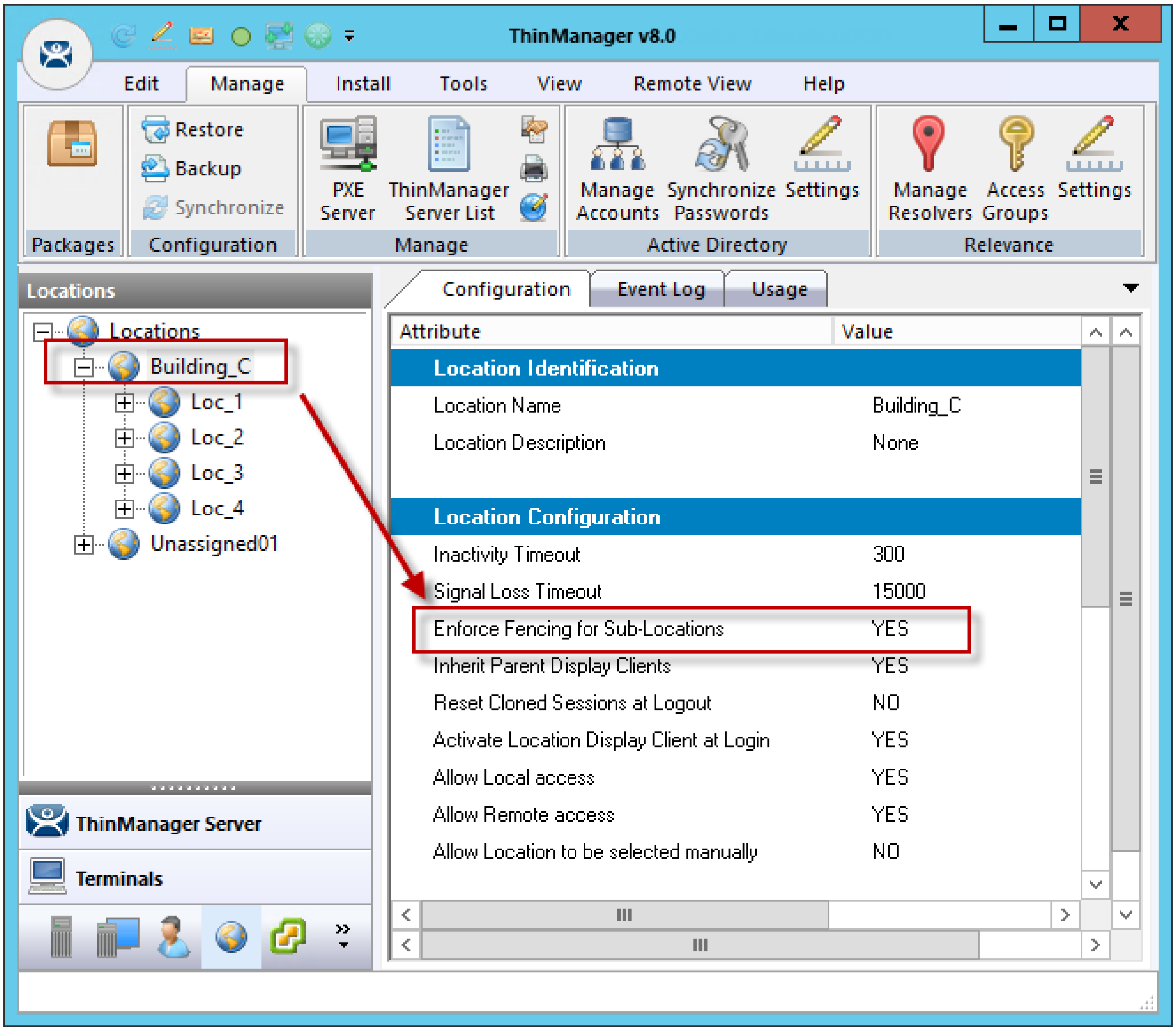
# 9. Fencing and Sub-Locations

Fencing is a hierarchy that allows to organize locations by nesting locations within locations. This can be useful for organization but it also allows control of access through Fencing.

Fencing allows you to create a location that has to be entered or authenticated before you can access the sub-locations. It is a way to ensure the user in in the right location before they can access a display client or action.

Fencing is useful to make sure the worker is in the area they are supposed to be. A worker can't take a photo of a QR code or bar code and log in at their desk with this method. Fencing can force them to enter an area controlled by Bluetooth beacons, Wi-Fi access points, or GPS before they can scan the QR code or bar code.

✓ **Fencing is best initiated by Bluetooth beacons, Wi-Fi Access Points, or GPS.**



| Attribute | Value |
|---|---|
| **Location Identification** | |
| Location Name | Building_C |
| Location Description | None |
| **Location Configuration** | |
| Inactivity Timeout | 300 |
| Signal Loss Timeout | 15000 |
| Enforce Fencing for Sub-Locations | YES |
| Inherit Parent Display Clients | YES |
| Reset Cloned Sessions at Logout | NO |
| Activate Location Display Client at Login | YES |
| Allow Local access | YES |
| Allow Remote access | YES |
| Allow Location to be selected manually | NO |

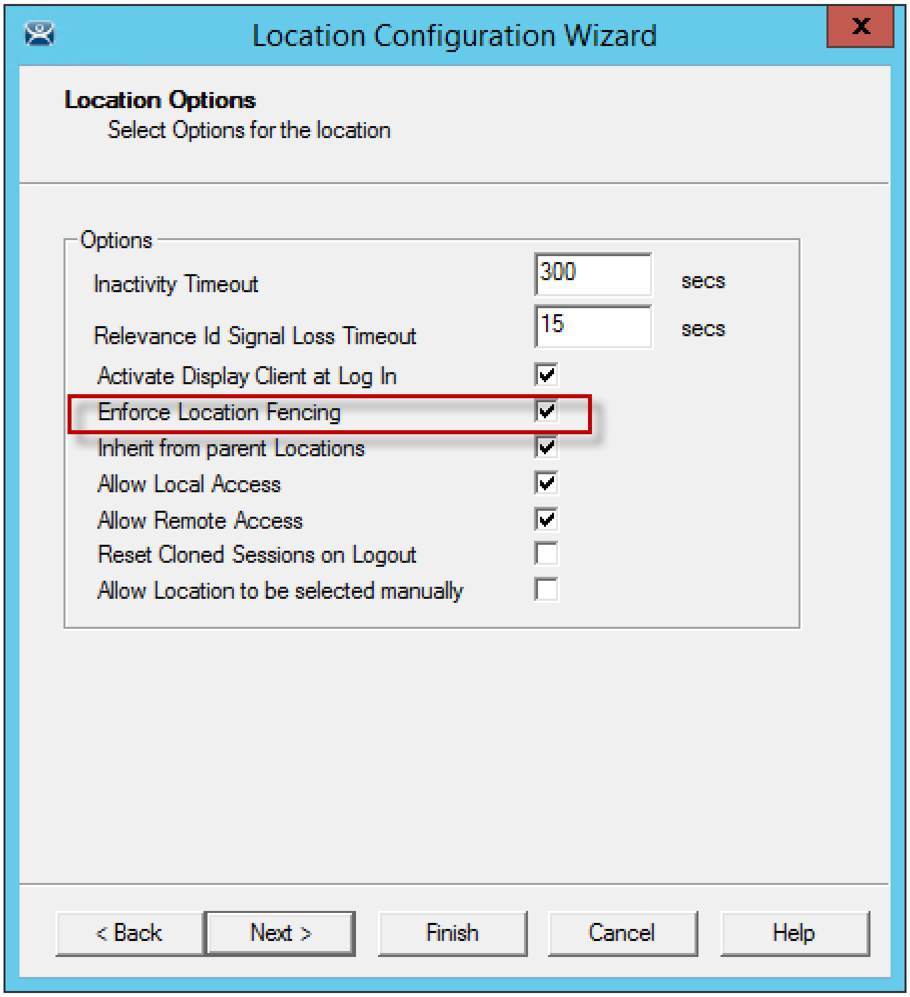
*Location Using Fencing*

The **Building_C l**ocation was created as the parent group with ***Fencing Enforced***. You have to enter the Building_C location before you are allowed to access Line_09 or Line_10.

## 9.1. Parent Locations

A Fence needs a parent location that authenticates a high level location that must be resolved before the child sub-locations can become active.

The parent location can be configured without display clients and actions, merely providing proff of location. The applications and actions are delivered by the child sub-locations.



**Location Options**

Select Options for the location

Options

Inactivity Timeout 300 secs

Relevance Id Signal Loss Timeout 15 secs

Activate Display Client at Log In ☑

Enforce Location Fencing ☑

Inherit from parent Locations ☑

Allow Local Access ☑

Allow Remote Access ☑

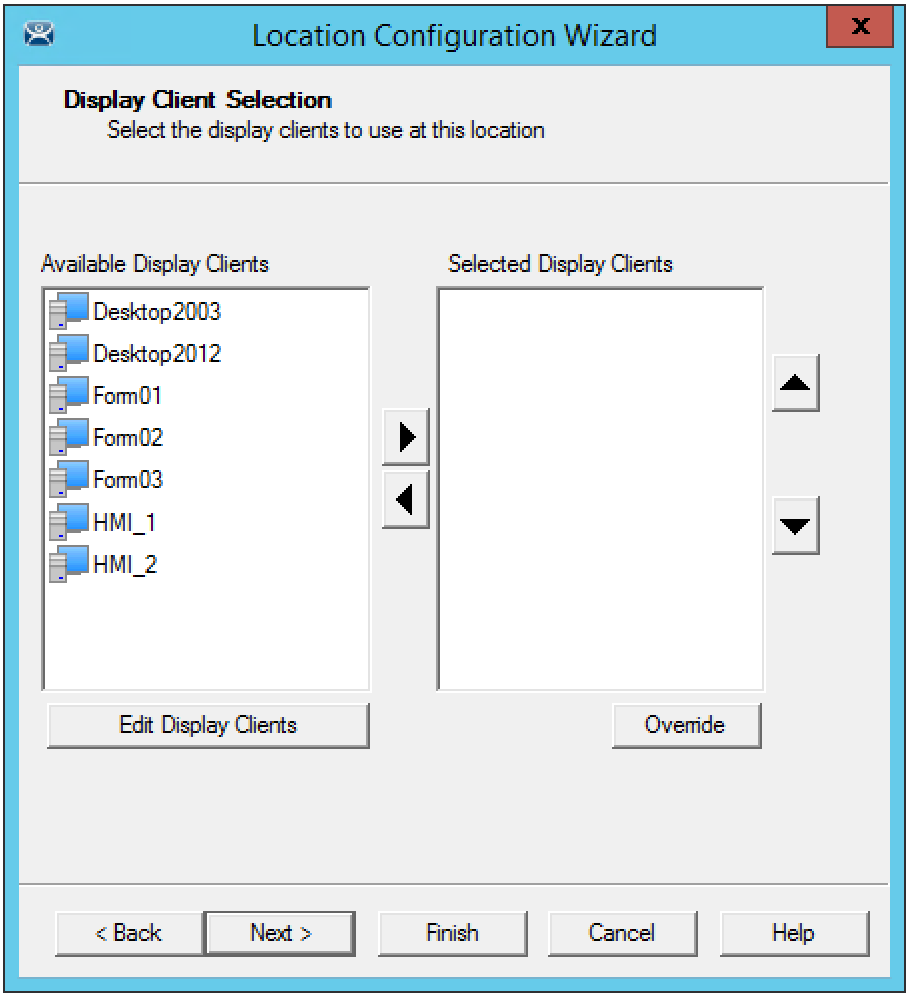
Reset Cloned Sessions on Logout □

Allow Location to be selected manually □

*Location Options for Parent Location*

The **Building_C** parent location has ***Enforce Location Fencing*** enabled.

A user will have to authenticate to the **Building_C** location before accessing the child sub-locations.



**Display Client Selection**

Select the display clients to use at this location

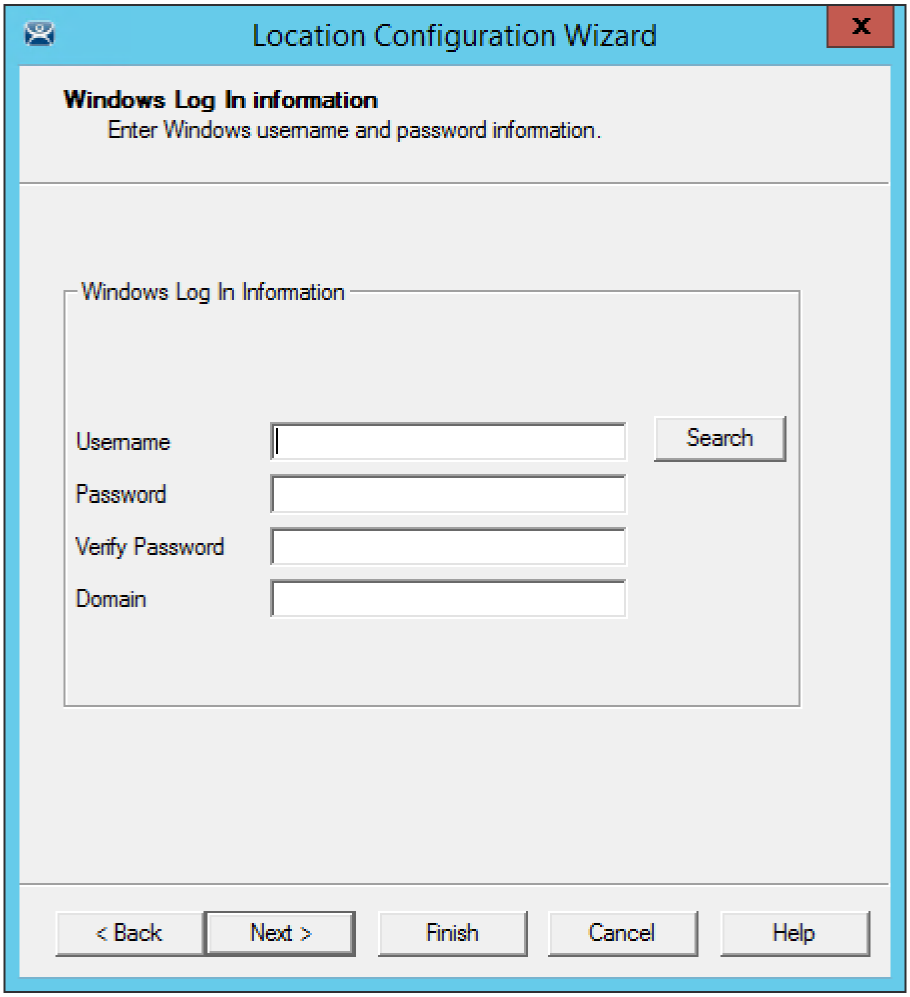
Available Display Clients

- Desktop2003
- Desktop2012
- Form01
- Form02
- Form03
- HMI_1
- HMI_2

Selected Display Clients

*Display Client Selection*

The **Building_C** parent location is not being assigned display clients. It is only being used for authentication so display clients are left off the location.



**Windows Log In information**

Enter Windows username and password information.

Windows Log In Information

Username

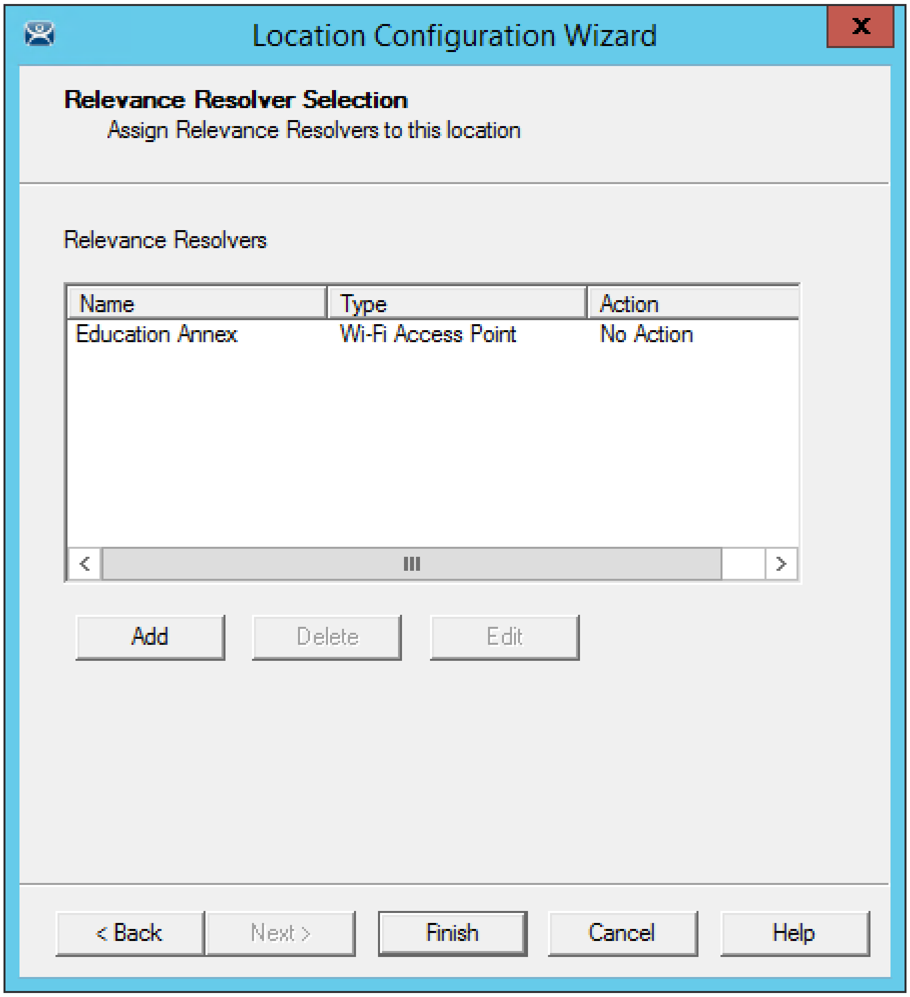
Password

Verify Password

Domain

*Windows Log In Information Page*

The **Building_C** parent location is not being assigned a Windows user account. Since it has no display clients of its own it doesn't need a Windows log in for them.



**Relevance Resolver Selection**

Assign Relevance Resolvers to this location

Relevance Resolvers

| Name | Type | Action |
|---|---|---|
| Education Annex | Wi-Fi Access Point | No Action |

*Relevance Resolver Selection Page*

The **Building_C** parent location is assigned **Education Annex Wi-Fi Access Point** resolver. It has no action listed because the intent isn't to launch a program or initiate an action other than identifying the user as being in the parent location.

A user will have to be on the **Education Annex** Wi-Fi network to access the sub-locations.

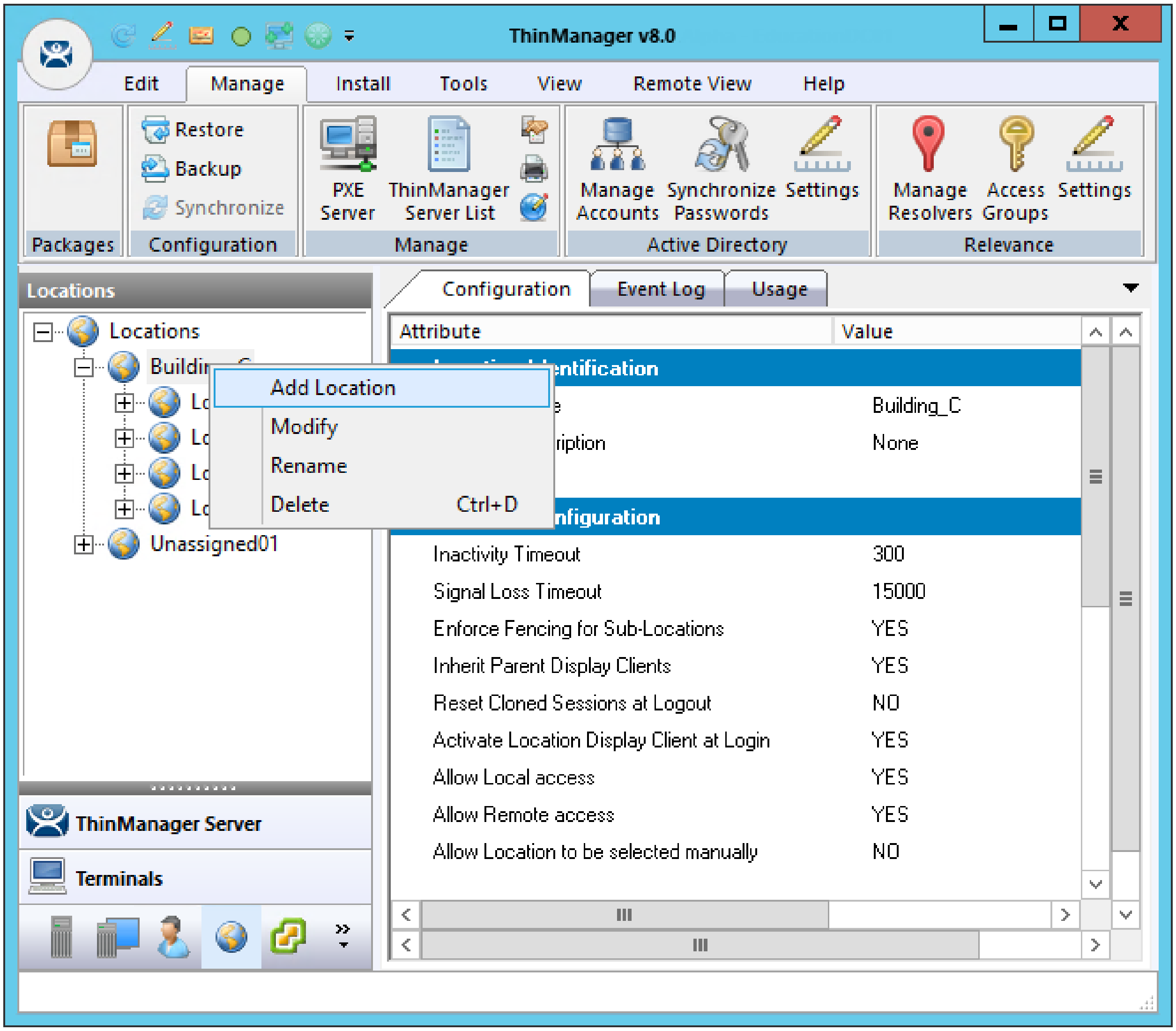
A GPS location or Bluetooth beacon could have been used instead.

