

THE WORLD'S MOST POWERFUL THIN CLIENT MANAGEMENT PLATFORM

ThinManager

RELEVANCE



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

Relevance 1.0 rev. 1

February 24, 2014

Relevance User Manual

1. Introduction to Relevance	4
2. Convert an Existing System.....	4
2.1. Upgrading an existing ThinManager System	4
2.2. The New ThinManager Interface	5
2.3. Menus	7
2.4. Current Configuration	9
2.5. Adding a Location	10
2.5.1. Location Configuration Wizard.....	11
2.6. Adding a Location to a Terminal.....	18
3. Using Mobile Devices to Interact with Relevance.....	26
3.1. Configuring an iPad in ThinManager	27
3.2. Configuring an iPad for Relevance.....	33
3.3. Associating the iPad to the Configuration	37
4. Manual Interaction with Locations	40
4.1. Shadow.....	41
4.2. Transfer	47
4.2.1. Transfer at the Location	50
4.3. Clone	52
5. Using the Mobile Device to Add Resolver Codes.....	55
5.1. QR Codes and Bar Codes.....	55
5.2. Bluetooth Beacons.....	61
6.1. Wi-Fi Access Points.....	70
7.1. GPS	78
7.2. Adding Actions to Resolver Codes.....	86
8. Interacting with the Location	90
8.1. Shadow.....	91
8.2. Forced Transfer	93
8.3. Transfer	97
8.4. Clone	101
9. Unassigned Locations.....	103
9.1. Create a Location	103
10. Fencing and Sub-Locations	112
11. Relevance User Access	117
11.1. Create Access Groups.....	118
11.2. Apply Permissions to a Display Client Application.....	119

11.3.	Create Relevance Users.....	121
11.4.	Creating a Location with Restricted Applications.....	123
11.5.	Putting it Together:.....	127
12.	One QR Code, Multiple Actions	131
13.	Calculating Permissions.....	134
14.	Guided Access on the iPad.....	136

1. Introduction to Relevance

Relevance adds location to computing for mobile access. 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, Clone, 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 7 software on each ThinManager Server using the Install Mode, either using the **Install Application on Terminal Server** on a 2008 server, the **Add/Remove Programs** on a 2003 server, or with the **change user /install** command.

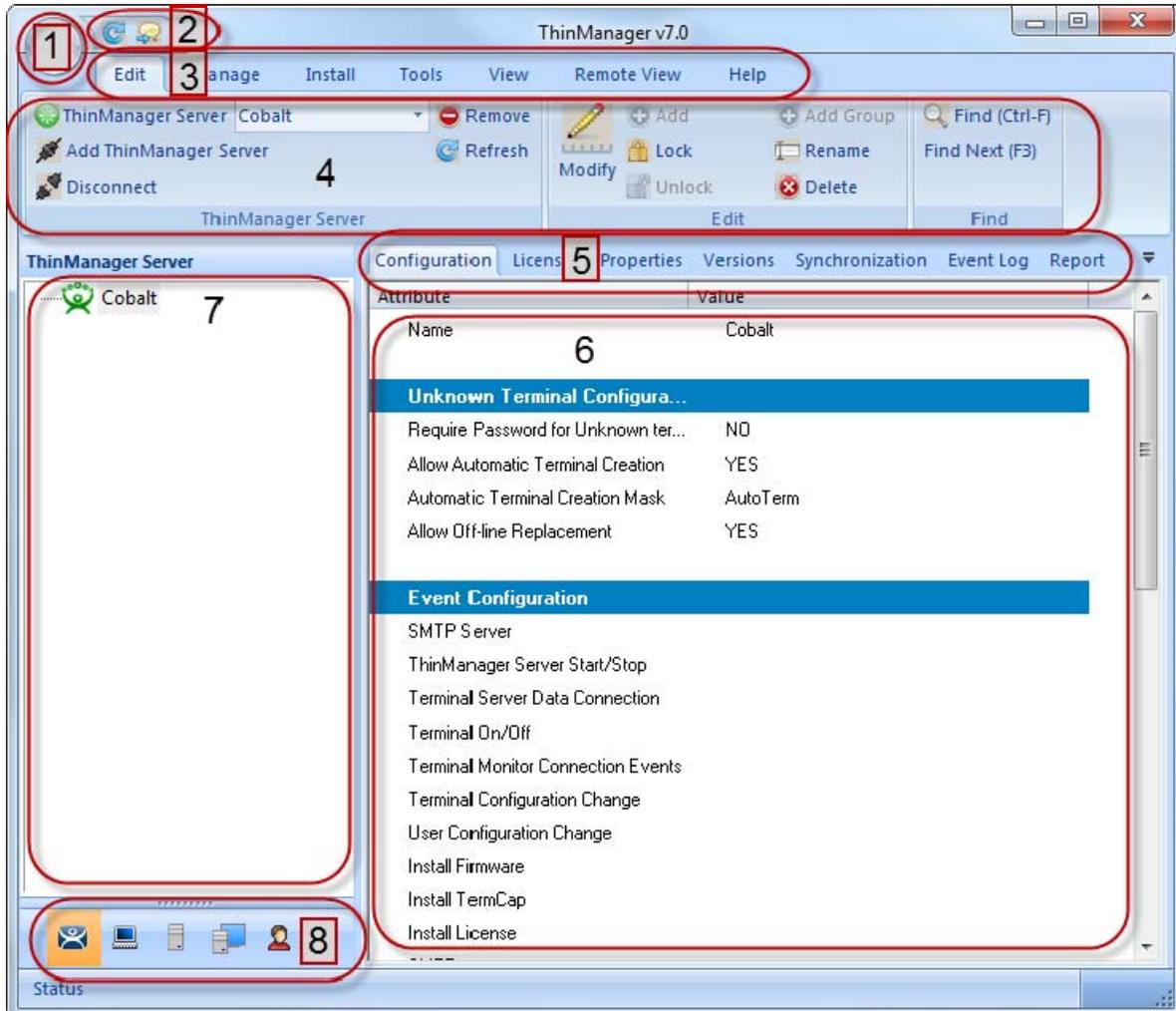
Synchronize your ThinManager Servers once they are both updated if they were synchronized before. Synchronize at **Manage > ThinManager Server List > Auto-synchronization Selection** and check the **Automatic Synchronization** checkbox.

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 New ThinManager Interface

The ThinManager interface was changed in ThinManager 7.0 to a style based on the Microsoft Office 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.

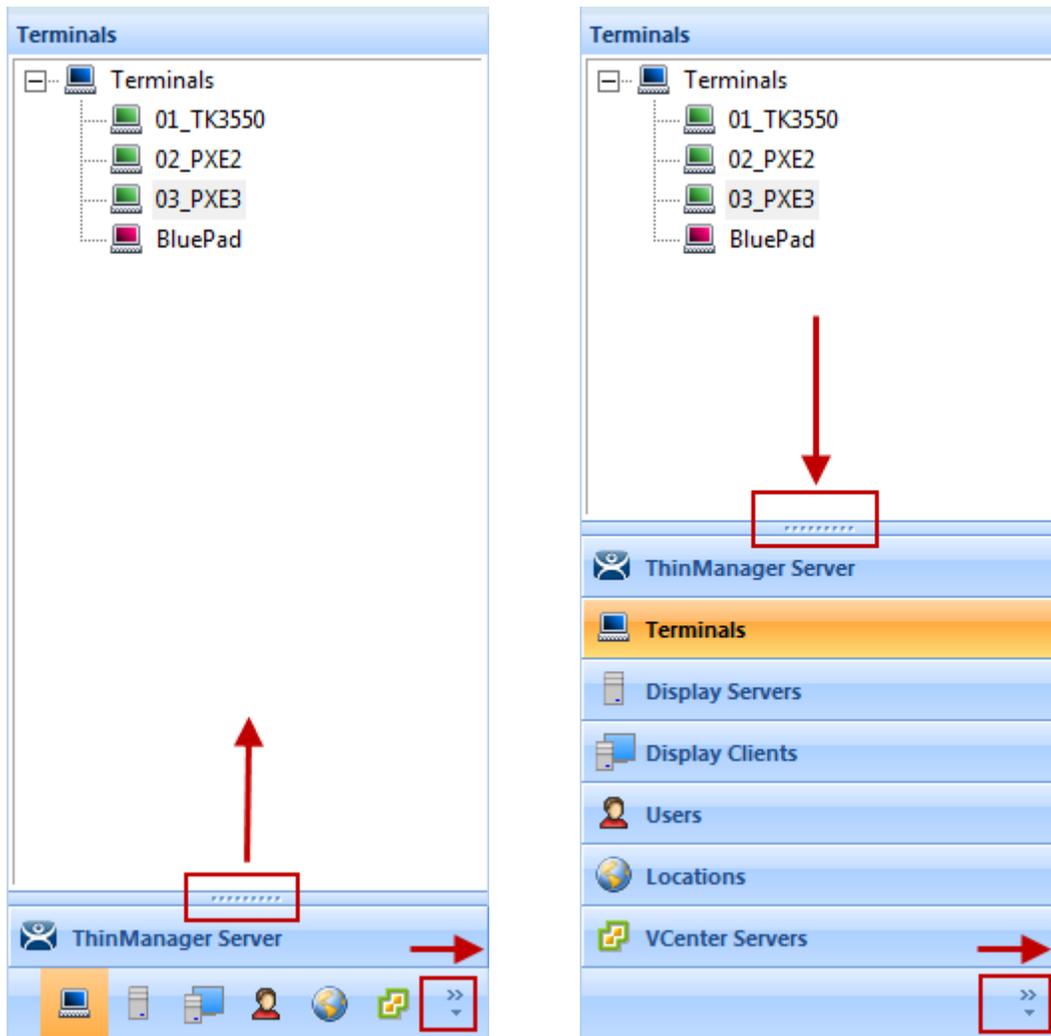


ThinManager Interface

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

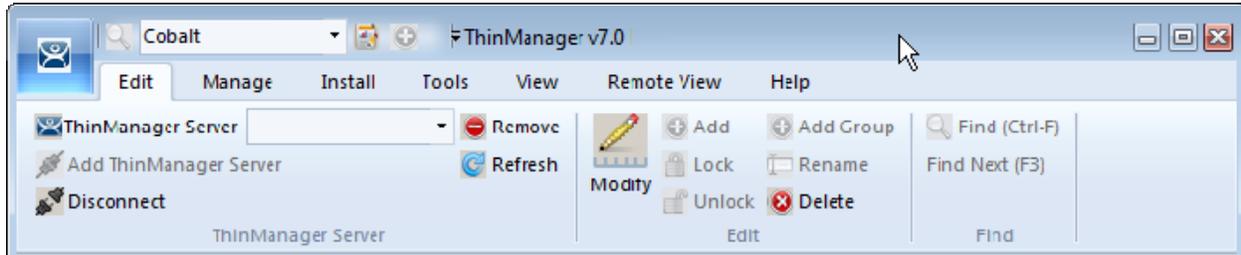
Stacking the buttons is provides quicker switching but the minimized buttons allows more room to show components in a larger system

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

2.3. Menus

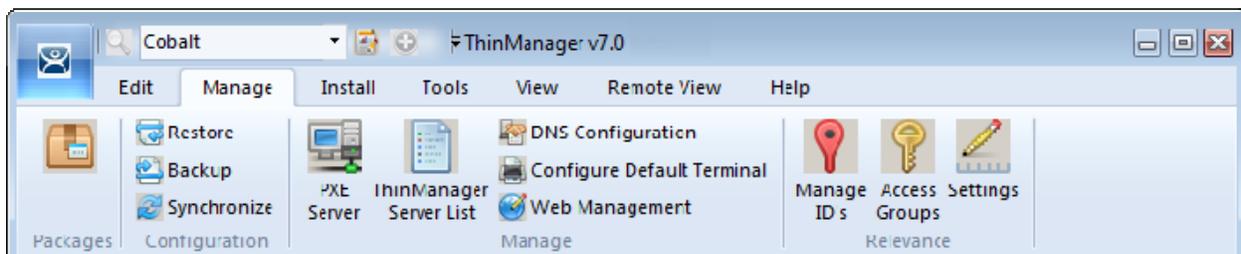
The menus of ThinManager use the Microsoft Office ribbon but contain similar functions as previous versions.

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

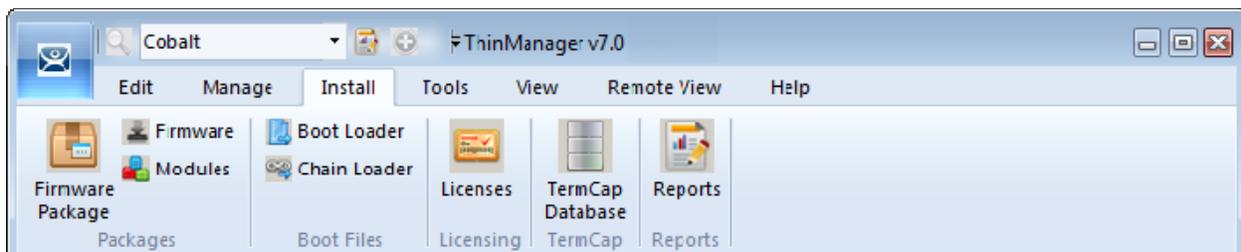
Edit includes common editing commands and buttons to **Add ThinManager Servers**, **Remove**, **Refresh**, and **Modify**. There is a **Find** and **Find Next** button to allow you to search the tree.



Manage

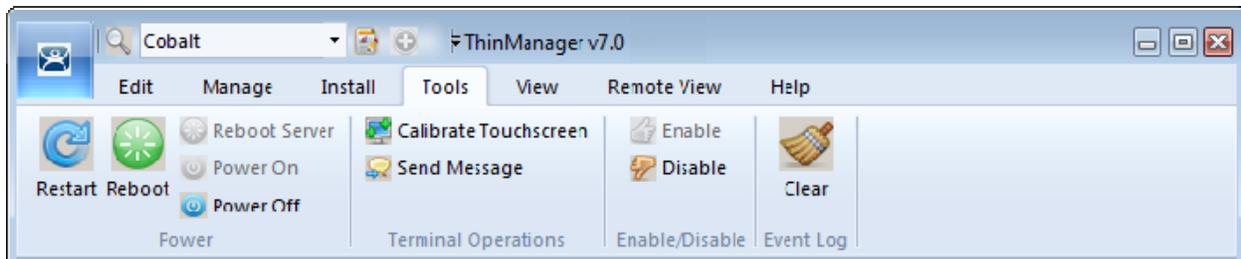
Manage includes common management commands with icons for **Packages**, **PXE Server**, **ThinManager Server List**, **DNS**, **Web** access, and **TermSecure Access Group** management:

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



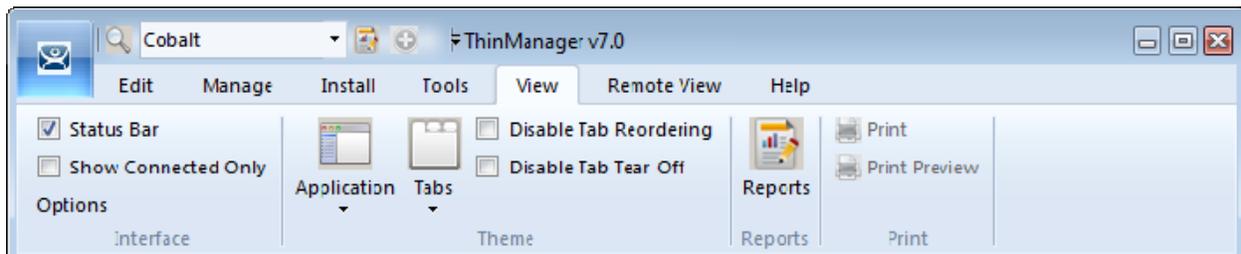
Install

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



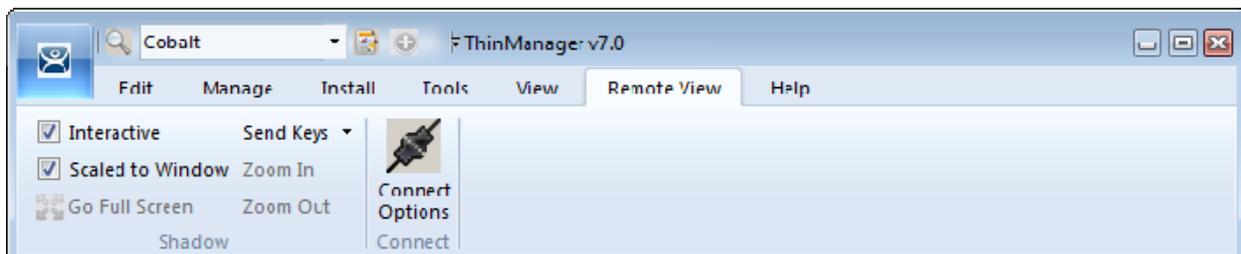
Tools

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



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.