## 9.2. Child Sub-Locations

Sub-locations that are nested under a parent location must resolve the parent location before it can initiate the action of the sub-location.

You can create a sub-location in two methods.

The first method to create a sub-location is to right click on the parent location, select the ***Add Location*** command, and launch the **Location Configuration Wizard**. The created location will be nested under the parent location.



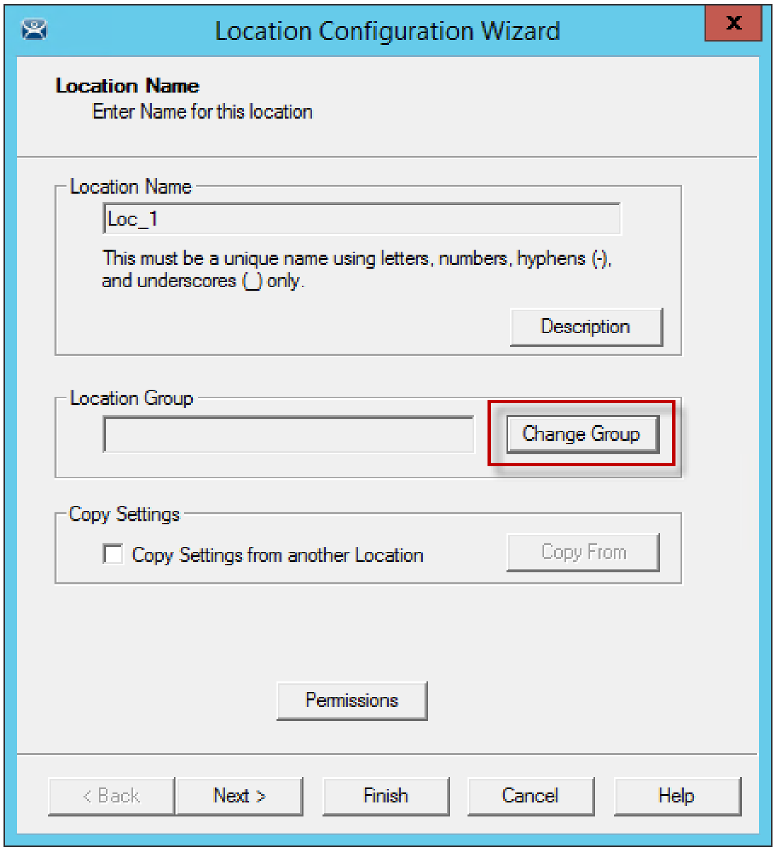
| Attribute | Value |
|---|---|
| ...ntification | |
| ...e | Building_C |
| ...ription | None |
| ...nfiguration | |
| Inactivity Timeout | 300 |
| Signal Loss Timeout | 15000 |
| Enforce Fencing for Sub-Locations | YES |
| Inherit Parent Display Clients | YES |
| Reset Cloned Sessions at Logout | NO |
| Activate Location Display Client at Login | YES |
| Allow Local access | YES |
| Allow Remote access | YES |
| Allow Location to be selected manually | NO |

*Location Right Click Menu*

This picture shows the ***Add Location*** command.

The second method to create a sub-location is to add an existing location to the location.

Launch the **Location Configuration Wizard** by double clicking on a location in the Location branch of the ThinManager tree.



Location Configuration Wizard

**Location Name**

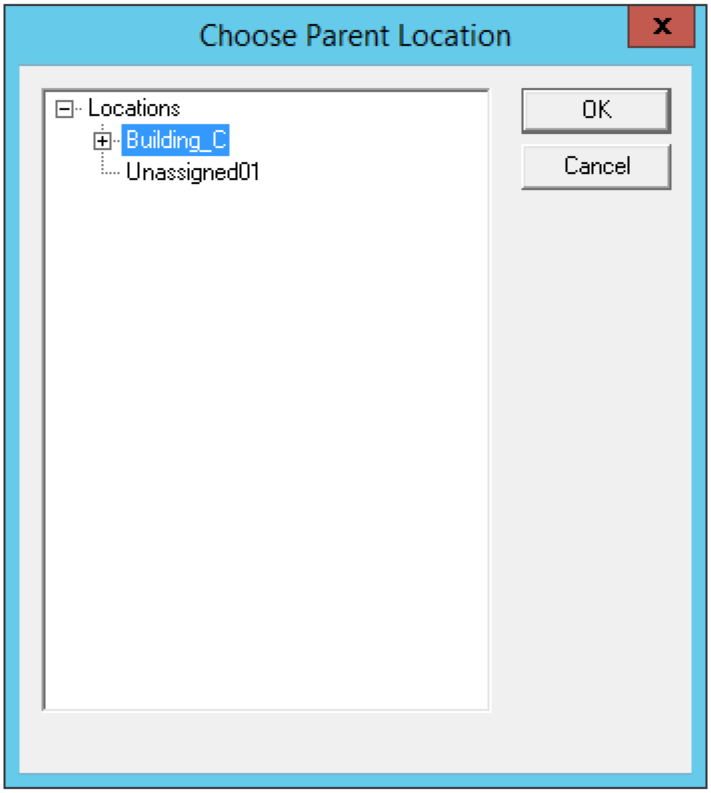
Enter Name for this location

Location Name: Loc_1

This must be a unique name using letters, numbers, hyphens (-), and underscores (_) only.

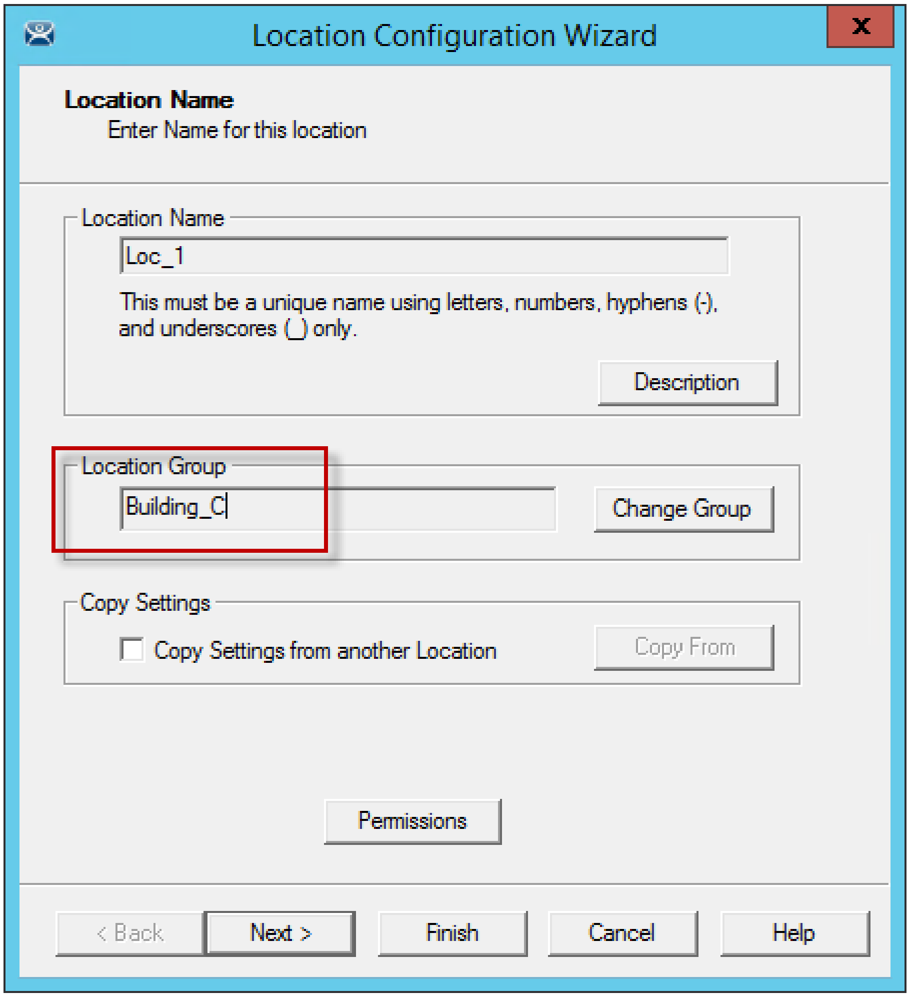
*Location Name Page of the Location Configuration Wizard*

Select the ***Change Group*** button to launch the **Choose Parent Location** window.



*Choose Parent Location Window*

Highlight the desired parent location in the **Choose Parent Location** and select the ***OK*** button.



Location Configuration Wizard

**Location Name**

Enter Name for this location

Location Name: Loc_1

This must be a unique name using letters, numbers, hyphens (-), and underscores (_) only.

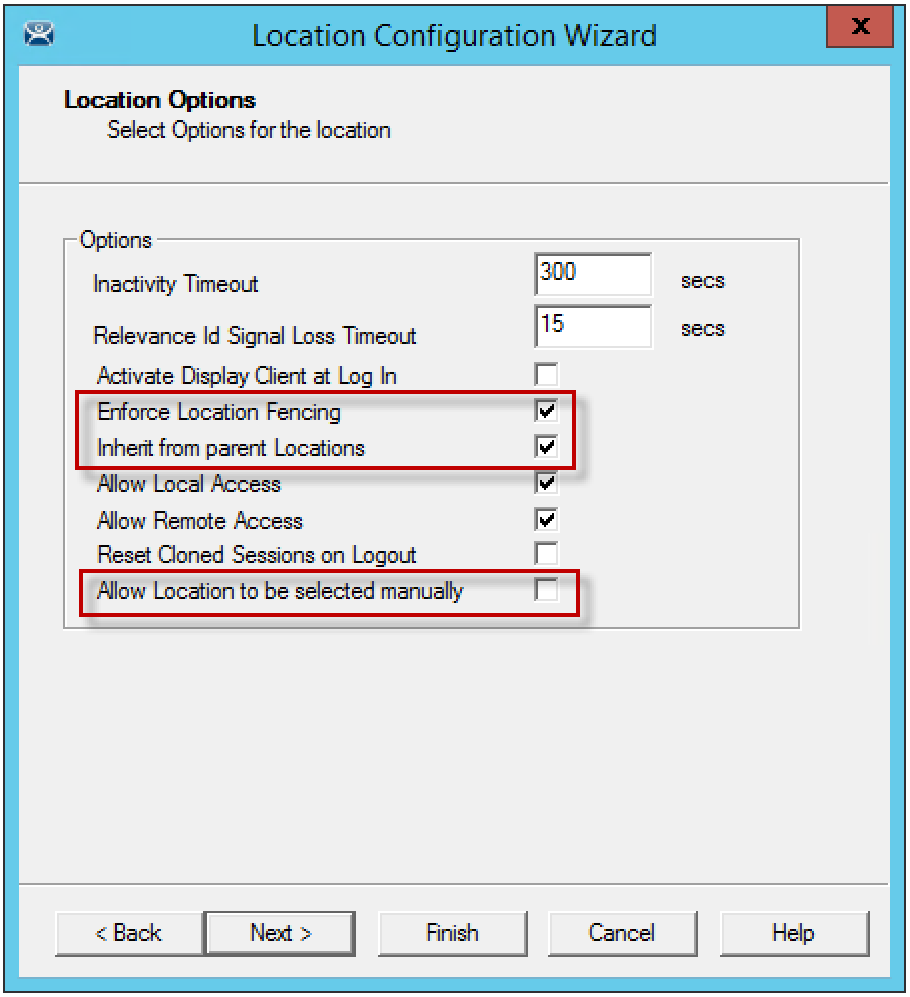
Location Group: Building_C

Copy Settings

□ Copy Settings from another Location

*Location Name Page of the Location Configuration Wizard*

The selected parent location will be displayed as the ***Location Group*** and the open location will become a child sub-location once the ***Finish*** button is selected to accept the change.



**Location Options**

Select Options for the location

Options

Inactivity Timeout: 300 secs

Relevance Id Signal Loss Timeout: 15 secs

□ Activate Display Client at Log In

☑ Enforce Location Fencing

☑ Inherit from parent Locations

☑ Allow Local Access

☑ Allow Remote Access

□ Reset Cloned Sessions on Logout

□ Allow Location to be selected manually

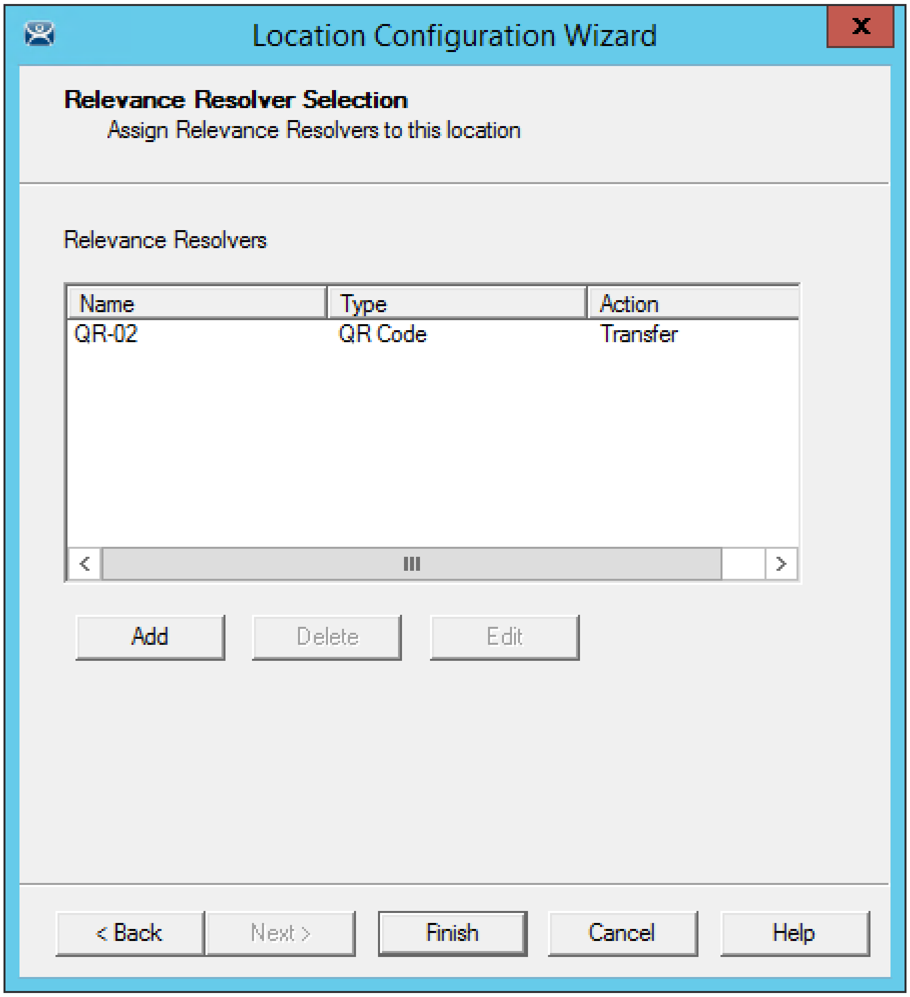
*Location Options for Sub- Location*

This sub-location is configured to Inherit from parent Location.

If they had sub-locations of their own they could have the Enforce Location Fencing applied.

Select the ***Inherit from parent Locations*** to inherit the applications applied to the parent location.

Unselect the ***Allow Location to be selected manually*** to make the user use the resolver at the location to initiate the application or action..


Location Configuration Wizard
Relevance Resolver Selection
Assign Relevance Resolvers to this location
Relevance Resolvers

| Name | Type | Action |
|---|---|---|
| QR-02 | QR Code | Transfer |

Add
Delete
Edit
< Back
Next >
Finish
Cancel
Help

*Relevance Resolvers Selection for Sub-Locations*

The sub-locations can use any resolver, either QR codes, additional Bluetooth beacons, another Wi-Fi access point, or GPS to allow access to the sub-location. The QR code provides the best way to provide pin point accuracy.

# 10. Relevance User Access

Relevance has Access Groups that can be used to control access to a location or action. This is based on the TermSecure permissions in ThinManager.

Relevance has the ability to control access to actions and applications in ThinManager like TermSecure does. The steps are:

- Create Access Groups
- Apply to Applications or actions
- Apply to location
- Create Relevance Users
- Apply Permissions
- Login to the location to access applications

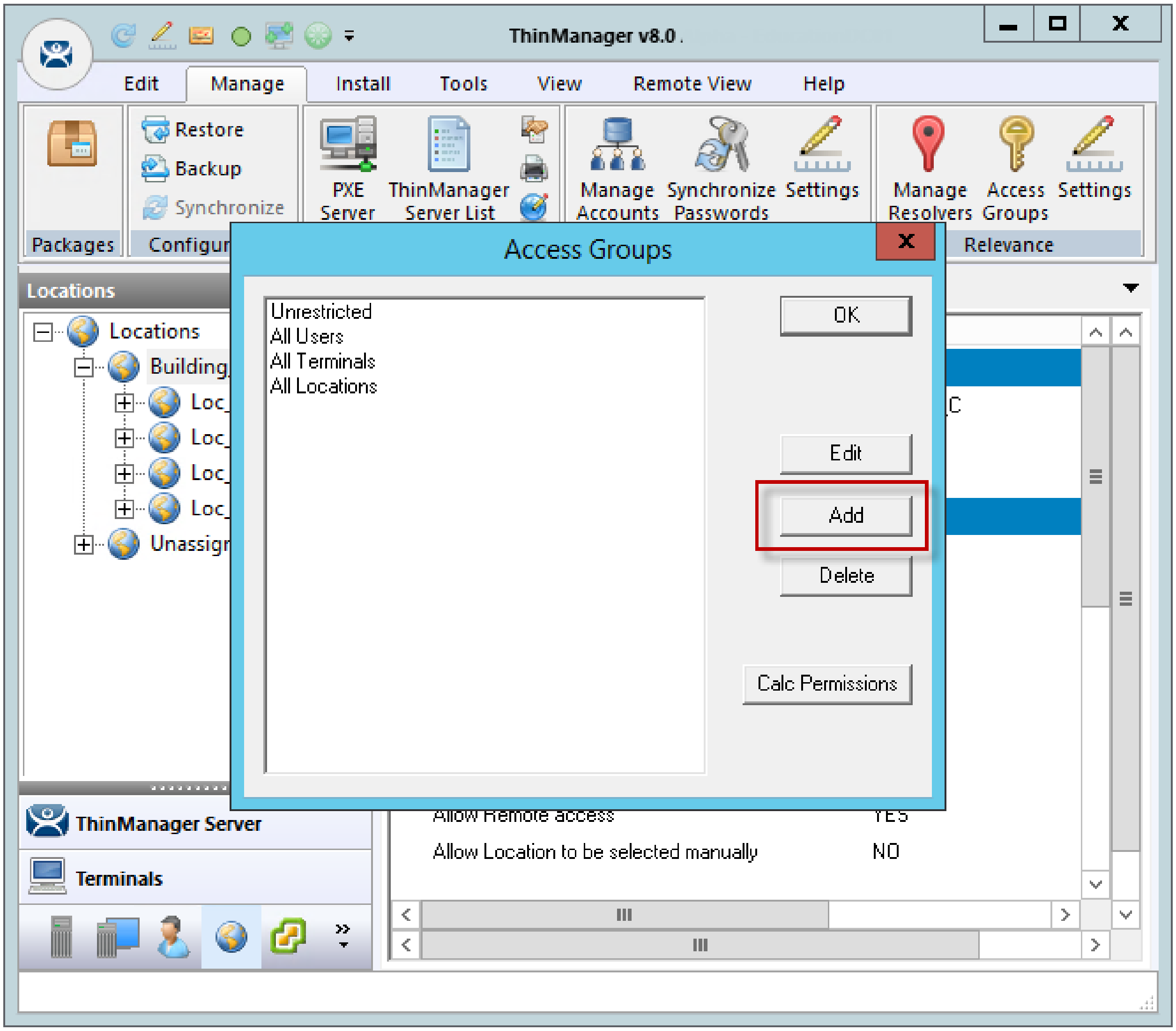
*Access Groups Applied to Display Clients and Users*

*User Accessing Display Clients Using Permissions*

## 10.1. Create Access Groups

Select the ***Manage*** menu.