Remote View

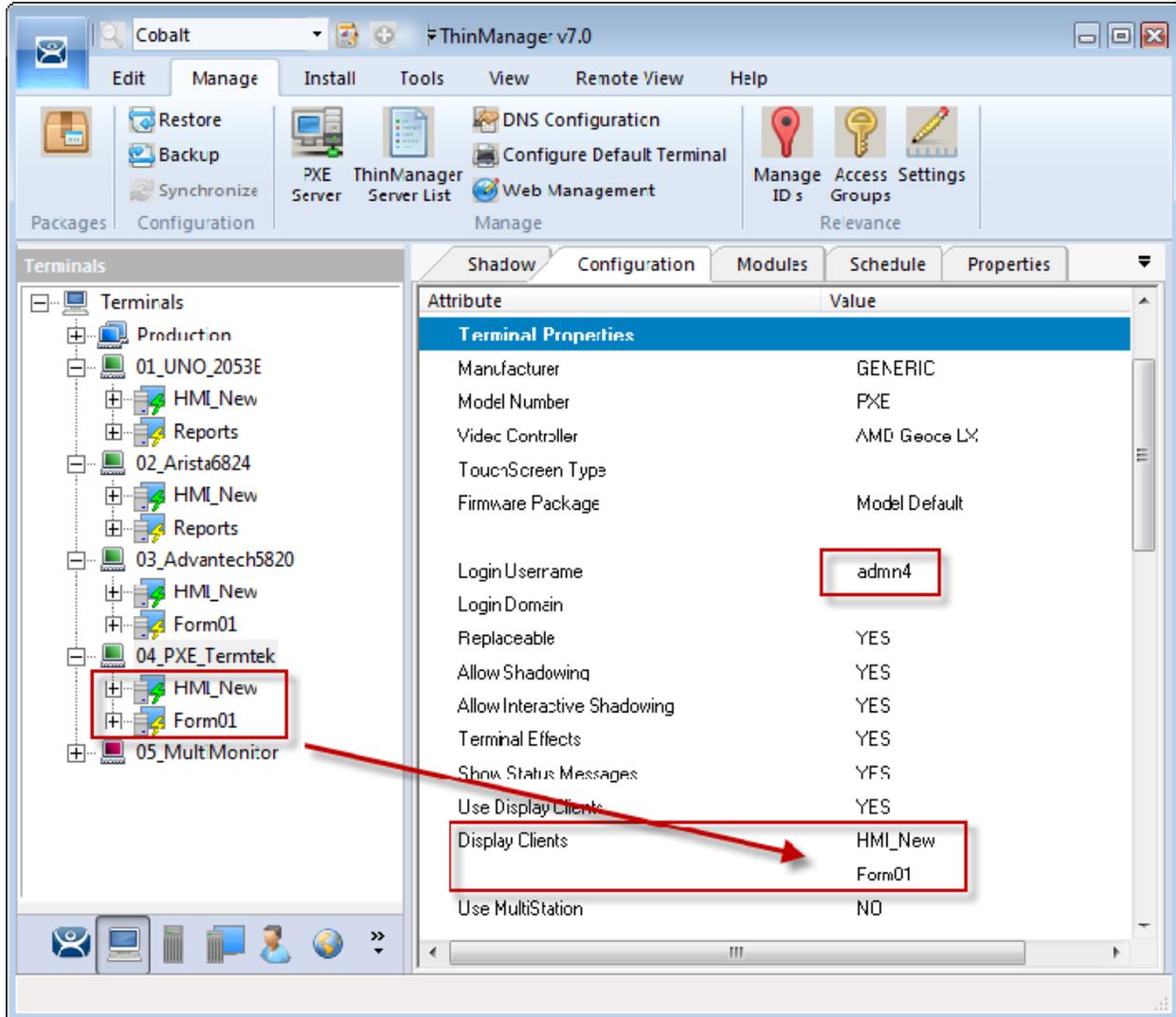
Remote View includes common commands with icons like **Interactive**, **Scaled to Window**, **Go Full Screen**, **Send Keys**, and **Connect Options**.

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. Current Configuration

The current configuration in the example was created in ThinManager 6 and upgraded to ThinManager 7. Each terminal is logging in with a Windows account and is running two display clients, HMI_New and either Reports or Form01.

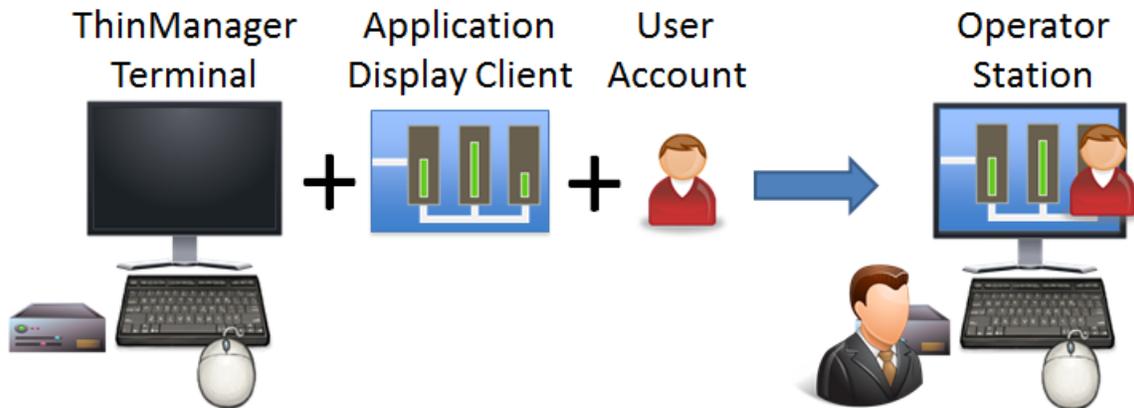


Terminal Tree

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

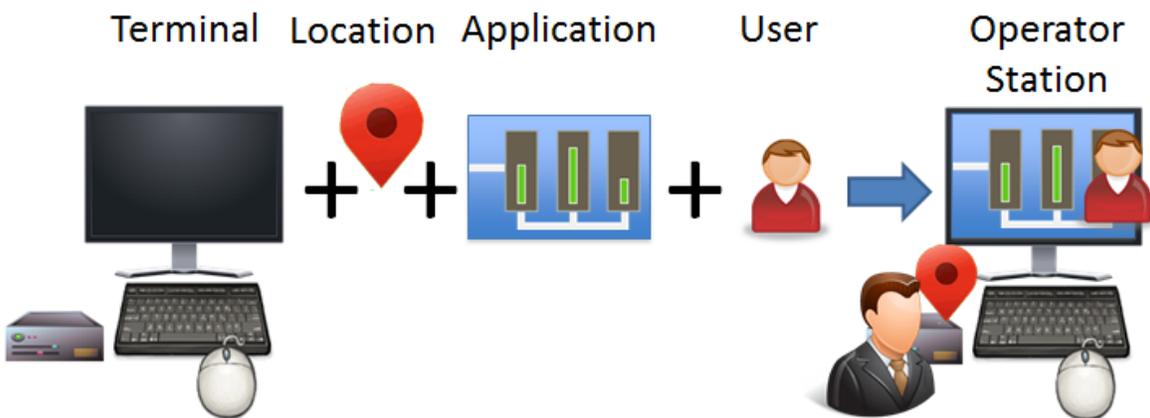
2.5. Adding a Location

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.