Click the ***Access Group*** key icon to launch the Access Groups window.



Unrestricted
All Users
All Terminals
All Locations

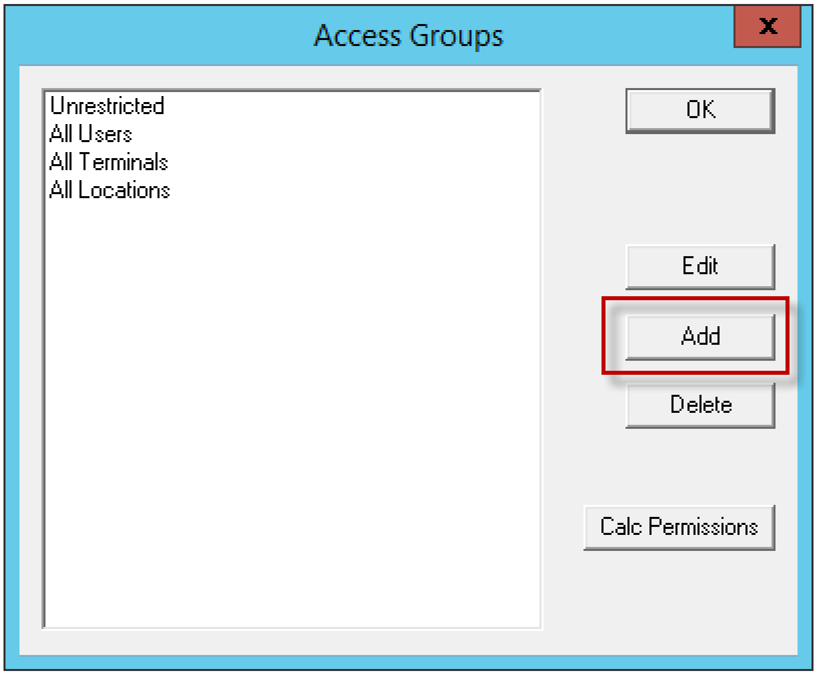
Allow Remote access YES
Allow Location to be selected manually NO

*Access Groups*

There are four default access groups, **Unrestricted**, **All Users**, **All Terminals**, and **All Locations**.

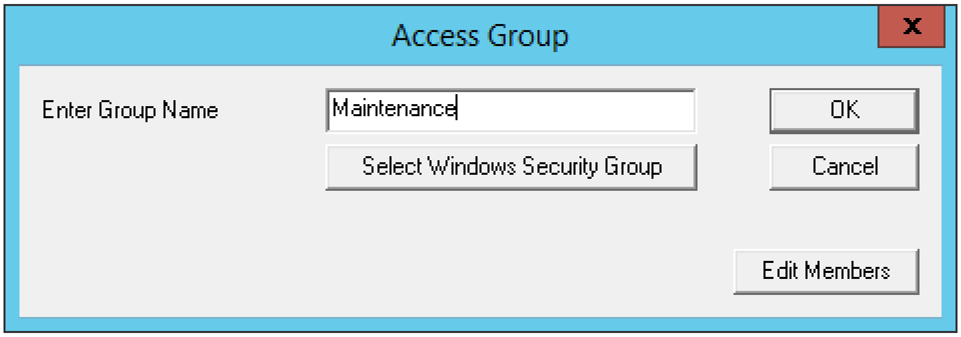
You need to add additional access groups to use permissions to control applications and actions..

T Access Groups are created in the **Access Group** window. Open it by selecting ***Manage>Access Groups*** from the ThinManager menu.



*Access Group Window with Default Groups*

The **Access Group** window shows the default **Access Groups**.
Select the ***Add*** button to open the **Access Group** window.

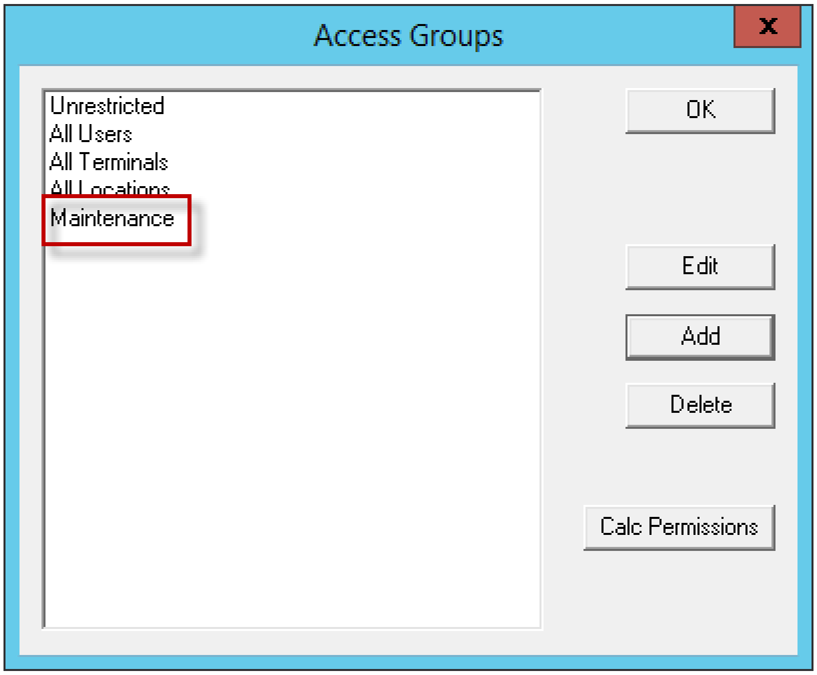


Enter Group Name: Maintenance

*Access Group Popup*

Enter the name of the Access Group you wish to add. ***Maintenance*** is used in this example.

Select the ***OK*** button to add the group.



*Access Groups Window*

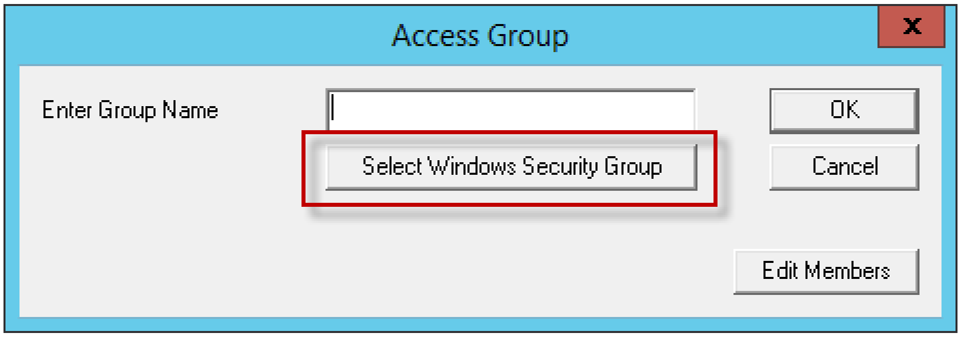
The **Access Groups** window will show the added TermSecure Access Groups.

### 10.1.1. Create Access Group using Windows Security Group

Access Groups can be created using Windows Security Groups. Open the **Access Group** window by selecting ***Manage>Access Groups*** from the ThinManager menu.

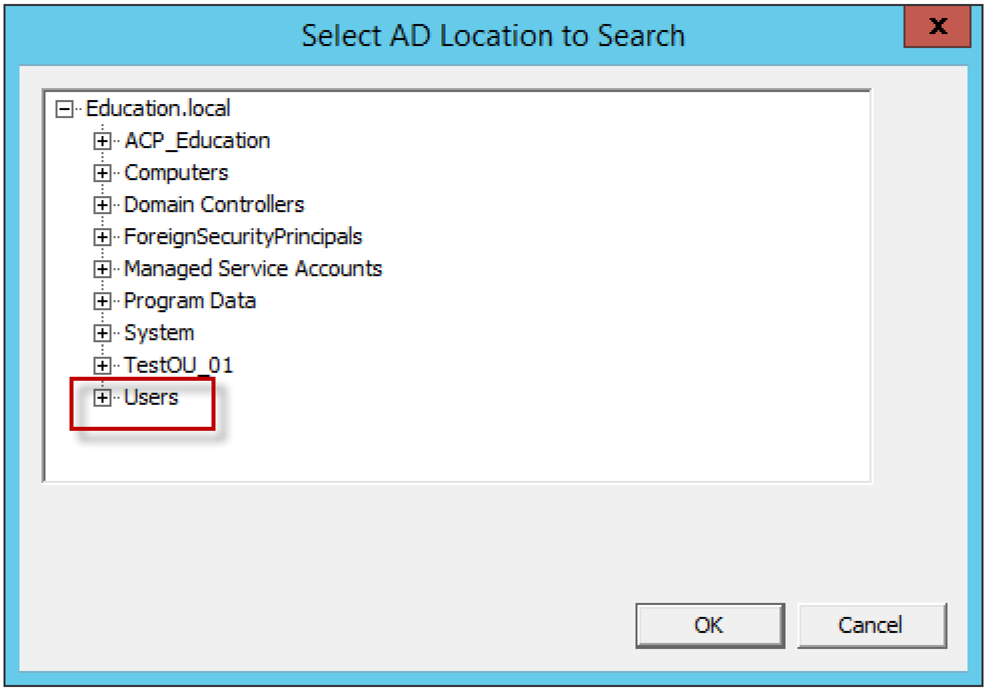
The **Access Groups** window shows the default Access Groups.

Select the ***Add*** button on the **Access Groups** window to launch the **Access Group** window.



*Access Group Creation Wizard*

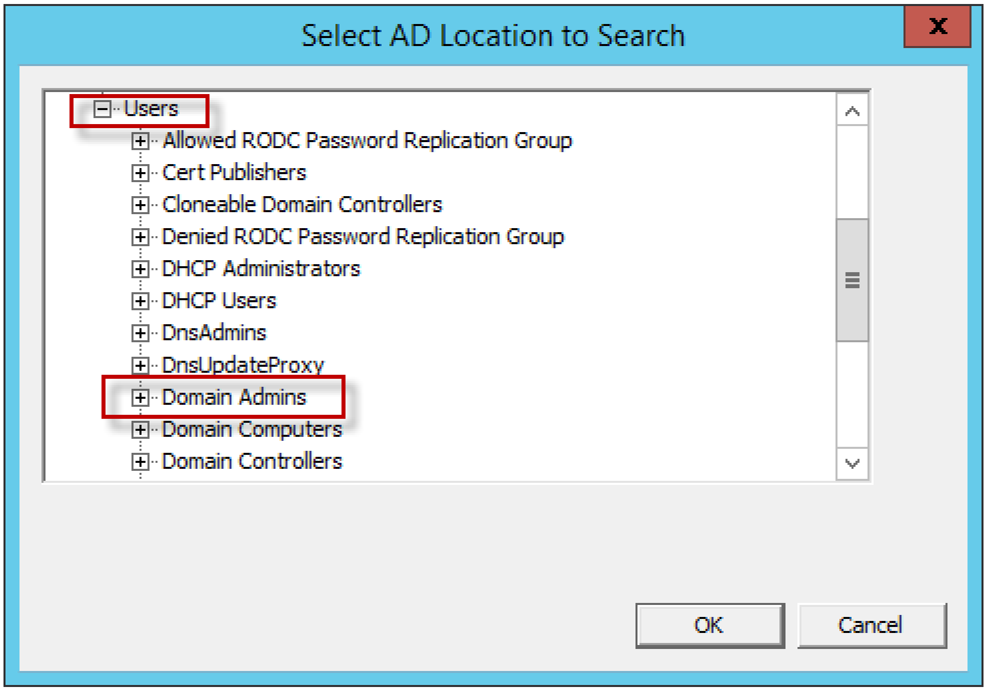
The **Access Group** window has a ***Select Windows Security Group*** button that launches the **Select AD Locations to Search** window.



*Select AD Locations to Search*

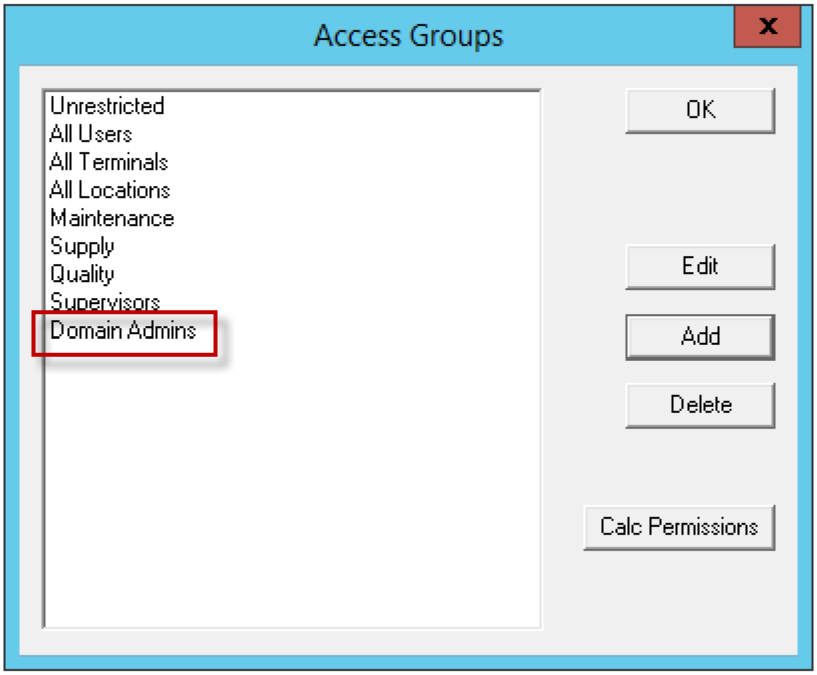
The **Select AD Location to Search** window will be displayed.

Select the **Users** group and expand the tree.


Select AD Location to Search
x
Users
Allowed RODC Password Replication Group
Cert Publishers
Cloneable Domain Controllers
Denied RODC Password Replication Group
DHCP Administrators
DHCP Users
DnsAdmins
DnsUpdateProxy
Domain Admins
Domain Computers
Domain Controllers
OK
Cancel

*Select AD Locations to Search*

The Windows User Groups will be shown once the **Users** branch is expanded. Select a Windows Group to add as a ThinManager Access Group and select the ***OK*** button.



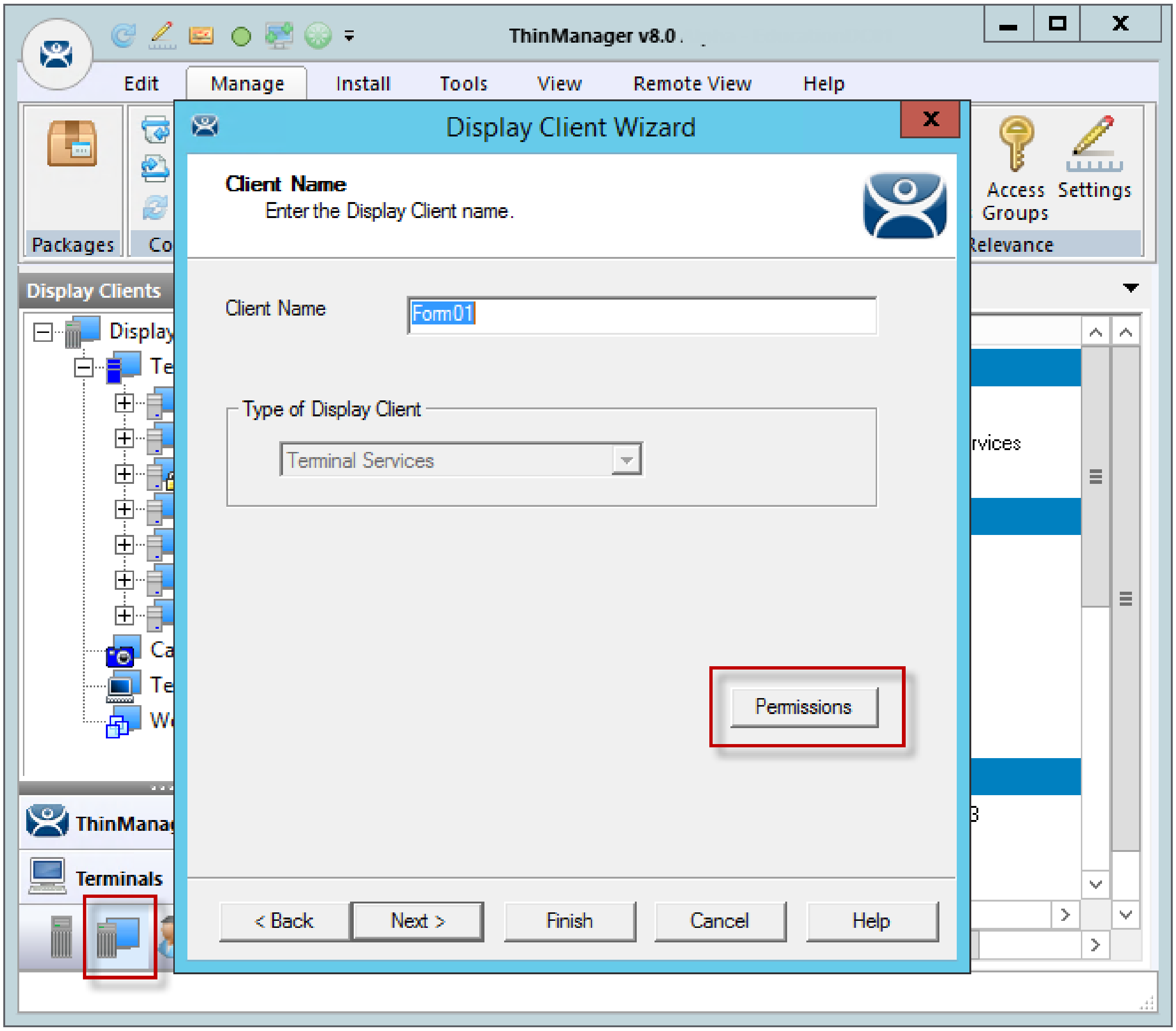
*Access Groups*

The Windows User Group will be added to the ThinManager Access Groups.

## 10.2. Apply Permissions to a Display Client Application

Select the **Display Client** tree and expand the **Terminal Services** branch.

Double click on the desired display client to launch the configuration wizard.



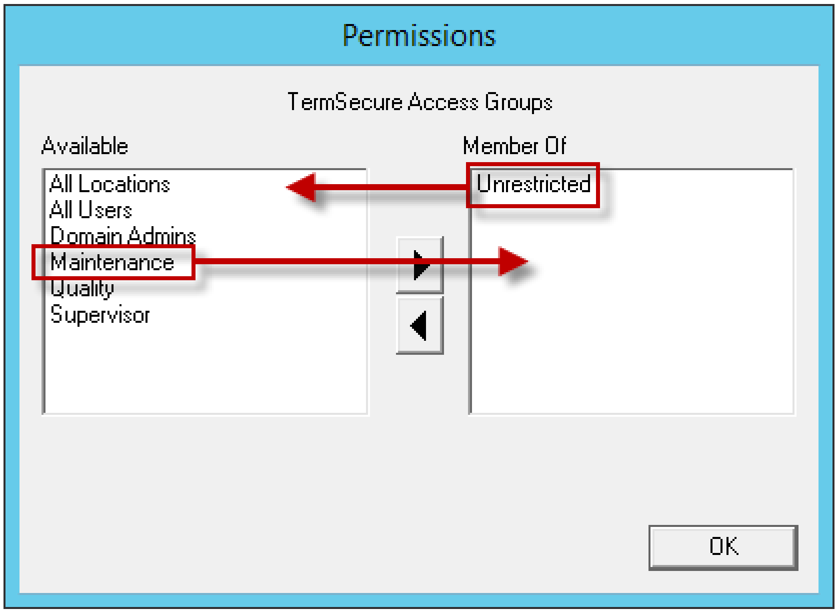
**Client Name**
Enter the Display Client name.

Client Name: Form01

Type of Display Client: Terminal Services

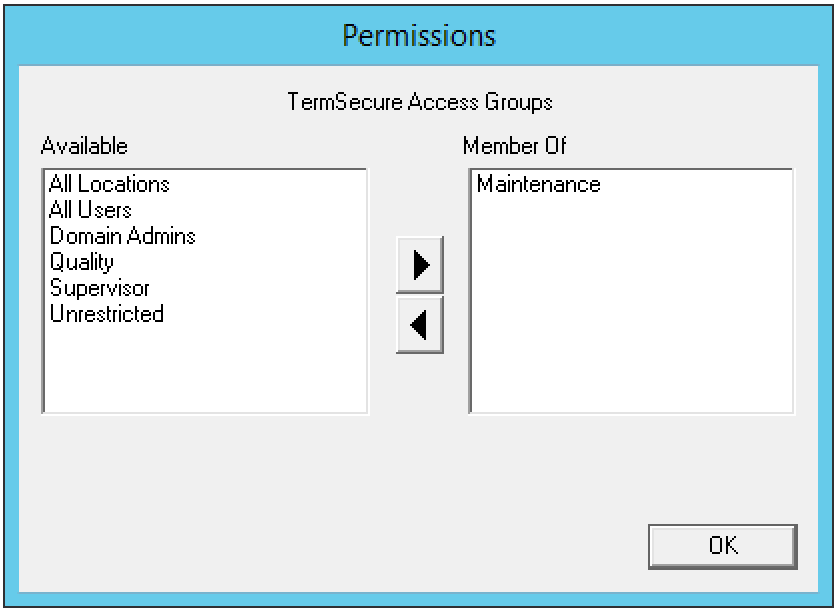
*Client Name Page of the Display Client Wizard*

Select the ***Permissions*** button on the Client Name page.



*Permissions Window - Before*

Remove **Unrestricted** from the ***Member Of*** list and add your access group to the ***Member Of*** list.



*Permissions Window - After*

Select ***OK*** to accept.

Select ***Finish*** to close the wizard.

This display client application is now restricted to members of your group.

## 10.3. Create Relevance Users

You need to create a user(s) that is a member of the access group to access the application.

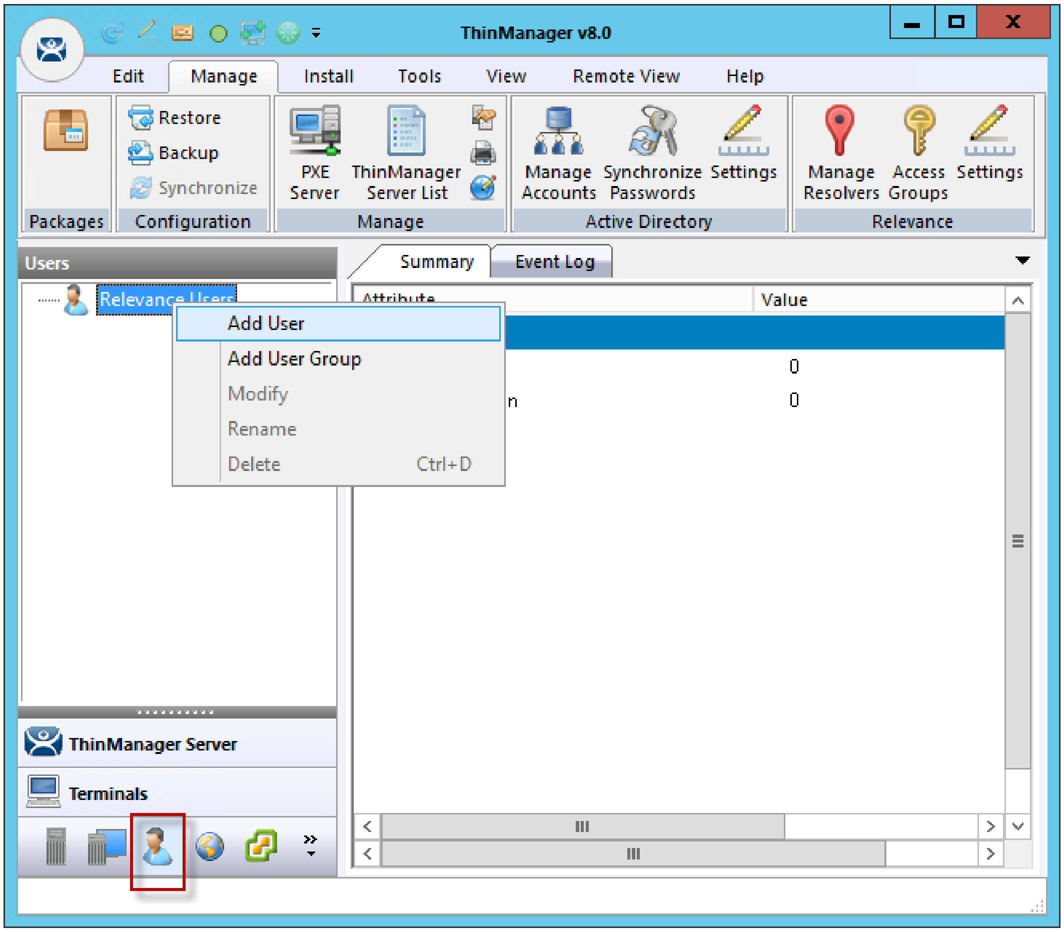
Relevance User accounts may grant the user access to a restricted program or may give a user a program session that follows them from terminal to terminal. The terminal will not display restricted applications until an appropriate TermSecure User has logged in.

**Note:** This section shows how to use Permissions to deny or grant access to applications that belong to a Location. This means that the Relevance User doesn't need to be tied to a Windows account.
You can take advantage of the Active Directory integration and create Relevance user accounts that are tied to Active Directory accounts.

If you want to have the Relevance user have applications of their own then they will need to be tied to a Windows user account.

Using Active Directory to create TermSecure User accounts will be discussed in Create the TermSecure User with a Domain on page 146.

Open the **Relevance User** tree by clicking on the Relevance User icon at the bottom of the ThinManager tree.



*TermSecure User Tree*

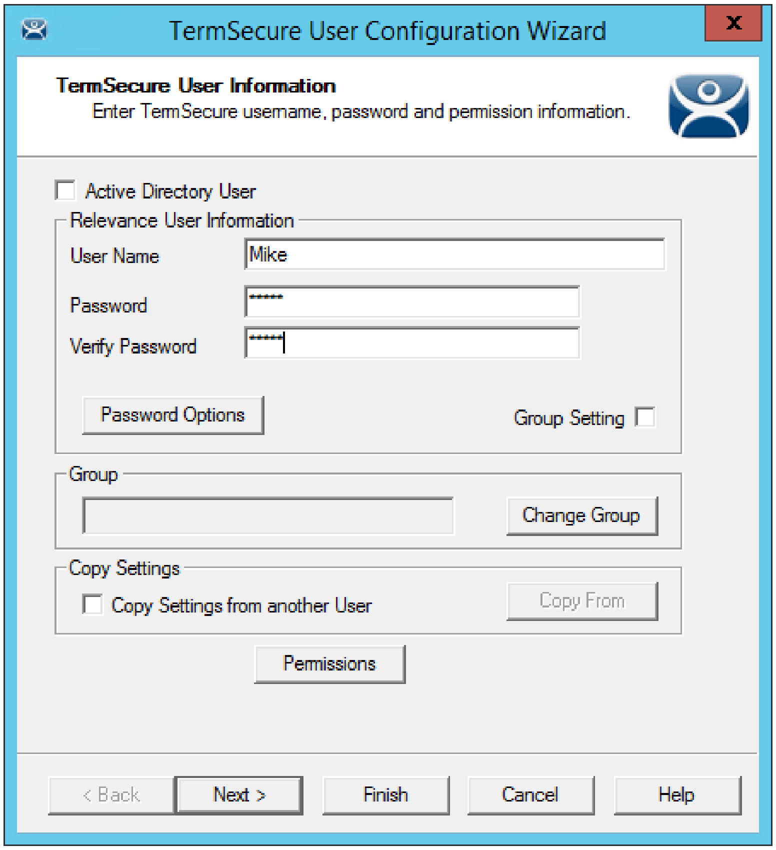
Right click on the ***Relevance Users*** branch of the ThinManager tree and select the Add User command to open the **Relevance User Configuration Wizard**.

### 10.3.1. Create the TermSecure User without a Domain

The **Relevance User Configuration Wizard** allows a Relevance User to be created and configured.

ThinManager 8.0 introduces Active Directory integration to the ThinManager system. This allows you to use the Active Directory to create users. Please see Create the TermSecure User with a Domain on page 146.

You can uncheck the Active Directory checkbox to create Relevance users that are not tied to a Windows account.



TermSecure User Configuration Wizard

TermSecure User Information

Enter TermSecure username, password and permission information.

□ Active Directory User

Relevance User Information

User Name: Mike

Password: *****

Verify Password: *****

Group Setting □

Group:

Copy Settings

□ Copy Settings from another User

*TermSecure User Configuration Wizard*

To create a TermSecure User that is not an Active Directory user you first uncheck the ***Active Directory User*** checkbox.

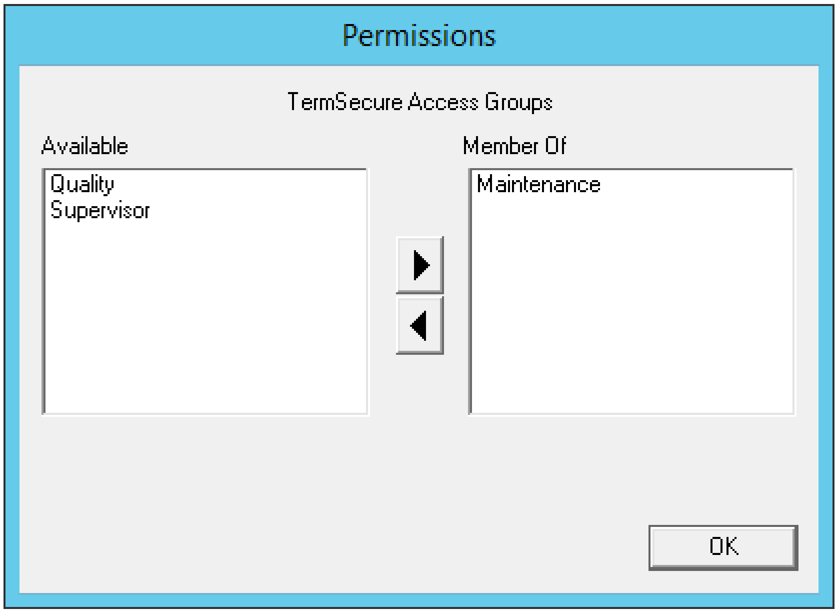
**Note:** This is not a Windows account but is a TermSecure account to be used within ThinManager.

Enter a name in the ***User Name*** field.

Enter a password in the ***Password*** and ***Verify Password*** fields.

Select the ***Permissions*** button to launch the **Permissions** window.

**Note:** Relevance Access is based on the ThinManager TermSecure Access Groups. This is why TermSecure is used in the wizards.



Available: Quality, Supervisor

Member Of: Maintenance

*Permissions Window*

Add your Relevance Access Group to your created user by double clicking on the Access Group in the ***Available*** text box to move it to the ***Member Of*** list.

Select the ***OK*** button to accept the changes.

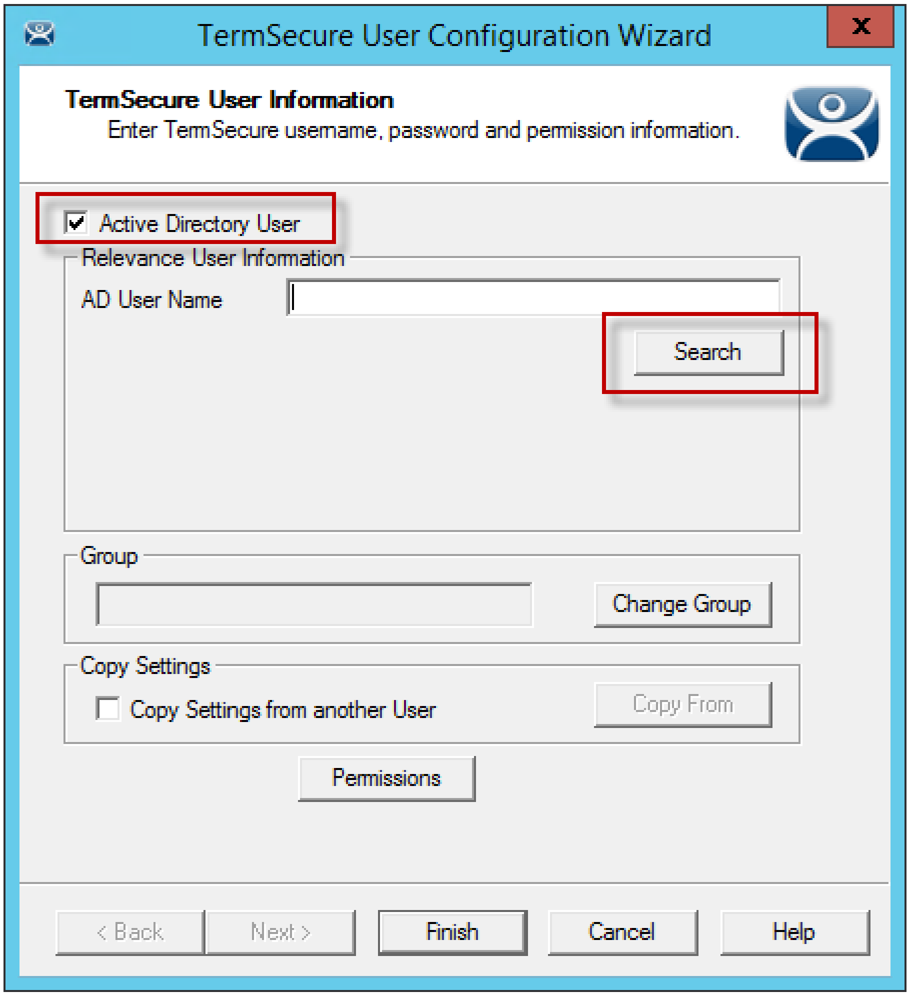
These are the only settings needed for a TermSecure User to unlock hidden applications, a Relevance User name and membership in a Relevance Access Group. The wizard has other settings that will be described in the next section.

### 10.3.2. Create the TermSecure User with a Domain

The first page of the **TermSecure User Configuration Wizard** is the **TermSecure User Information** page that creates the TermSecure User account.

ThinManager Active Directory integration allows a TermSecure User to have its Windows user account drawn from the Active Directory. You allow ThinManager to store the password to streamline password management.

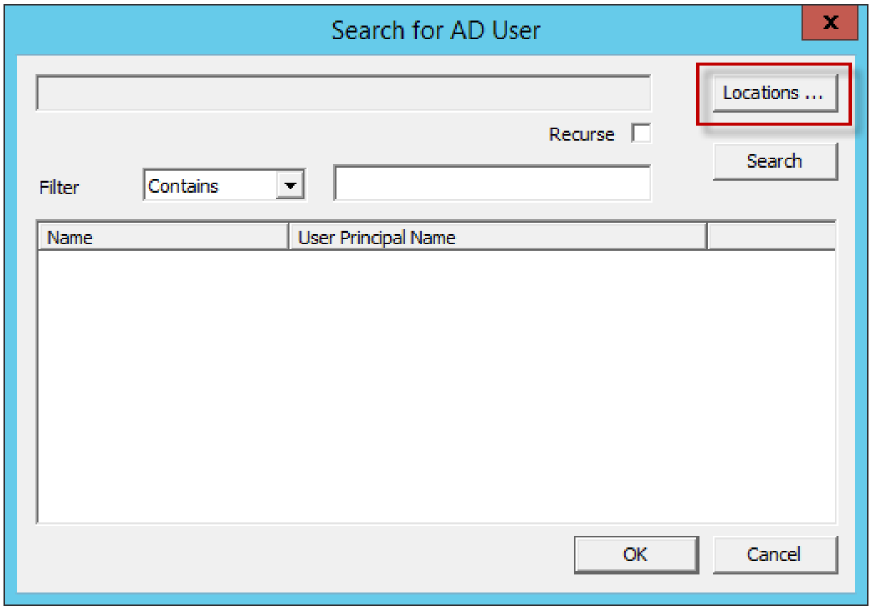
The first page of the **TermSecure User Configuration Wizard** is the **TermSecure User Information** page that creates the TermSecure User account.


TermSecure User Configuration Wizard
TermSecure User Information
Enter TermSecure username, password and permission information.
☑ Active Directory User
Relevance User Information
AD User Name
Search
Group
Change Group
Copy Settings
□ Copy Settings from another User
Copy From
Permissions
< Back
Next >
Finish
Cancel
Help

*TermSecure User Information*

Selecting the ***Active Directory User*** checkbox allows you to draw the user account from the Active Directory.

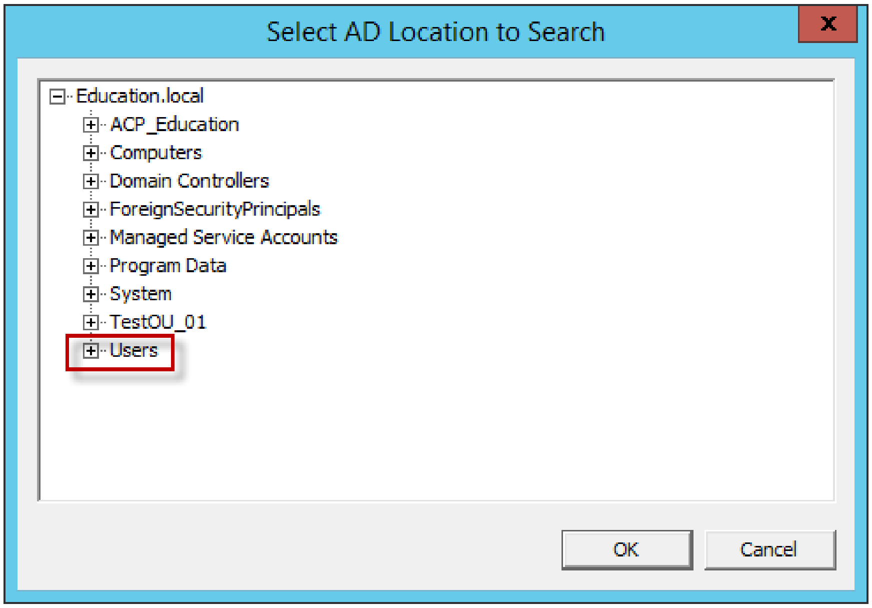
Select the ***Search*** button to begin the Active Directory process by launching the **Search for AD User** window.



*Search for AD User Window*

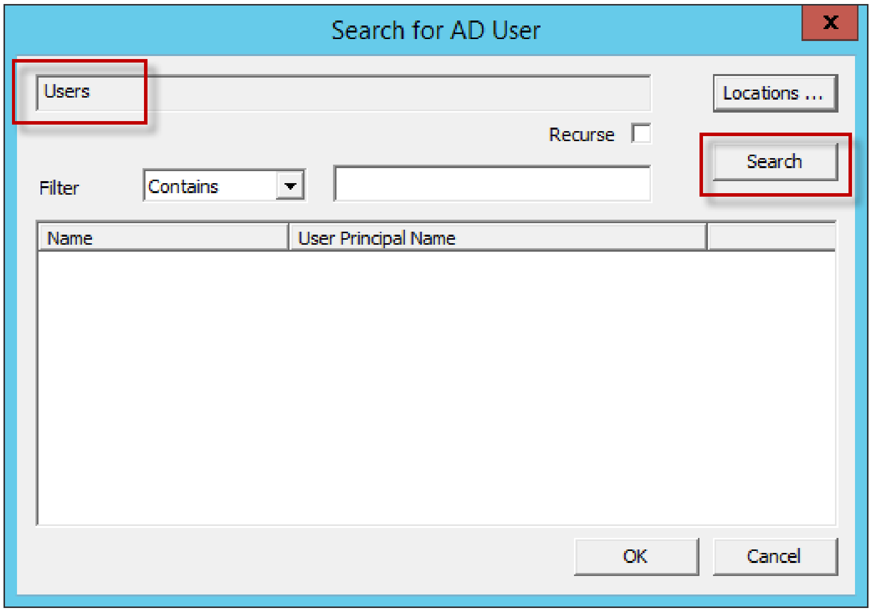
Select the Locations button on the Search for AD User window to choose a location.