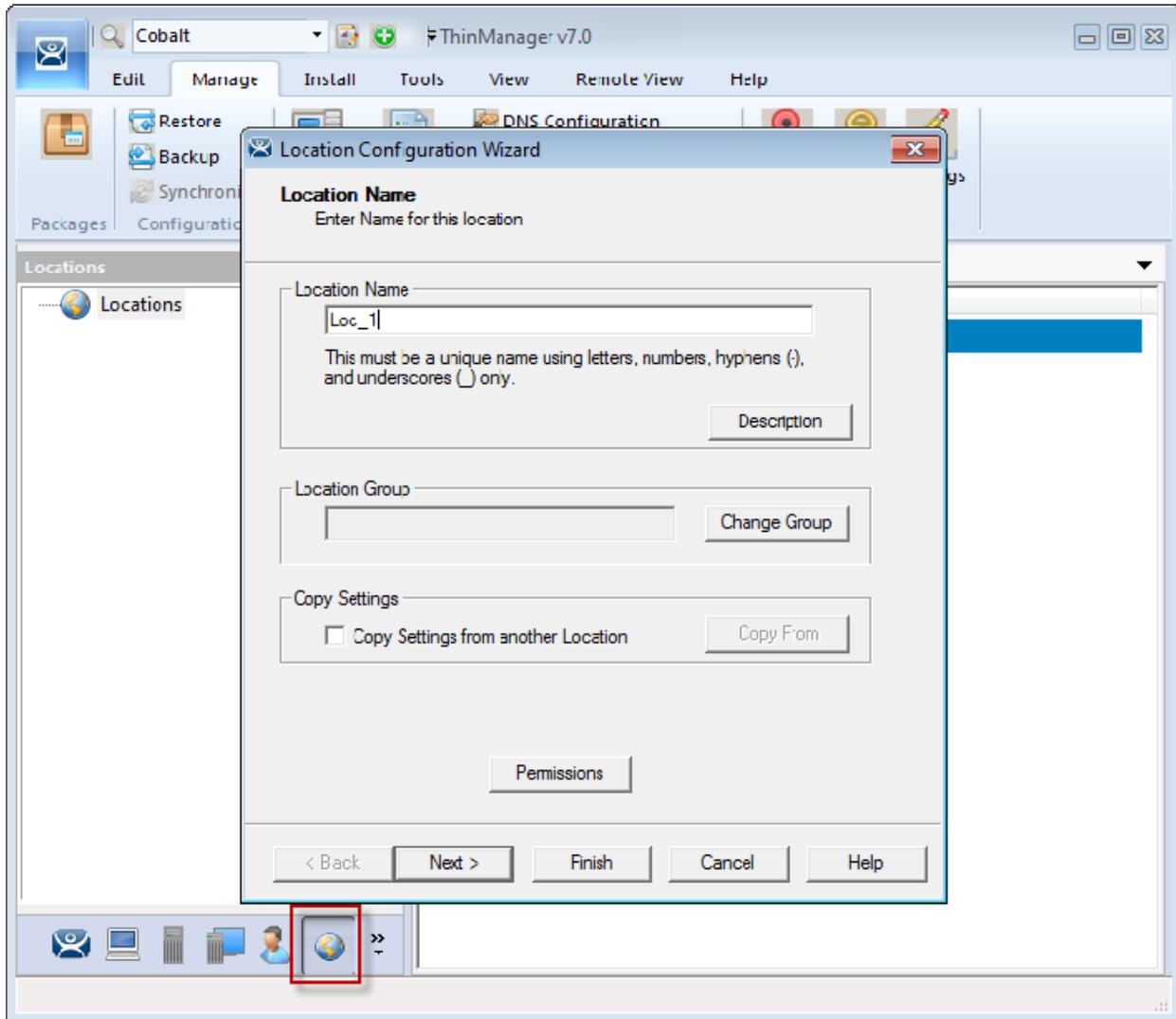


First Relevance Deployment

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.

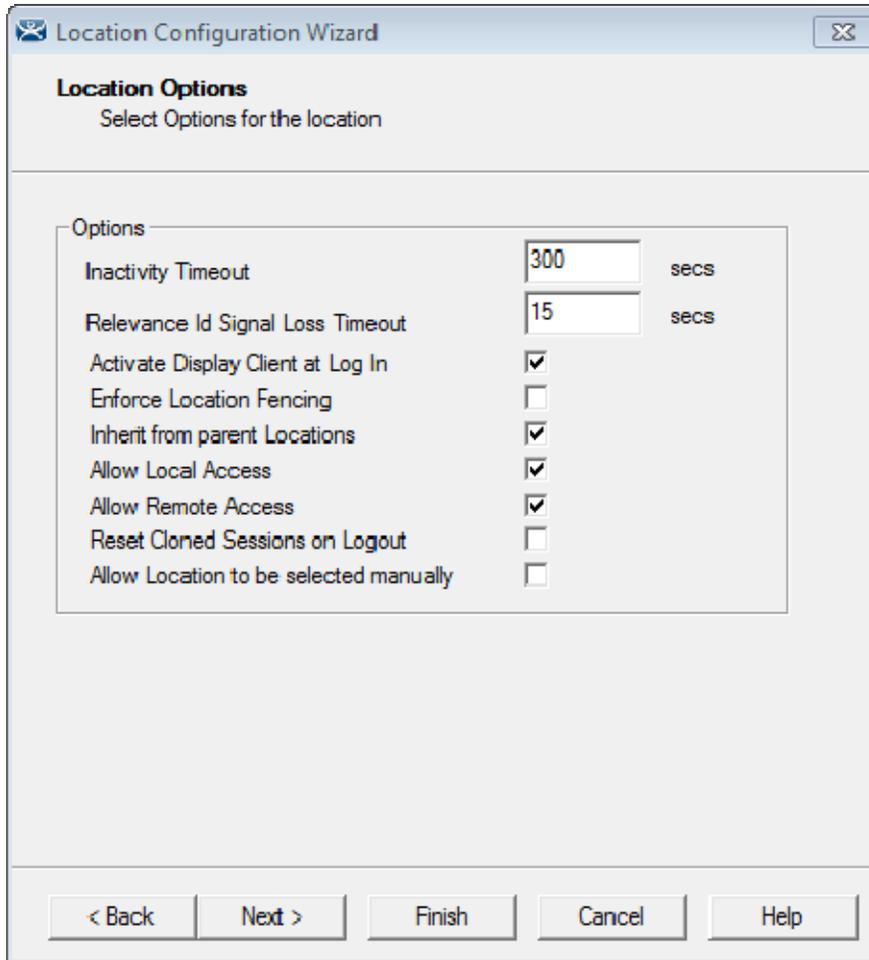


Location Configuration Wizard

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 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.

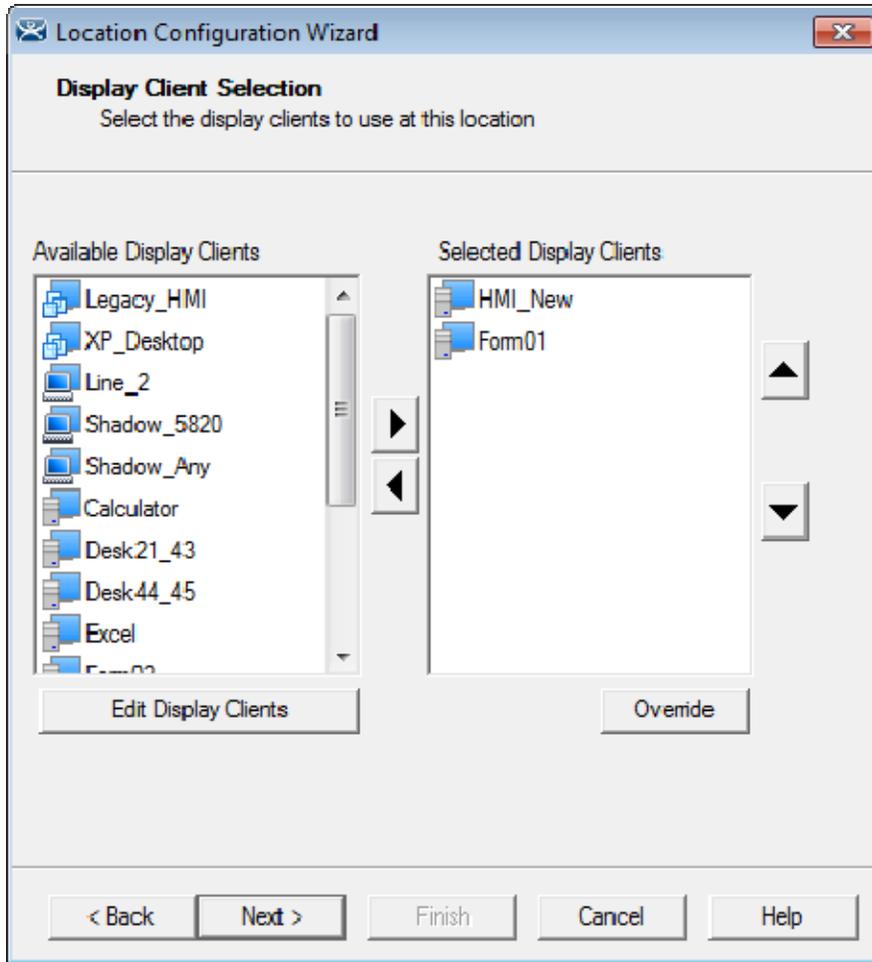
The screenshot shows the 'Location Configuration Wizard' window. The title bar reads 'Location Configuration Wizard'. Below the title bar, the section is titled 'Location Options' with the subtitle 'Select Options for the location'. The main area is divided into two sections: 'Options' and 'Allowed Manually Selected Location Actions'. In the 'Options' section, there are two input fields: 'Inactivity Timeout' set to 300 and 'Relevance Id Signal Loss Timeout' set to 15, both with 'secs' units. Below these are several checkboxes: 'Activate Display Client at Log In' (checked), 'Enforce Location Fencing' (unchecked), 'Inherit from parent Locations' (checked), 'Allow Local Access' (checked), 'Allow Remote Access' (checked), and 'Reset Cloned Sessions on Logout' (unchecked). The 'Allow Location to be selected manually' checkbox is checked and highlighted with a red box. A red arrow points from this box to the 'Allowed Manually Selected Location Actions' section, which contains three checked checkboxes: 'Allow Shadowing', 'Allow Cloning', and 'Allow Transfer', all highlighted with a red box. At the bottom of the window are five buttons: '< Back', 'Next >', 'Finish', 'Cancel', and 'Help'.

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.



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.

The screenshot shows a window titled "Location Configuration Wizard" with a close button in the top right corner. Below the title bar, the text "Windows Log In information" is displayed, followed by the instruction "Enter Windows username and password information." The main area of the window contains a form titled "Windows Log In Information" with the following fields: "Username" (containing "location1"), "Password" (masked with asterisks), "Verify Password" (containing "1"), and "Domain" (empty). A "Verify" button is located to the right of the "Domain" field. At the bottom of the window, there are five buttons: "< Back", "Next >", "Finish", "Cancel", and "Help".

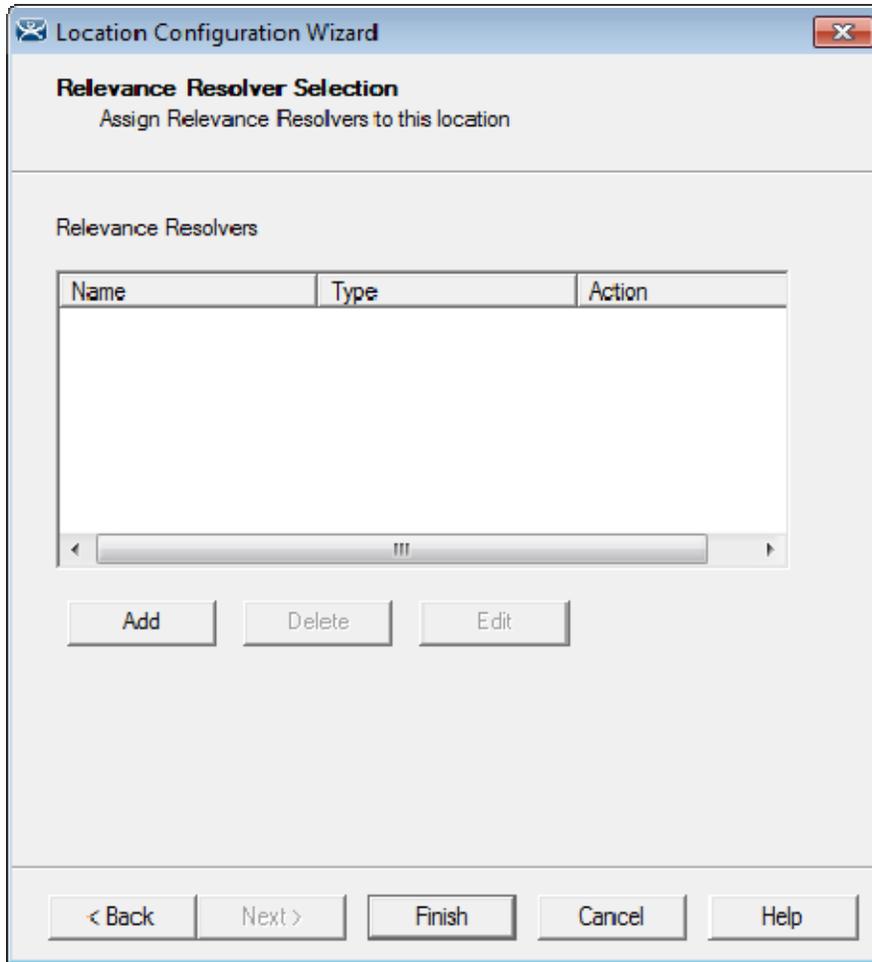
Window Log In Information Page

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.

Select **Next** to continue.



Relevance Resolver Selection Page

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

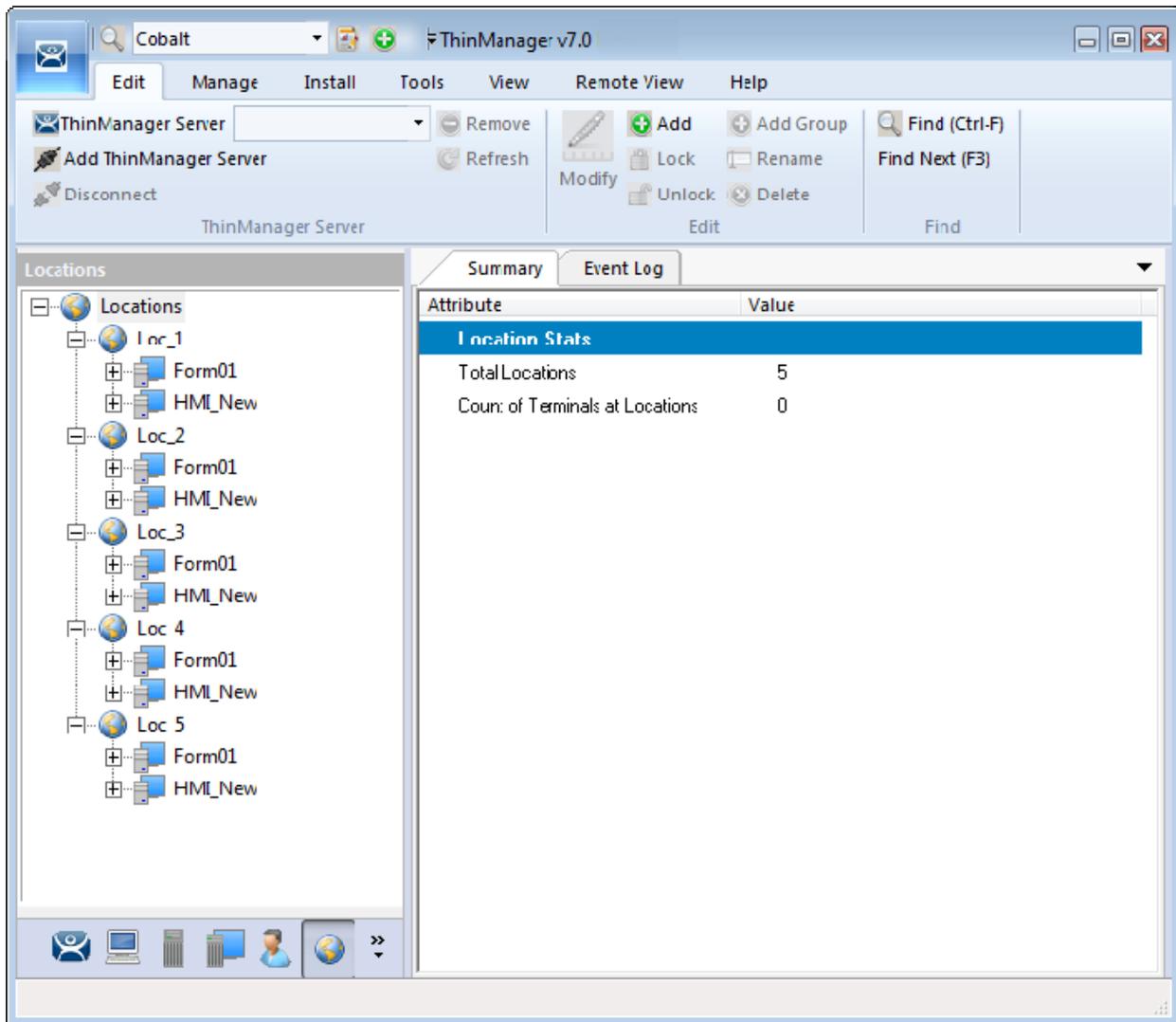
Resolvers include

- 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 55.