This will launch the **Select AD Location to Search** window.



*Select AD Location to Search Window*

Highlight  the AD location you want to select the user from and select the ***OK*** button. This will enter the location into the ***Locations*** field in the **Search for AD User** window.



Users

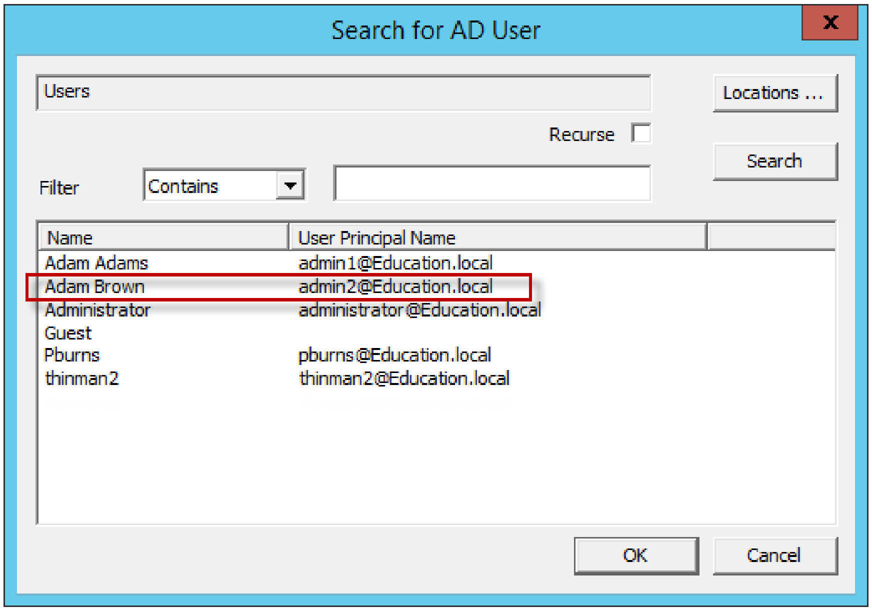
Recurse □

Filter: Contains

| Name | User Principal Name |
|---|---|

*Search for AD User Window – Location Selected*

Once the Location has been selected click the ***Search*** button to populate the user field with users from the highlighted location.



Users

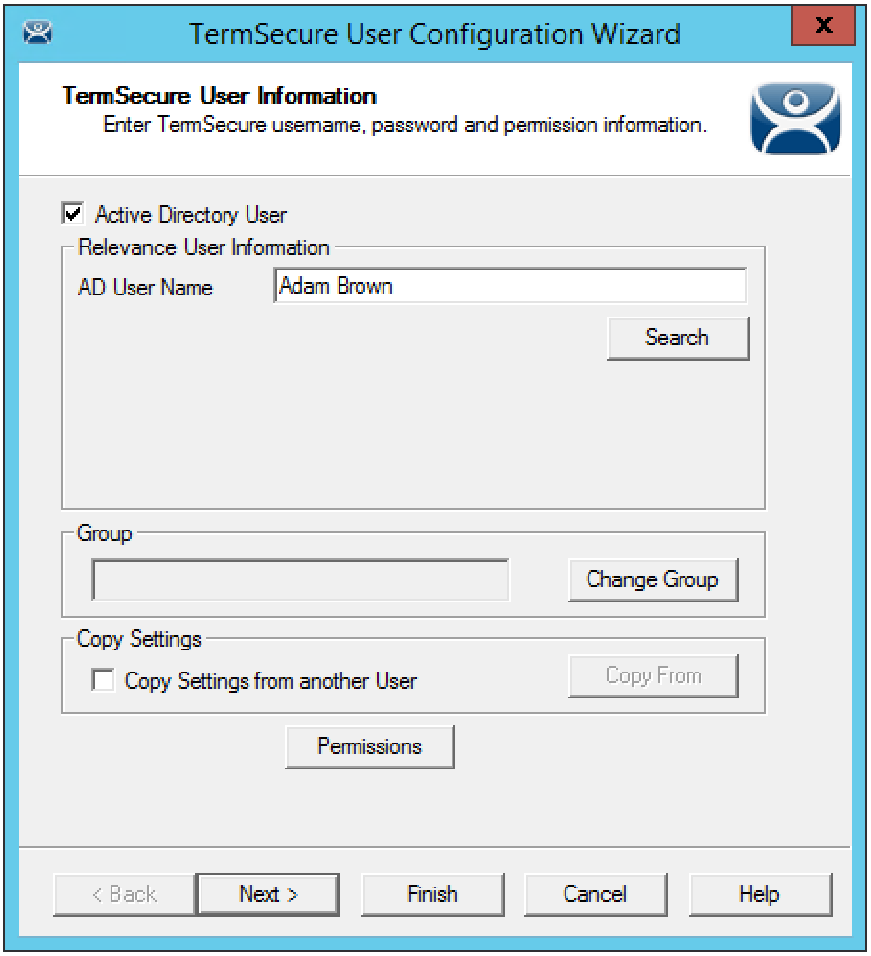
Recurse □

Filter: Contains

| Name | User Principal Name |
|---|---|
| Adam Adams | admin1@Education.local |
| Adam Brown | admin2@Education.local |
| Administrator | administrator@Education.local |
| Guest | |
| Pburns | pburns@Education.local |
| thinman2 | thinman2@Education.local |

*Search for AD User Window – Users*

Highlight the desired user account from the Active Directory members and select the ***OK*** button. This will enter the user account in the ***AD User Name*** field of the **TermSecure User Information** page.



TermSecure User Configuration Wizard

**TermSecure User Information**

Enter TermSecure username, password and permission information.

☑ Active Directory User

Relevance User Information

AD User Name: Adam Brown

Group:

Copy Settings

☐ Copy Settings from another User

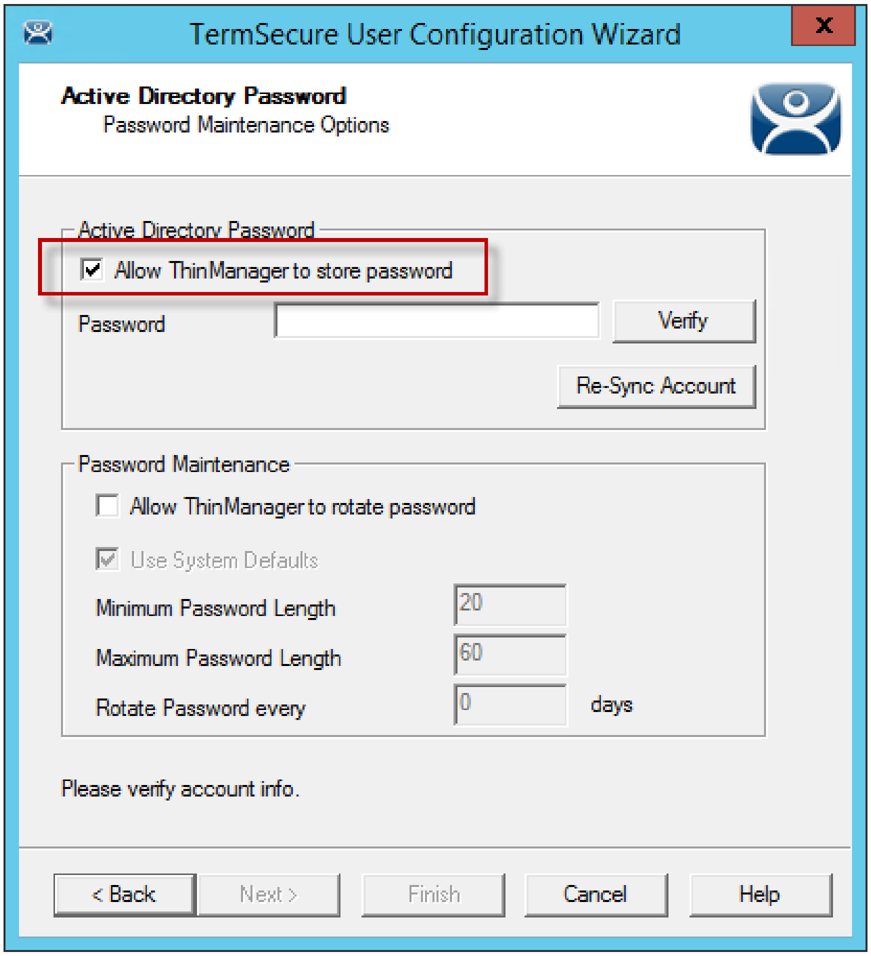
*TermSecure User Information Window*

This shows an Active Directory user in the ***AD User Name*** field.

Select the ***Permission*** button to apply membership in Access Groups as shown in Create Access Groups on page 136**Error! Bookmark not defined.**.

Select the ***Finish*** button if you only need a **Permission** applied.

Select the ***Next*** button if you want to apply user-specific display clients.



TermSecure User Configuration Wizard

**Active Directory Password**
Password Maintenance Options

Active Directory Password

☑ Allow ThinManager to store password

Password

Password Maintenance

☐ Allow ThinManager to rotate password

☑ Use System Defaults

Minimum Password Length: 20

Maximum Password Length: 60

Rotate Password every: 0 days

Please verify account info.

*Active Directory Password Page*

The **Active Directory Password** page has an ***Allow ThinManager to store password*** checkbox. If this is unchecked then ThinManager does not store the account and you must enter a password each time the session logs on. This is fine if you are logging in with a TermSecure password anyhow.

If the ***Allow ThinManager to store password*** checkbox is checked then you can have the Windows password stored in ThinManager. This allows a fingerprint scan to send the Windows password automatically for authentication.

If the ***Allow ThinManager to store password*** checkbox is checked you can use the system defaults or uncheck the ***Use System Default Password Settings*** to customize the password settings.

The password settings include

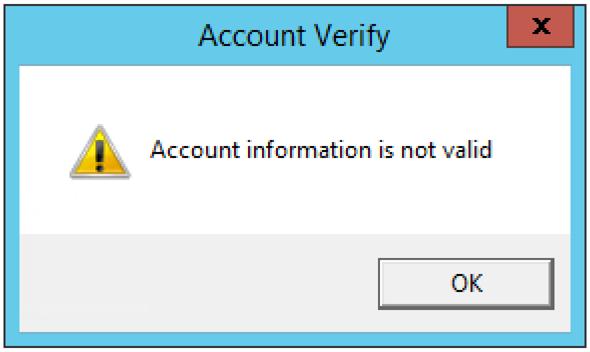
**Password Complexity Requirements:**

- ***Minimum Password Length*** – This is the minimum number of characters a password may have.
- ***Maximum Password Length*** – This is the maximum number of characters a password may have.

**Password Maintenance:**

- ***Rotate Password every*** – This is the number of days before the password must be changed.

Enter a the user password in the ***Password*** field and select the ***Verify*** button.

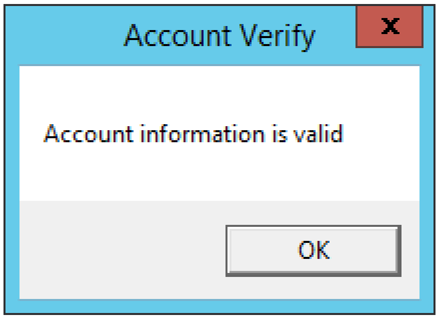


Account Verify

Account information is not valid

*Account Verify Dialog - Fail*

Selecting the ***Verify*** button will check your password against the Active Directory. If it is incorrect it will show a failed dialog.



Account Verify

Account information is valid

*Account Verify Dialog - Pass*

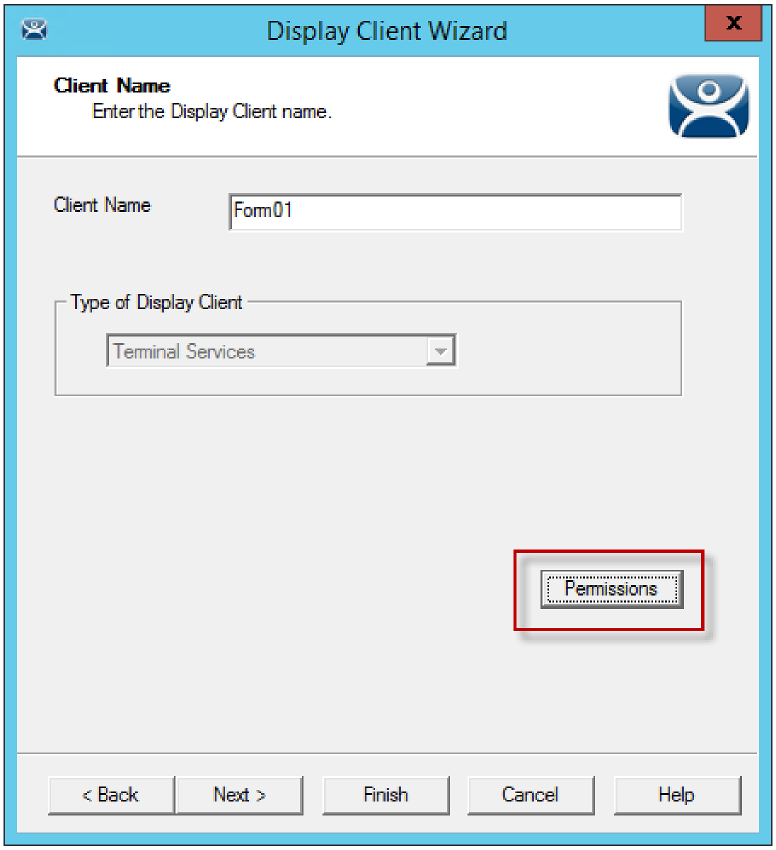
If the password is correct the dialog will show a positive result.

# 11. Creating a Location with Restricted Applications.

Access Group permissions can be assigned to display clients so that a user has to log on with an account that has permission to access the application. This allows controls application deployment by granting or denying access with permissions.

## 11.1. Using Permission to Restrict an Application

Open the Display Client with the application you want to restrict by double clicking on the display client in the Display Client tree.



Display Client Wizard

**Client Name**

Enter the Display Client name.

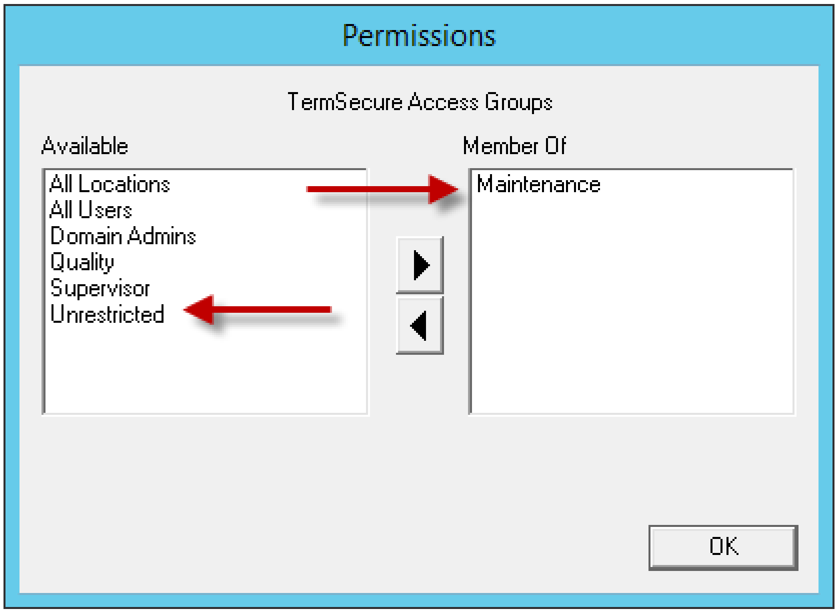
Client Name: Form01

Type of Display Client: Terminal Services

*Client Name Page of the Display Client Configuration Wizard*

Permissions are applied to the display client on the **Client Name Page** of the Display Client Configuration wizard.

Select the ***Permissions*** button to open the **Permissions** window.



*Permissions Window*

Remove *Unrestricted* from the ***Member of*** list and move the desired Access Group to the ***Member of*** list.

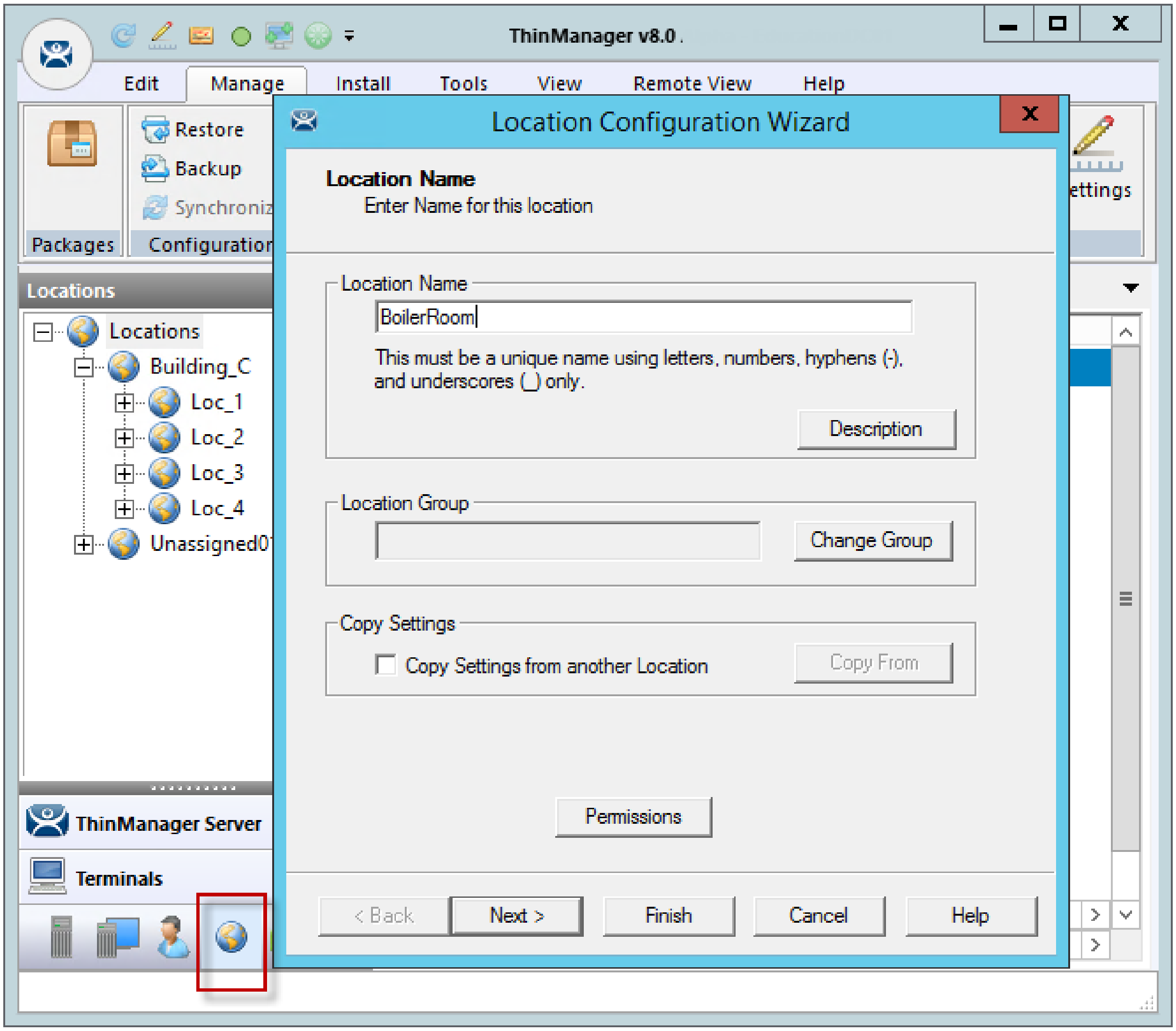
Click ***OK*** to close the window.

Click the ***Finished*** button on the **Client Name Page** to close the Display Client Configuration wizard.

## 11.2. Adding a Restricted Application to a Location

Create a Location with the restricted display client by opening the ***Locations*** tree by selecting the Locations icon on the Tree Selector.

Right click on the ***Locations*** branch and select ***Add Location*** to launch the Location Configuration Wizard.



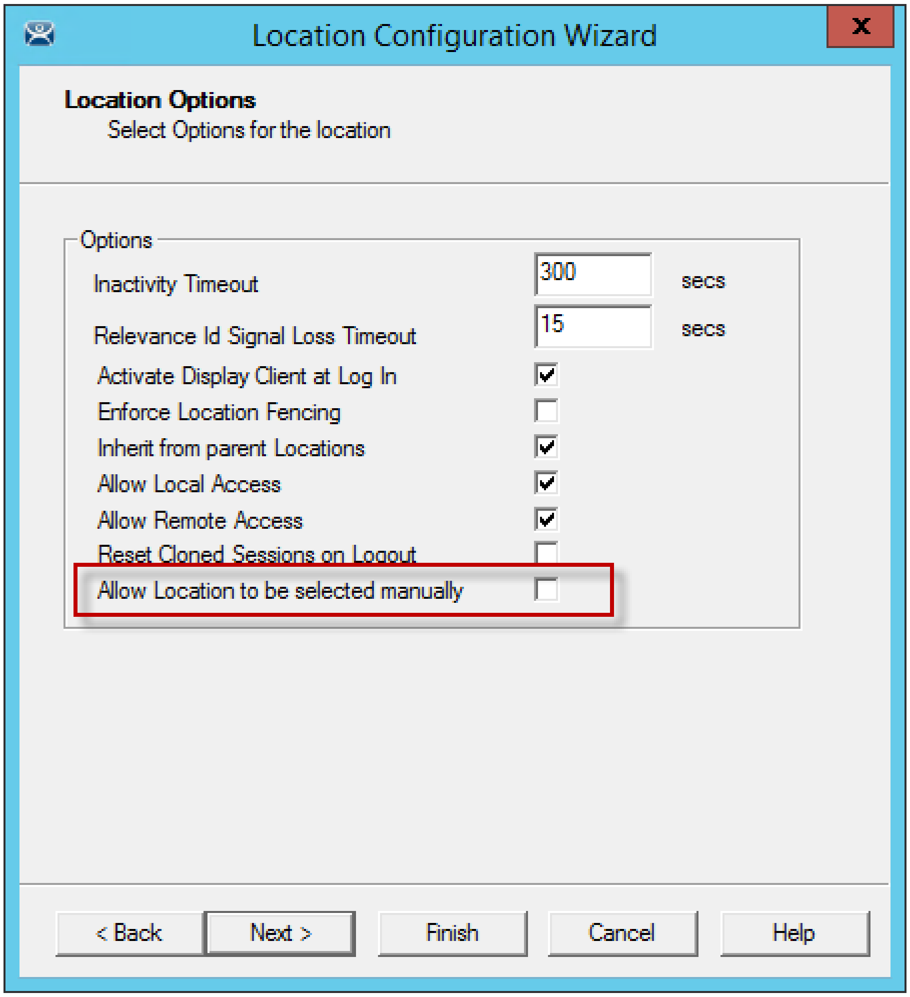
**Location Name**
Enter Name for this location

Location Name
BoilerRoom
This must be a unique name using letters, numbers, hyphens (-), and underscores (_) only.

□ Copy Settings from another Location

*Location Configuration Wizard*

Enter a location name in the ***Location Name*** field and select ***Next***.



**Location Options**

Select Options for the location

Options

Inactivity Timeout 300 secs

Relevance Id Signal Loss Timeout 15 secs

Activate Display Client at Log In ☑

Enforce Location Fencing □

Inherit from parent Locations ☑

Allow Local Access ☑

Allow Remote Access ☑

Reset Cloned Sessions on Logout □

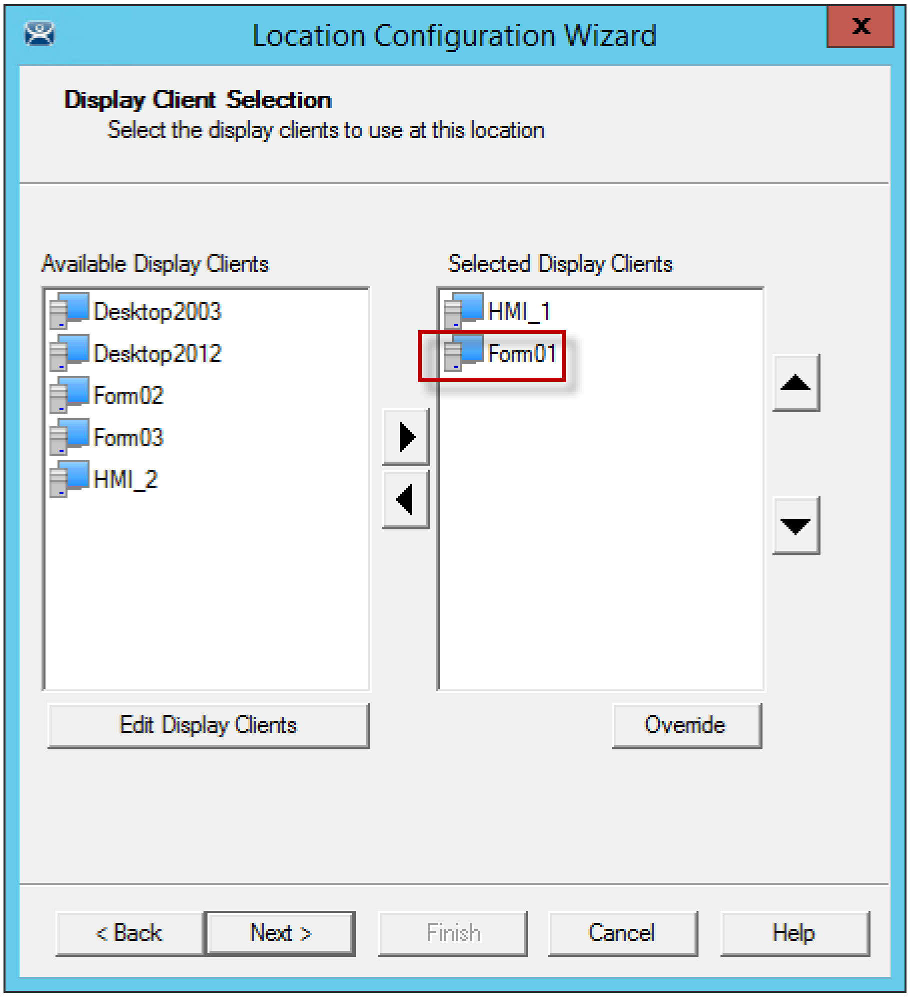
Allow Location to be selected manually □

*Location Options*

Choose your options on the **Location Options** page of the Location Configuration wizard.

Leaving the ***Allow Location to be selected manually*** checkbox unchecked  forces the user to use a resolver to access the applications.

Select ***Next*** to continue.



Location Configuration Wizard

**Display Client Selection**

Select the display clients to use at this location

Available Display Clients

- Desktop2003
- Desktop2012
- Form02
- Form03
- HMI_2

Selected Display Clients

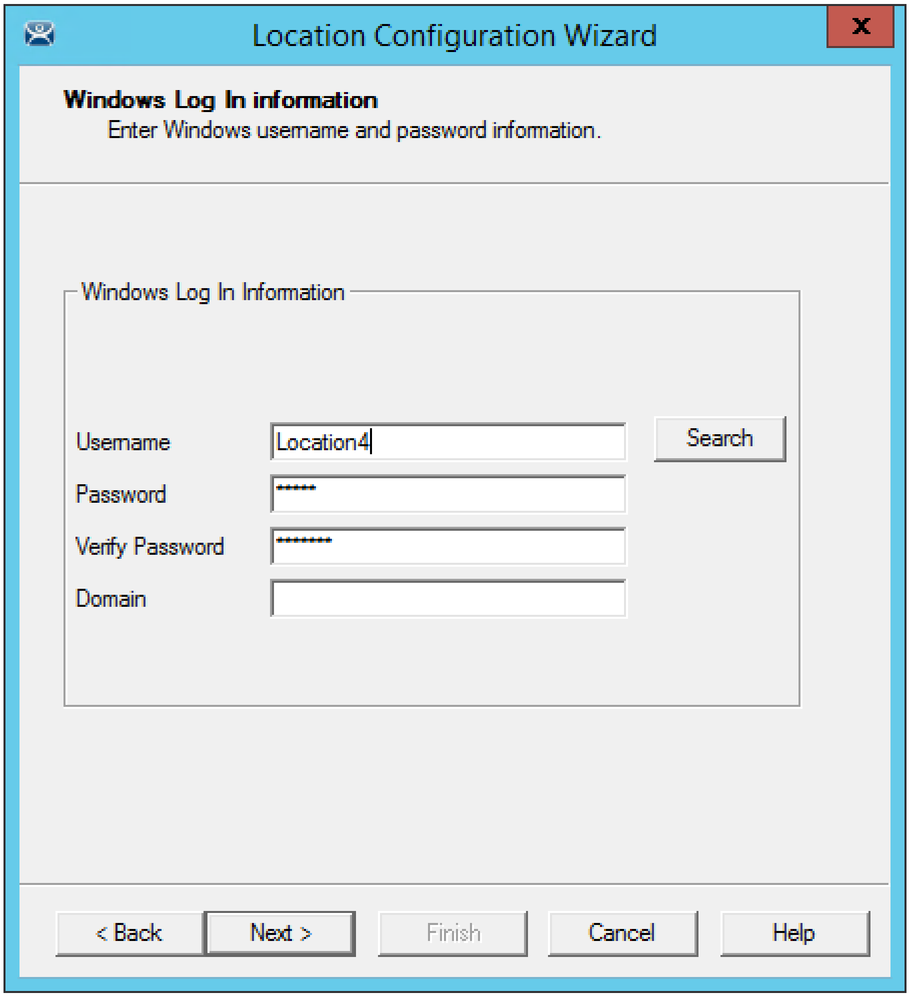
- HMI_1
- Form01

*Terminal Server Selection Page*

Add the desired display clients to the ***Selected Display Client*** list on the Terminal Server Selection page.

In this example the **HMI_1** display client is unrestricted but the **Form01** is restricted to members of the **Maintenance Access Group** as shown in Using Permission to Restrict an Application on page 152.

Select ***Next*** to continue.



Location Configuration Wizard

**Windows Log In information**

Enter Windows username and password information.

Windows Log In Information

Username: Location4

Password: ******

Verify Password: ********

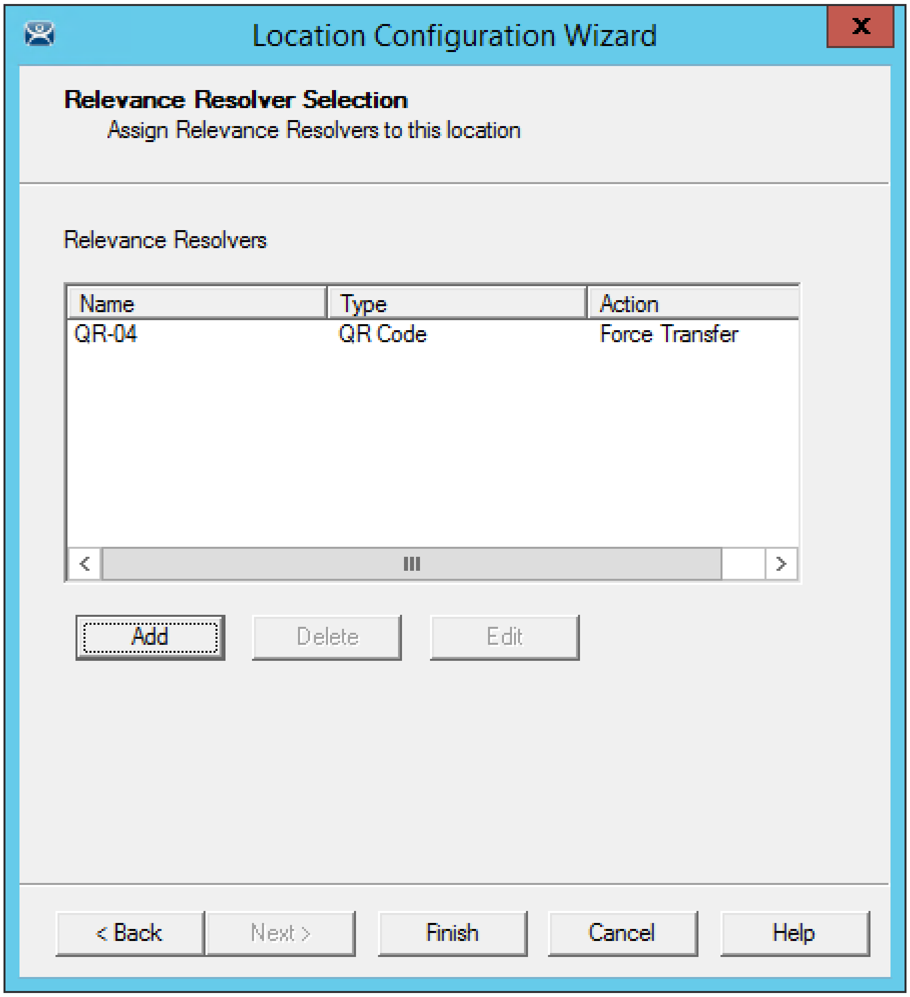
Domain:

*Windows Log In Information Page of the Location Configuration Wizard*

A location with display clients requires a valid Windows user account.

Enter one in the ***Username*** field and add the passwords.

Select ***Next*** to continue.


Location Configuration Wizard
Relevance Resolver Selection
Assign Relevance Resolvers to this location
Relevance Resolvers
Add
Delete
Edit
< Back
Next >
Finish
Cancel
Help

| Name | Type | Action |
|---|---|---|
| QR-04 | QR Code | Force Transfer |

*Relevance Resolver Selection*

Select the ***Add*** button to launch the **Choose a Relevance Resolver** window.

Select your action, ***Forced Transfer*** in this case.

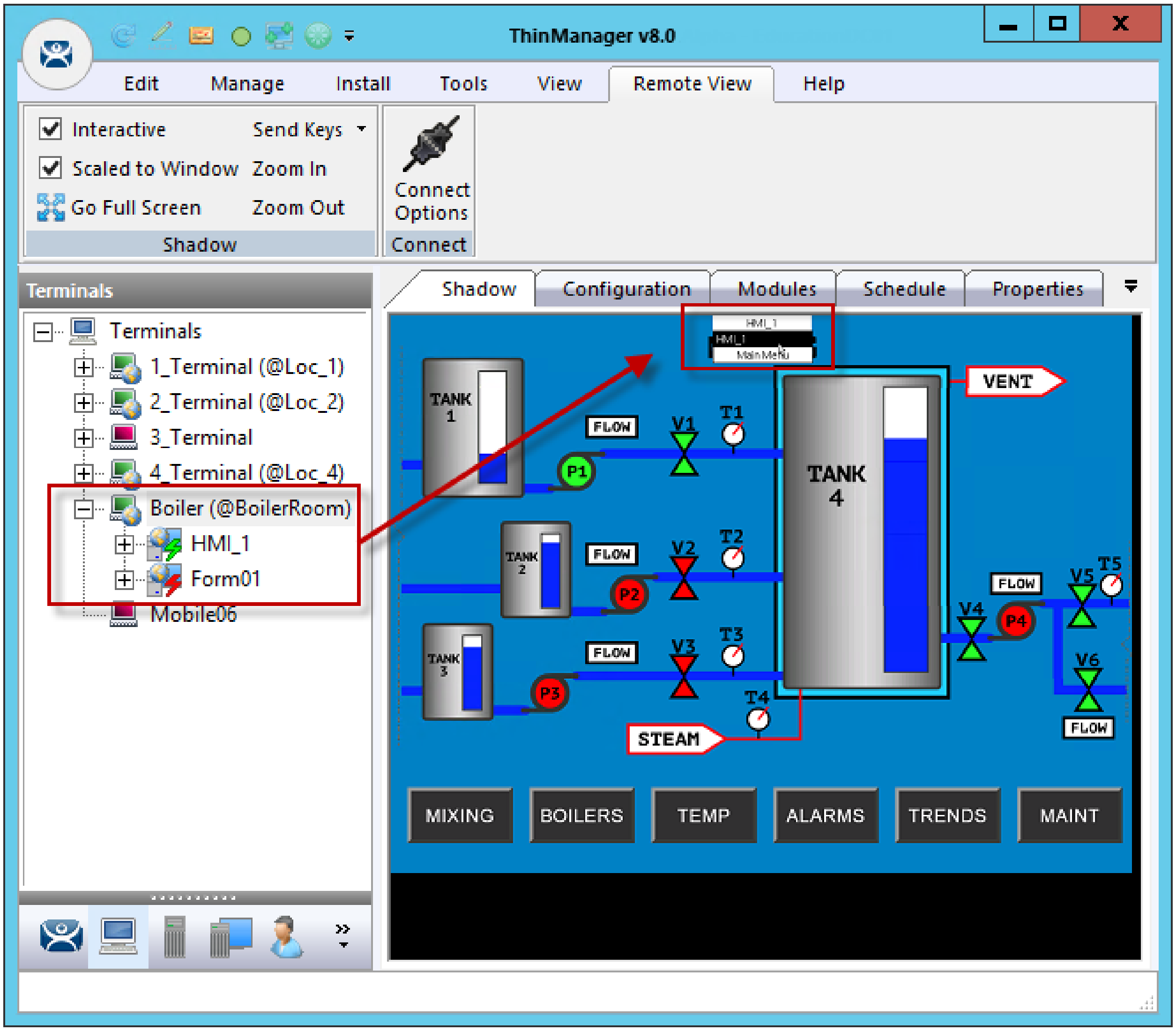
Select ***Finish*** to create the location and close the wizard.

## 11.3. Putting it Together

You now have a location with two display client applications.

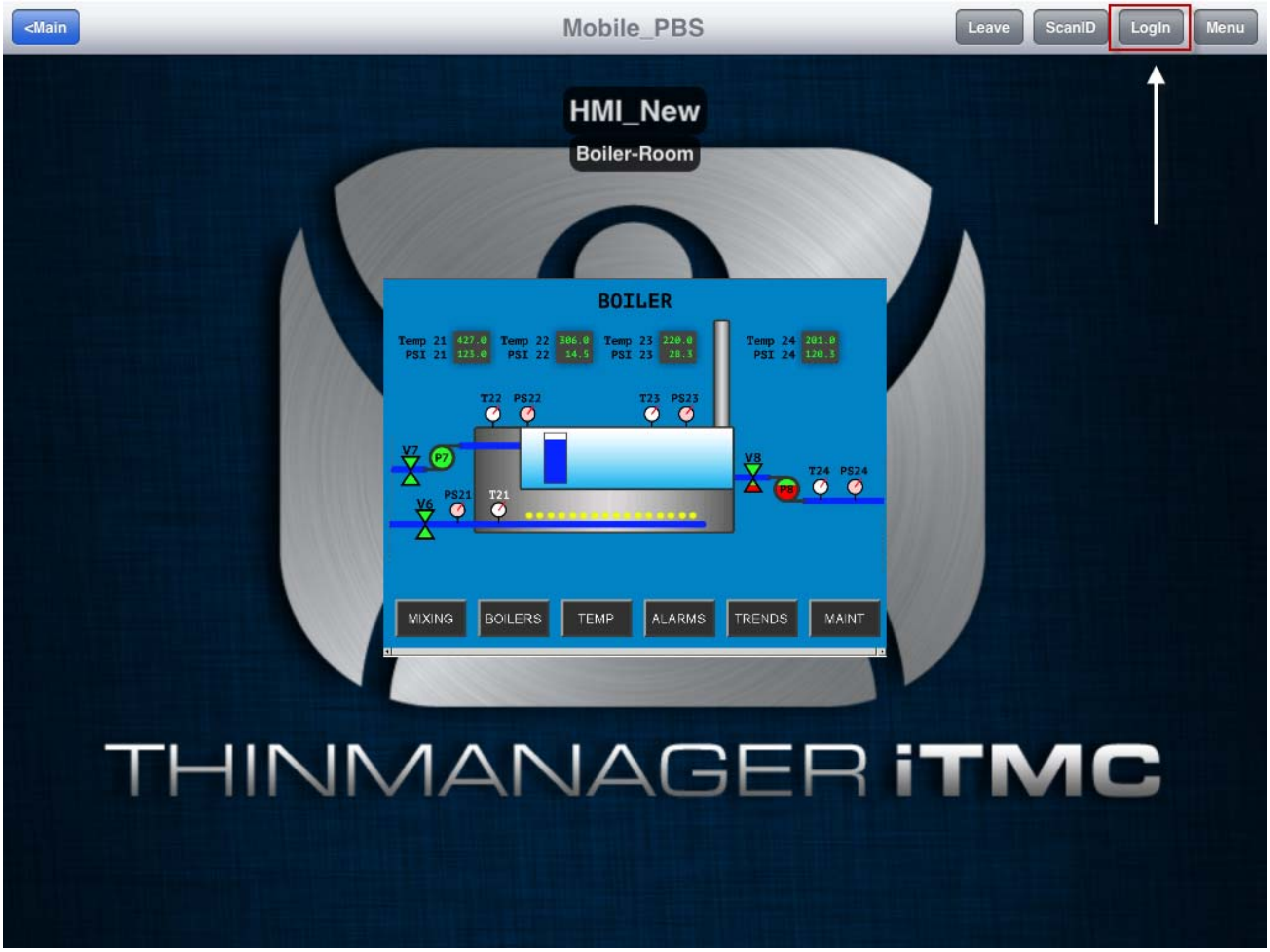
**HMI_1** is unrestricted and will be visible for anyone accessing the location.