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

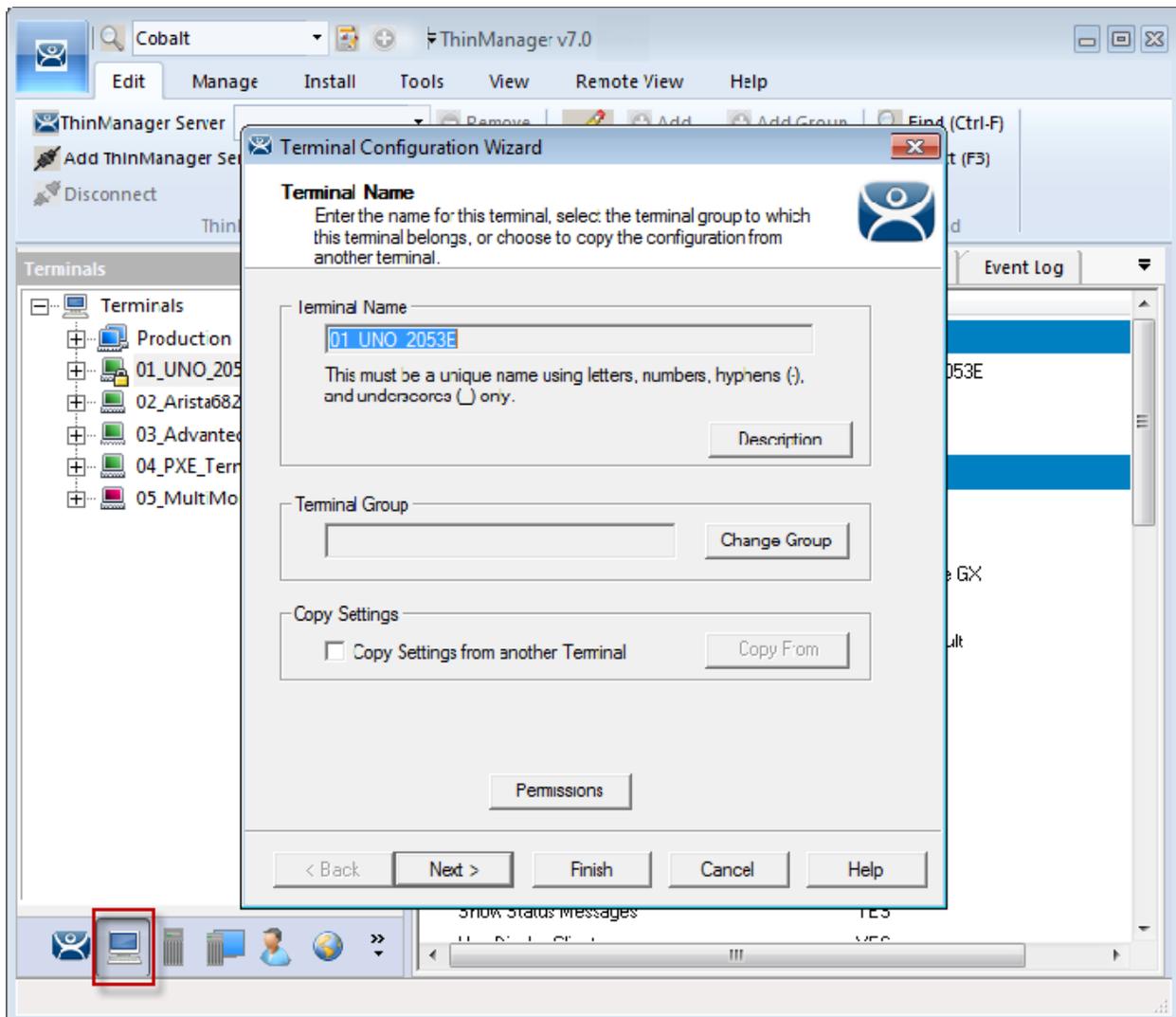


Location with Assigned Display Clients

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

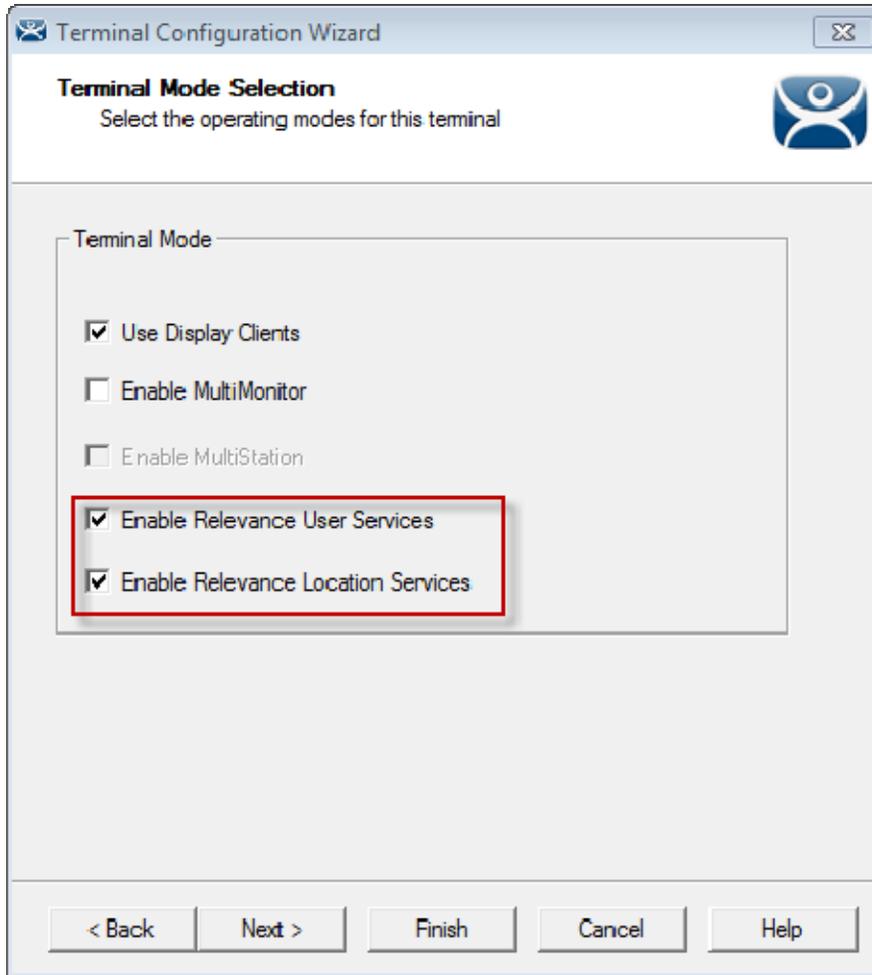
2.6. Adding a Location to a Terminal

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



Terminal Configuration Wizard

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 Page

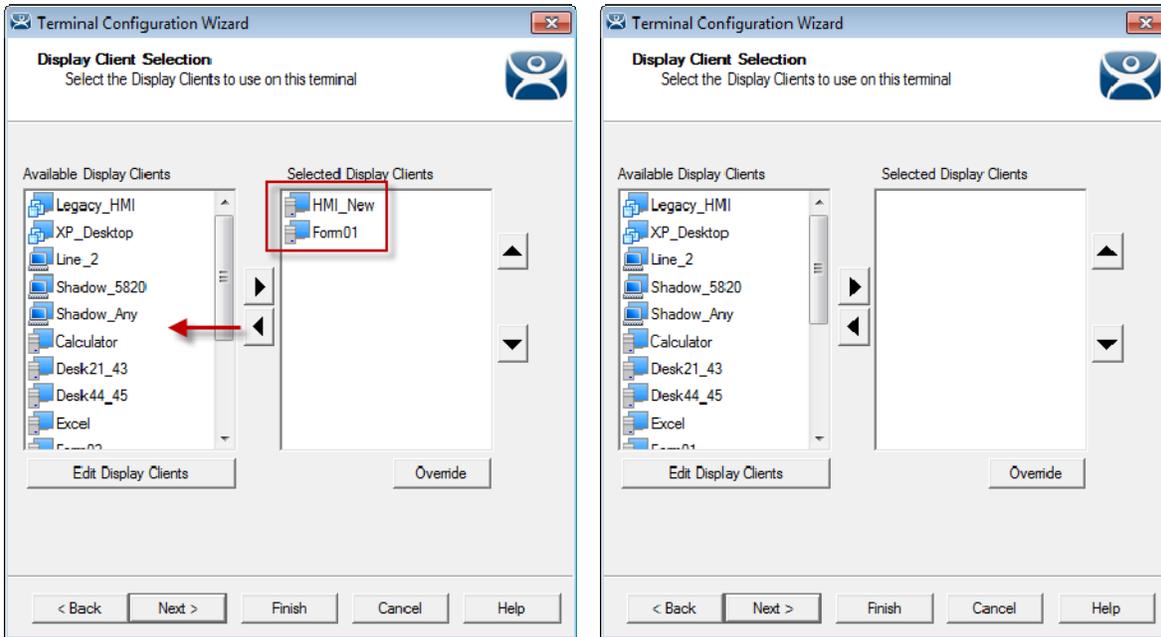
Navigate to the **Terminal Mode Selection** page. There are two Relevance checkboxes.