**Form01** is restricted to members of the Maintenance access group.



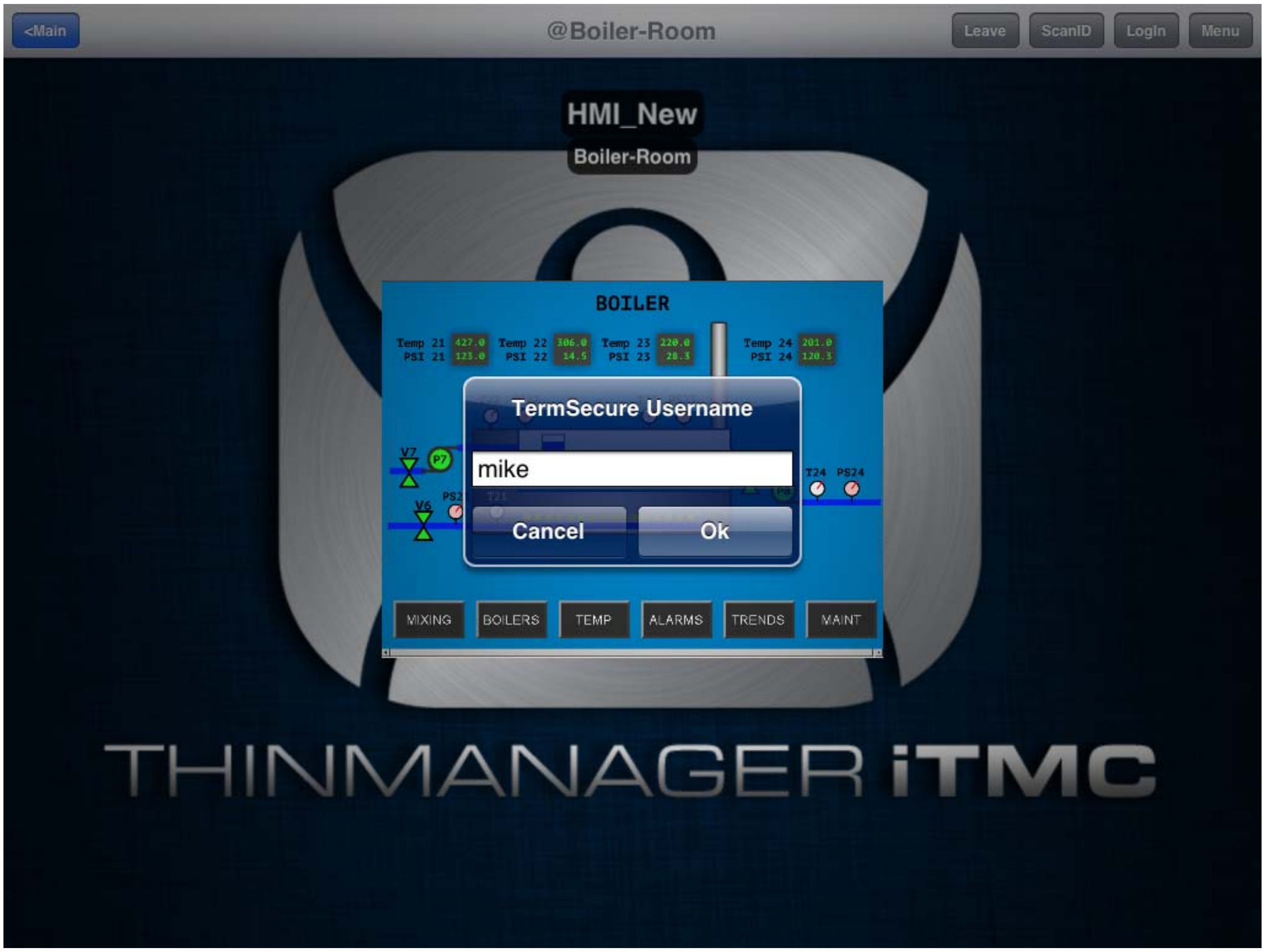
*Shadowed Location*

This picture shows the location with the **HMI_New** application running. Form01 isn't running because no **Maintenance** user is logged in.



*Mobile Transfer of the Location*

When the mobile user transfers the location they have access to only the unrestricted **HMI_New** application. Selecting the ***Login*** button in the top right corner will launch a Login prompt top allow the Relevance user to login.

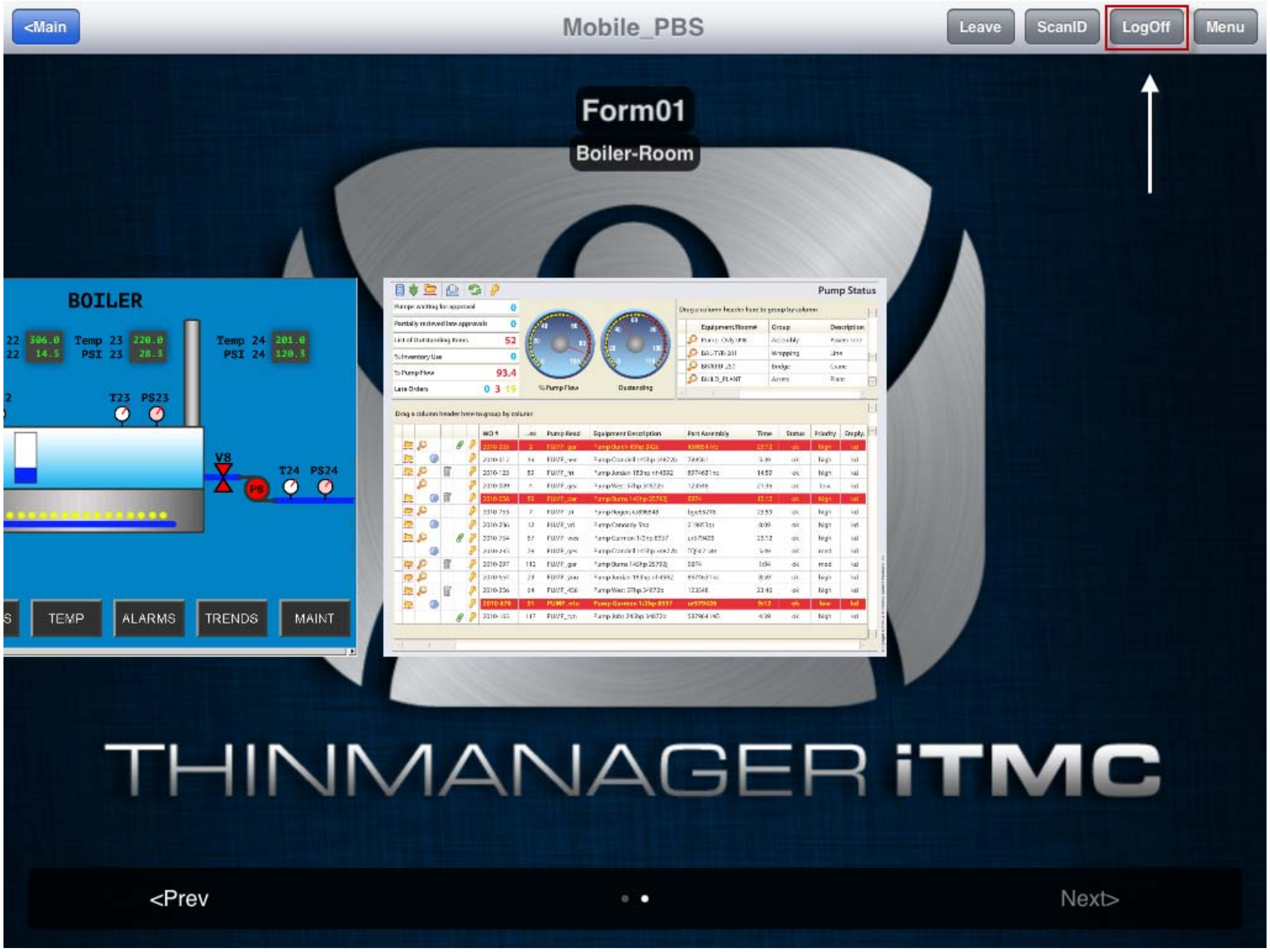


TermSecure Username

mike

*Relevance User/TermSecure User Login Prompt*

Login with the Relevance User account that is a member of the proper access group.



*Relevance User Account Accesses Application*

Once the Relevance User logs in they will have access to the hidden restricted application.

The user can log off by selecting the ***Logoff*** button in the upper right corner.

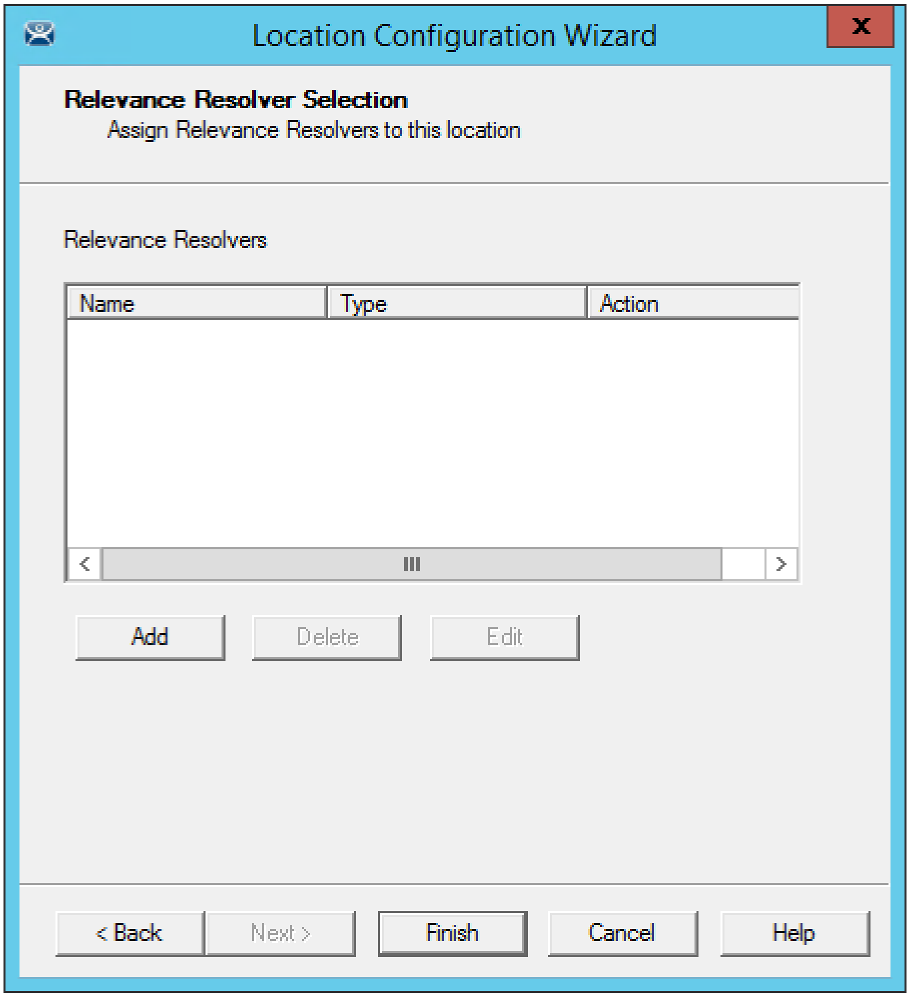
# 12. One QR Code, Multiple Actions

The last section covered the use of a Relevance Access Group to hide a display client application from the public with use of Access Groups. This section will cover using access groups to provide different actions.

Instead of using a different resolver for every action you can use a single resolver and Access Groups to provide different actions. This example will to use a QR code as the resolver.

Select the **Location** globe icon on the Tree Selector at the bottom of the tree to open the Locations branch.

Highlight the terminal and double click or select ***Modify*** to open the **Location Configuration Wizard**.



Location Configuration Wizard

**Relevance Resolver Selection**

Assign Relevance Resolvers to this location

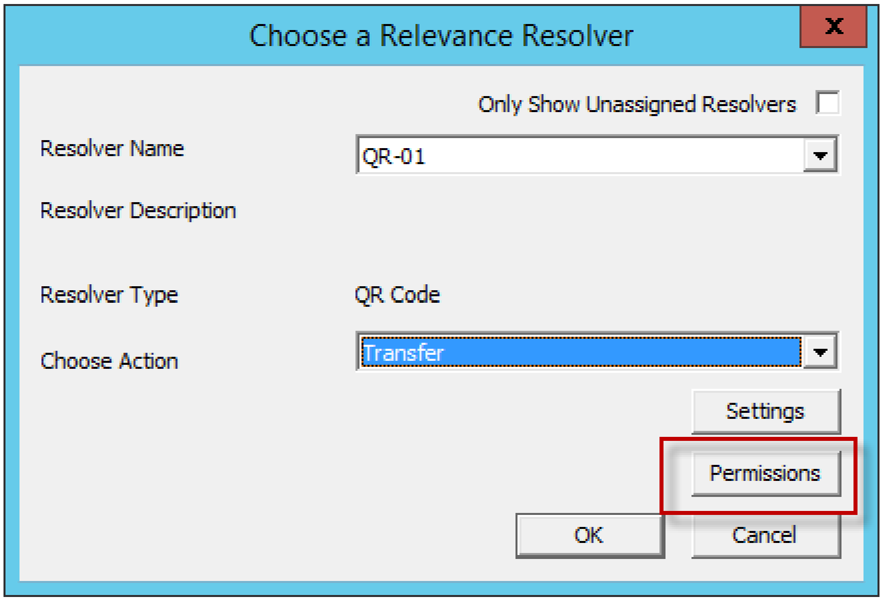
Relevance Resolvers

| Name | Type | Action |
|---|---|---|

*Relevance ID Selection Page*

Navigate to the **Relevance ID Selection** page.

Add the same resolver to the location as many times as you have actions and access groups you want to involve.



Resolver Name: QR-01

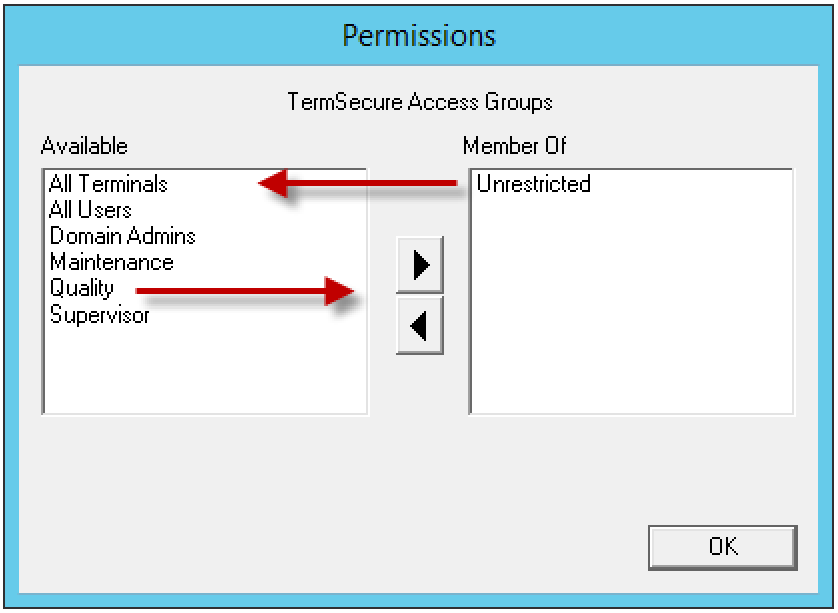
Resolver Type: QR Code

Choose Action: Transfer

*Choose a Relevance Resolver Window*

Select a different action from the ***Choose Action*** dropdown each time you add it.

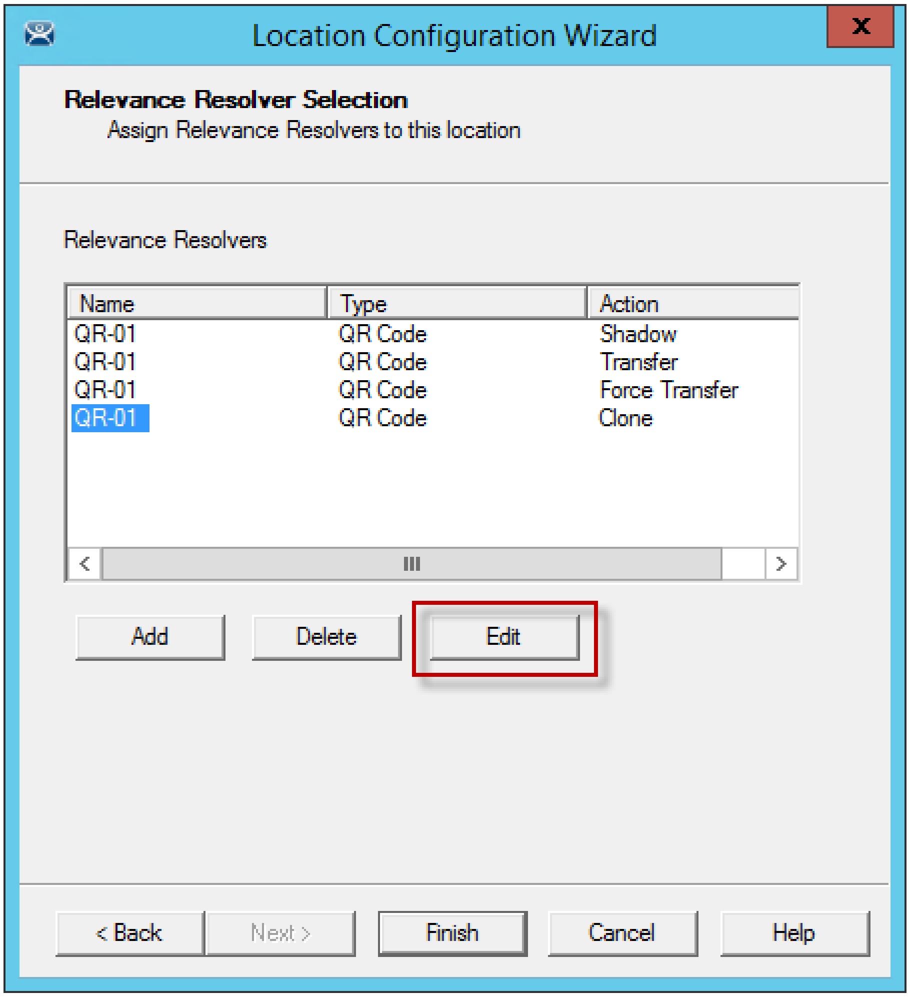
Select the ***Permission*** button to add the Access Group to the action.



*Relevance ID Selection Page*

Remove the ***Unrestricted*** group and add the desired group.

Select the ***OK*** button to finish.


Location Configuration Wizard
Relevance Resolver Selection
Assign Relevance Resolvers to this location
Relevance Resolvers
Add
Delete
Edit
< Back
Next >
Finish
Cancel
Help

| Name | Type | Action |
|---|---|---|
| QR-01 | QR Code | Shadow |
| QR-01 | QR Code | Transfer |
| QR-01 | QR Code | Force Transfer |
| QR-01 | QR Code | Clone |

*Edit Button on the Relevance Resolver Selection Page*

You can also edit the permissions by highlighting a resolver and selecting the ***Edit*** button. This will launch the **Choose a Relevance Resolver** window that has the ***Permissions*** button on it.

This example used the following settings:

| Location | Application | Resolver | QR Action | Access Group |
|---|---|---|---|---|
| Loc_1 | HMI_New<br>Form01 | **QR-01** | Shadow | Quality |
| | | **QR-01** | Transfer | Maintenance |
| | | **QR-01** | Force Transfer | Foremen |
| | | **QR-01** | Clone | Supervisor |

If a Supervisor scans QR-01 they will clone the application and run it with their own Windows account.

If a Quality member scans the QR-01 code they will be able to shadow the location, leaving control with the operator.

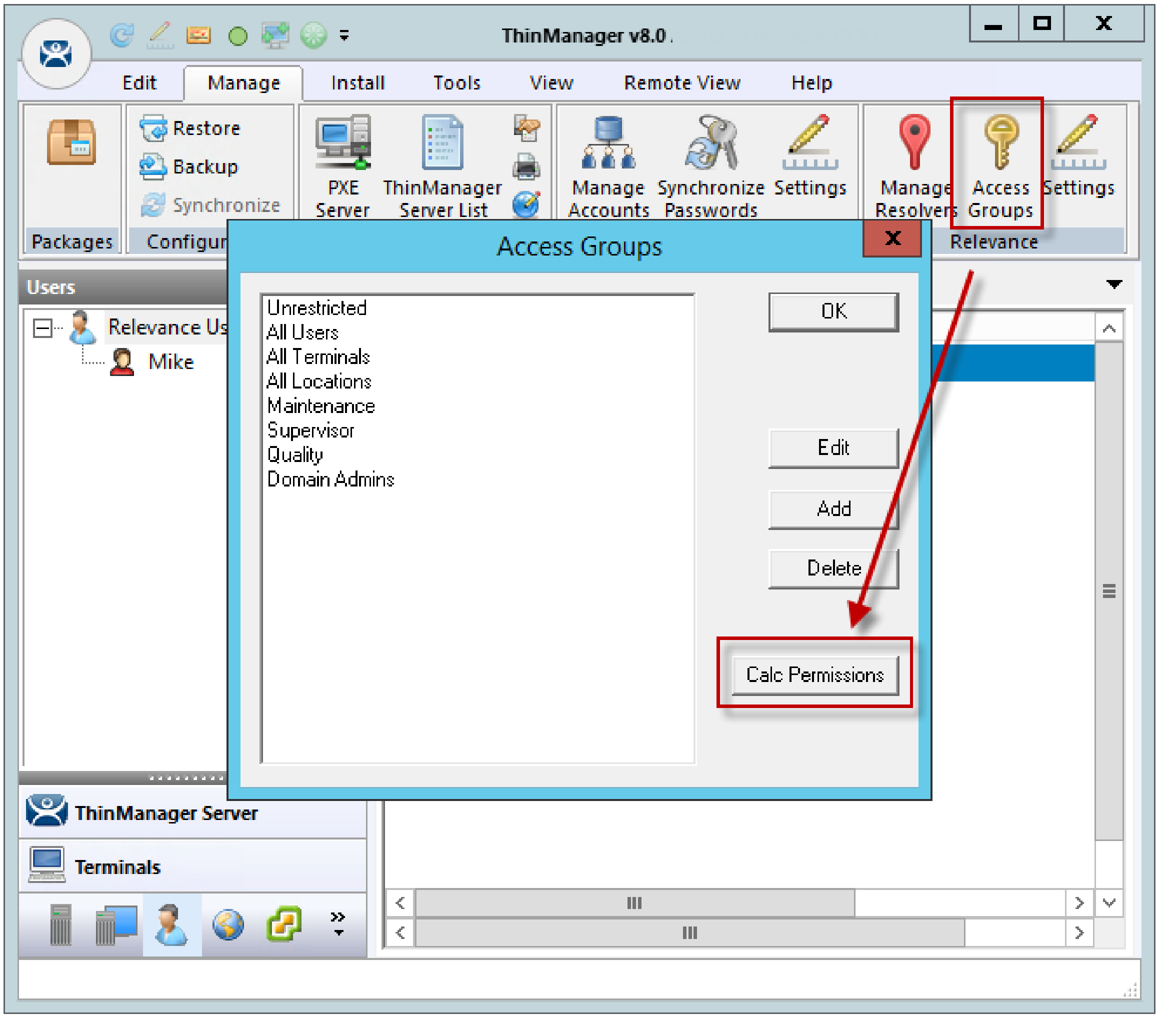
If a Maintenance member scans QR-01 they will transfer the application to their mobile device once the operator allows it.

If a Foreman scans the QR-01 code they will immediately transfer the display from the location to their mobile device so that they can take their application with them when they roam through their section.

# 13. Calculating Permissions

It is easy to lose track of the permissions as your system expands and more functions and features are added. Relevance has a Permission Calculator to help.

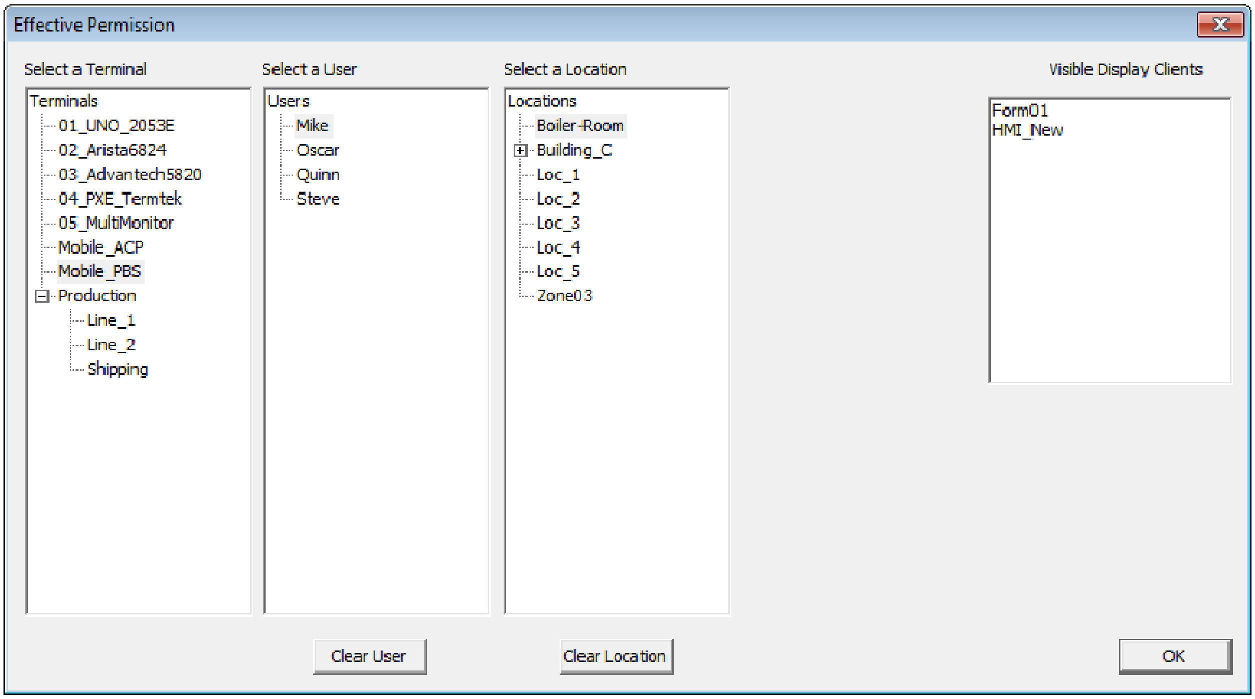
Open the **Access Groups** window by selecting ***Manage > Access Groups***.



Unrestricted
All Users
All Terminals
All Locations
Maintenance
Supervisor
Quality
Domain Admins

*Access Groups Window*

Select the ***Calc Permissions*** button on the **Access Groups** window.



*Effective Permission Window*

There are four columns, **Select a Terminal**, **Select a User**, **Select a Location**, and **Visible Display Clients**.

Highlighting members of selection lists will show the display clients that will be visible in the **Visible Display Client** column.

The ***Clear User*** and ***Clear Location*** buttons will clear the fields and allow you to test another combination.

The ***OK*** button closes the window.

# 14. TermMon ActiveX and Relevance

ACP has an ActiveX Object that customers can use to integrate their ThinManager system with their other software applications. This is done by embedding the ActiveX object into the application, then working with the events, methods, and properties that are provided. Most often, this is used for customers that have Automation HMI products, such as Rockwell FactoryTalk View, or Wonderware InTouch. With this ActiveX, customers can get information about the terminal, sessions that are running, users that are logged in, and the current Location for Relevance applications. There are also methods to control the current Display Client, logged in User, IP Cameras overlays, and many others. Documentation on the available items is in the User Manual, or from the TermMon ActiveX documentation.

For Relevance, the main features are with regard to the Location. Once a mobile device has Resolved to a Location a string property is available that has the path and name of the current Location. If you have nested Locations, it provides this information in a path form, such as “ParentLocation\ChildLocation\ChildLocation”. This can be a very versatile item for customers that are using HMI’s and want to control access to pages, security, and other things based on the Location.

One other Relevance feature in the ActiveX is the ability to trigger an Operator to scan a code through the application. This can be used to provide an extra layer of safety and security to an application. It can be tied to any operation in the HMI. For example, it could be added to a button to run a pump. Prior to the command to run going out, an event can be triggered that will prompt the Operator to scan a code. They then scan a QR Code or NFC device and it provides a result back to the HMI. Then, the code on the button determines if it can go ahead and provide the command to run the pump based on whether it got the expected information from the Location, via the ActiveX.

The ActiveX also contains properties that would allow you to programmatically Logon or Logoff (Enter or Exit) of a Location. This tells the session which Location to login to by passing a string to the appropriate ActiveX property. Selecting the Logoff item is the same as hitting the “Leave” button that is part of the iTMC application.

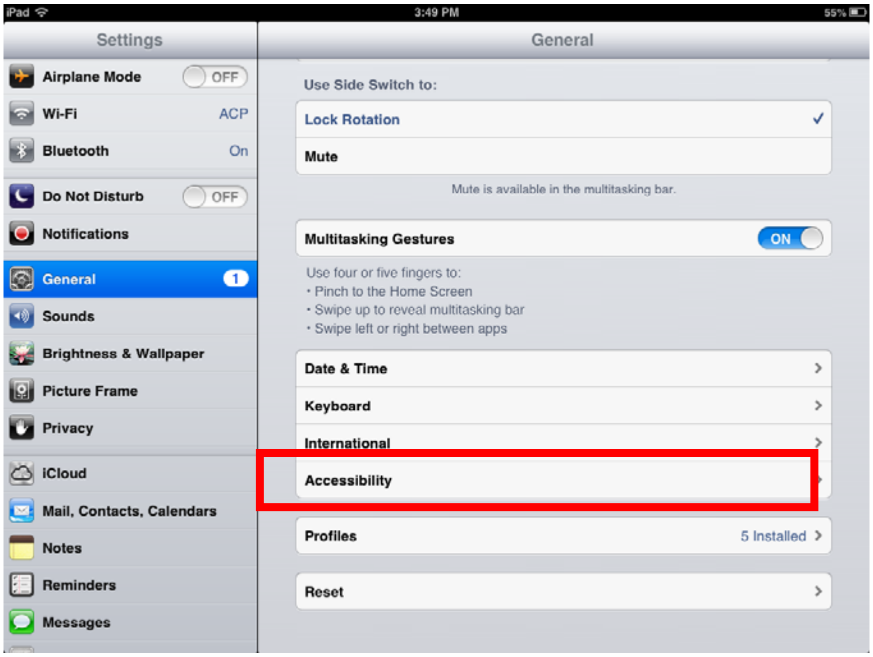
# 15. Guided Access on the iPad

Guided Access a feature that allows the iPad to be locked to a single application. This can help an administrator control the iPad by limiting users to the iTMC program.

**Note:** This advice is given as a service to our users. Please see Apple documentation for implementation.

Guided Access is turned on in the General settings of the iPad.

Open the ***Settings*** of the iPad.



Airplane Mode OFF

Wi-Fi ACP

Bluetooth On

Do Not Disturb OFF

Use Side Switch to:

Lock Rotation ✓

Mute

Mute is available in the multitasking bar.

Multitasking Gestures ON

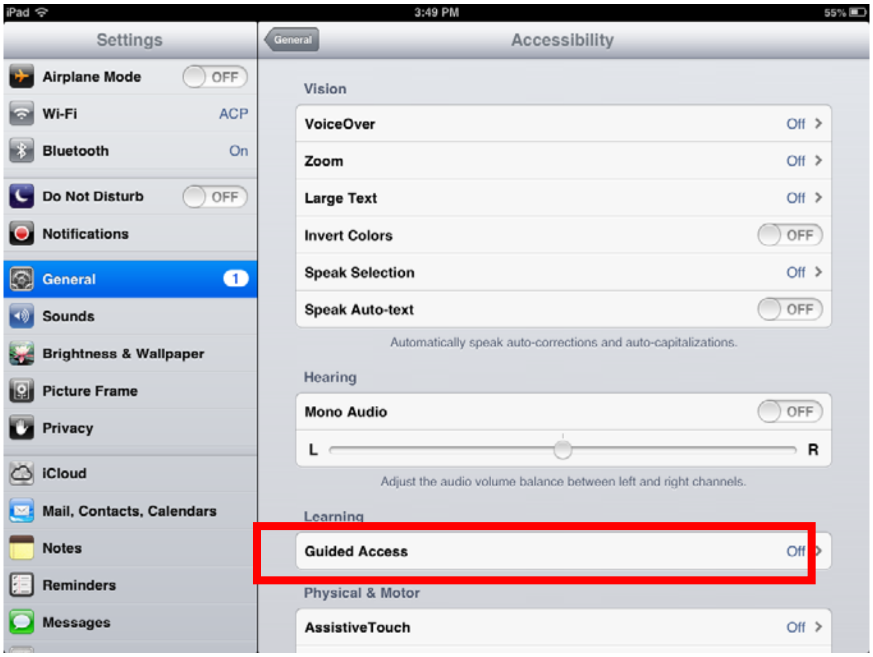
Use four or five fingers to:
- Pinch to the Home Screen
- Swipe up to reveal multitasking bar
- Swipe left or right between apps

Profiles 5 Installed

*Settings Page*

Select the ***General*** setting.

Select ***Accessibility***.



Vision

VoiceOver Off

Zoom Off

Large Text Off

Invert Colors OFF

Speak Selection Off

Speak Auto-text OFF

Automatically speak auto-corrections and auto-capitalizations.

Hearing

Mono Audio OFF

L R

Adjust the audio volume balance between left and right channels.

Learning

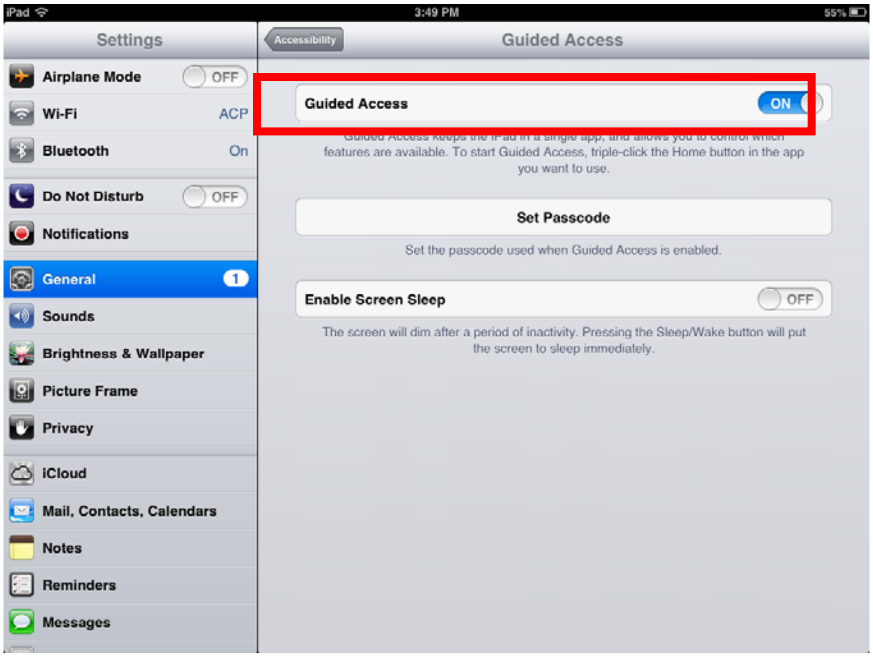
Guided Access Off

Physical & Motor

AssistiveTouch Off

*Accessibility Settings*

Select the ***Guided Access*** setting.



Guided Access ON

Guided Access keeps the iPad in a single app, and allows you to control which features are available. To start Guided Access, triple-click the Home button in the app you want to use.

Set Passcode

Set the passcode used when Guided Access is enabled.

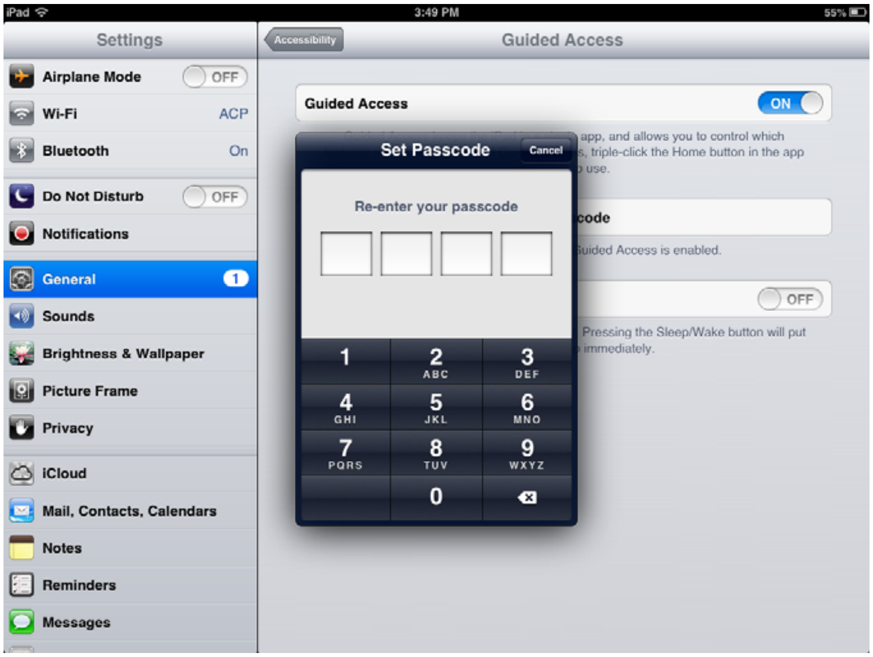
Enable Screen Sleep OFF

The screen will dim after a period of inactivity. Pressing the Sleep/Wake button will put the screen to sleep immediately.

*Guided Access Settings*

Turn ***Guided Access*** on.

Select ***Set Passcode***.



Airplane Mode OFF

Wi-Fi ACP

Bluetooth On

Do Not Disturb OFF

Guided Access ON

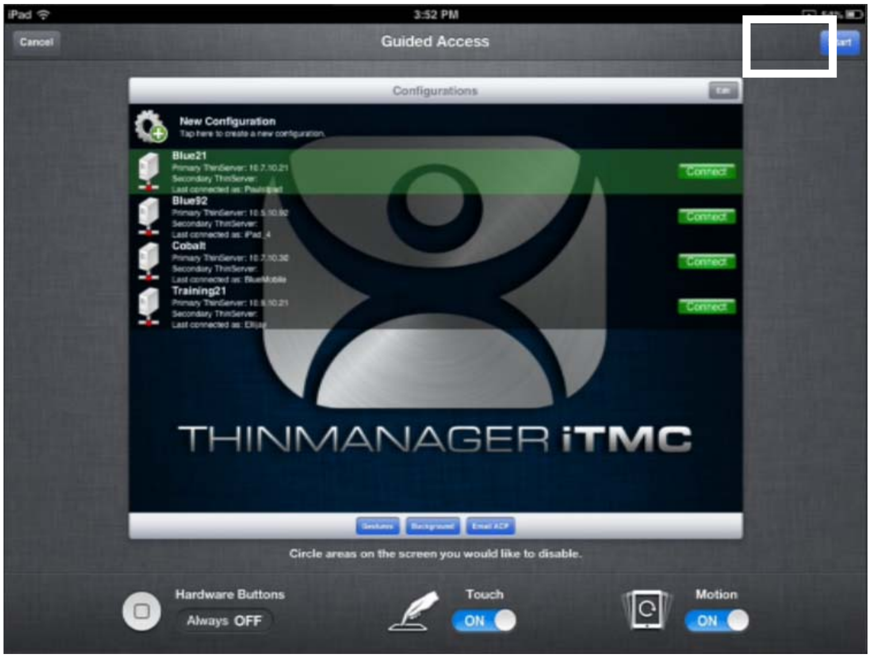
*Set Passcode*

Enter a four digit number as the passcode.

Re-enter the number to confirm.

- ✓ **DO NOT FORGET THIS NUMBER. It will allow you to turn the Guided Access off.**

Close the **Settings** by pressing the **Home** button once.



Circle areas on the screen you would like to disable.

Hardware Buttons Always OFF

Touch ON

Motion ON

*Guided Access for an Application*

Open the application you want to run exclusively, like iTMC.

Click the ***Home*** button three times to open the Guided Access control.

Press the ***Start*** button in the upper right corner.

This will restrict the iPad to that application. The user cannot close the application and is restricted to that app.

Press the ***Home*** button three times to return to the Guided Access control.

Press the ***End*** button in the top left corner to stop Guided Access.

Guided Access will be dormant until re-applied. It can be turned off completely by going into ***Settings > General > Accessibility > Guided Access*** and turning it off.