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.

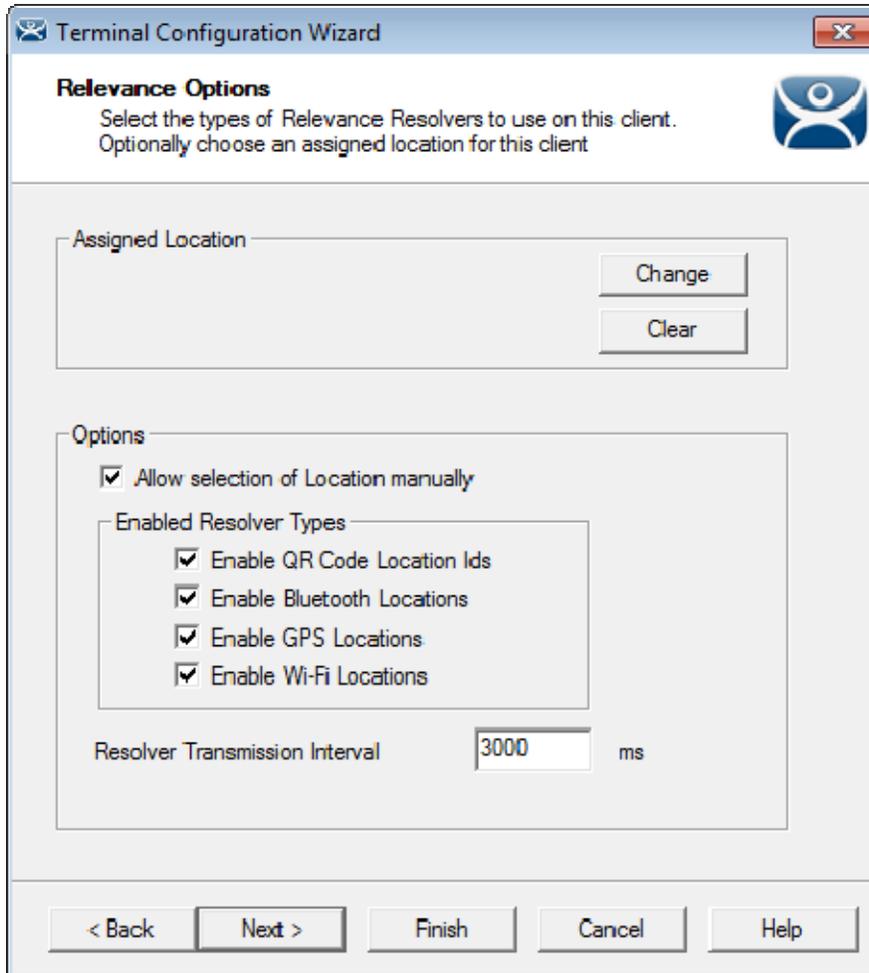


Remove Display Clients on the Display Client Selection Page

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 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:

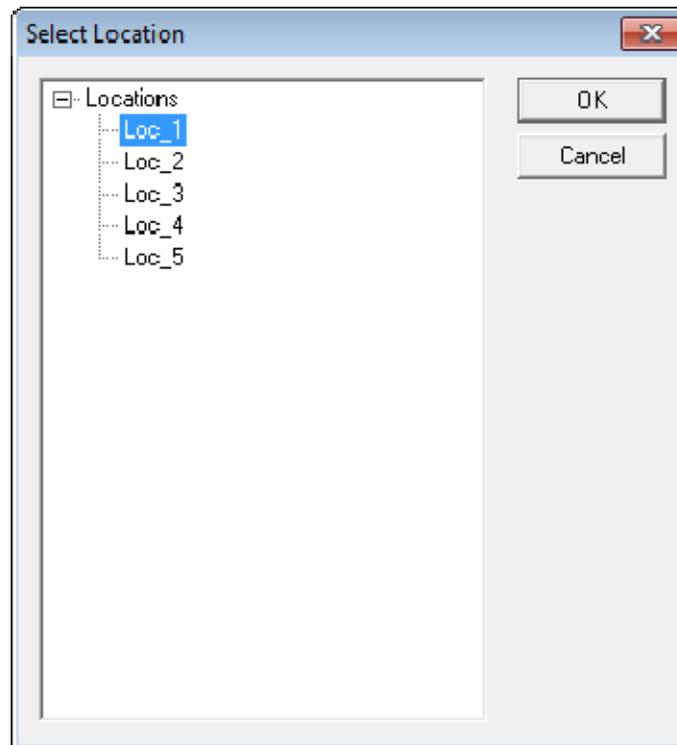
- **Allow Selection of the Location manually** – This will let the user select the location manually from a menu on the mobile device. If this is unselected then the user must use a Resolver.

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.

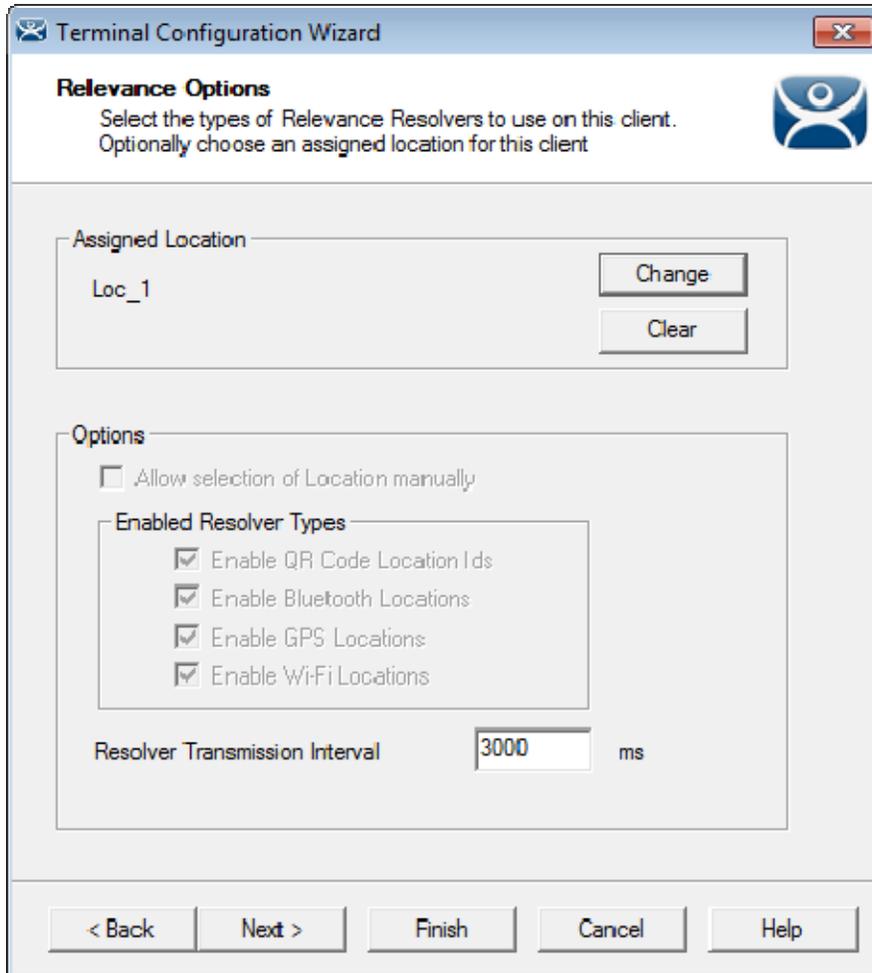
Select the **Change** button to open the **Select Location** window.



Select Location Window

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

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



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

Password

Verify Password

Domain

< Back Next > Finish Cancel Help

Log In Information Page

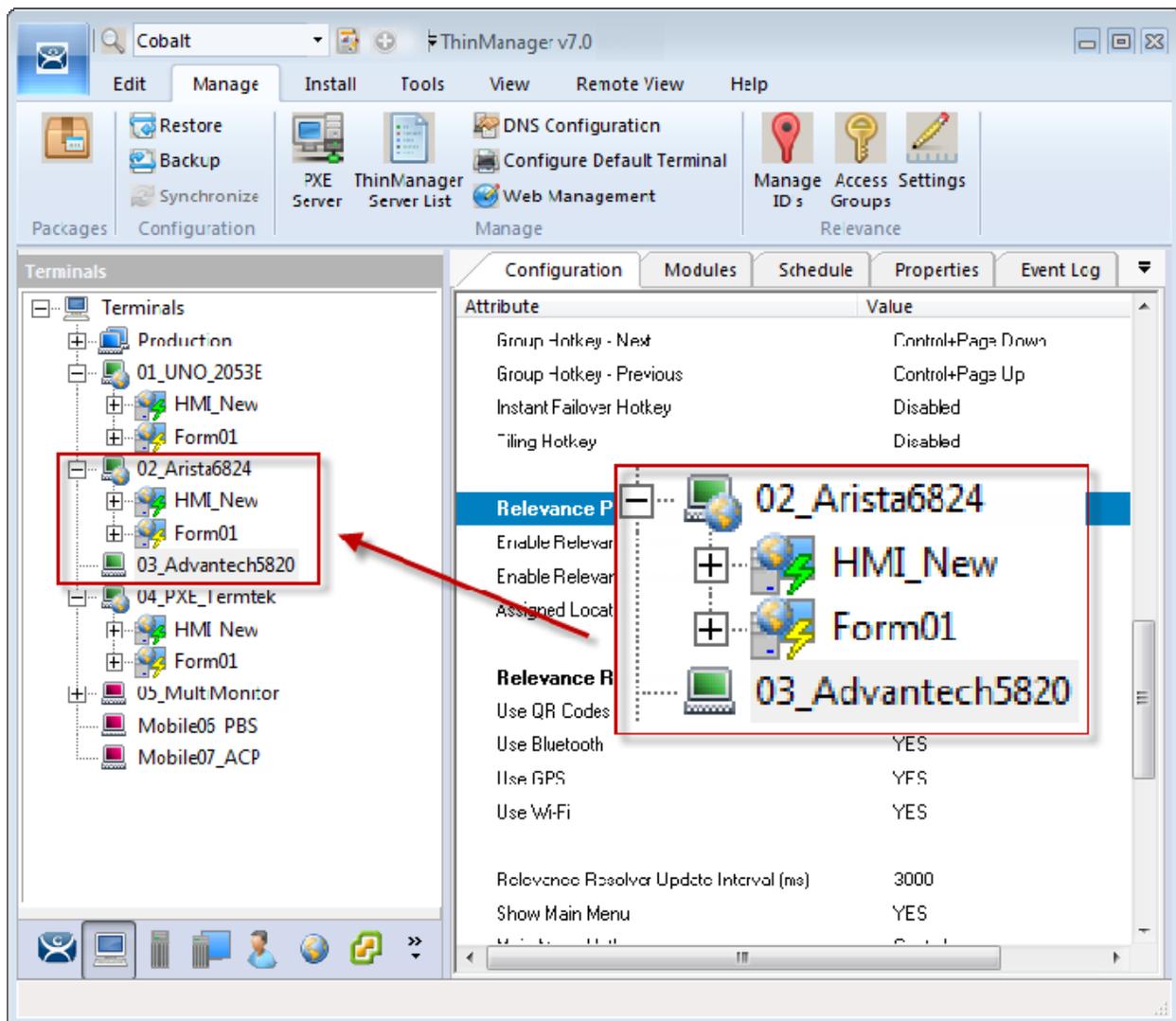
The terminal was assigned a user account to allow it to log in to the servers. This is not needed because the user account is assigned to the location.

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.



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 03_Advantech 5820 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.

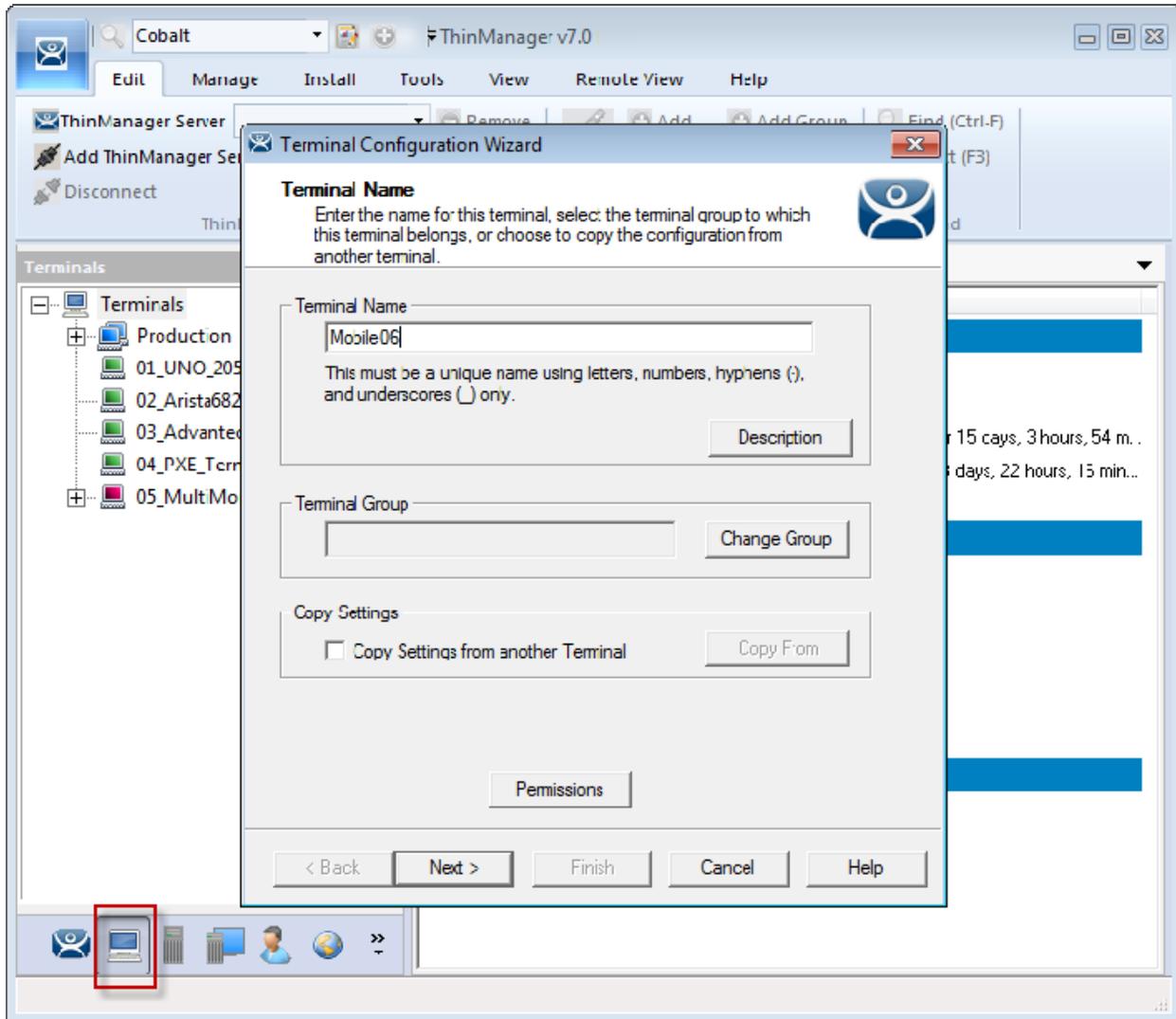
Relevance uses Resolvers to define the location.

- **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.

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

3.1. Configuring an iPad in ThinManager

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

Terminal Hardware
Select the manufacturer and model of this terminal.

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

Make / OEM: Apple

Model: iPad

OEM Model: iPad

Video Chipset: UNKNOWN

Terminal Firmware Package: Model Default
Terminal will run Package 7

Terminal ID and IP Address

Terminal ID: None

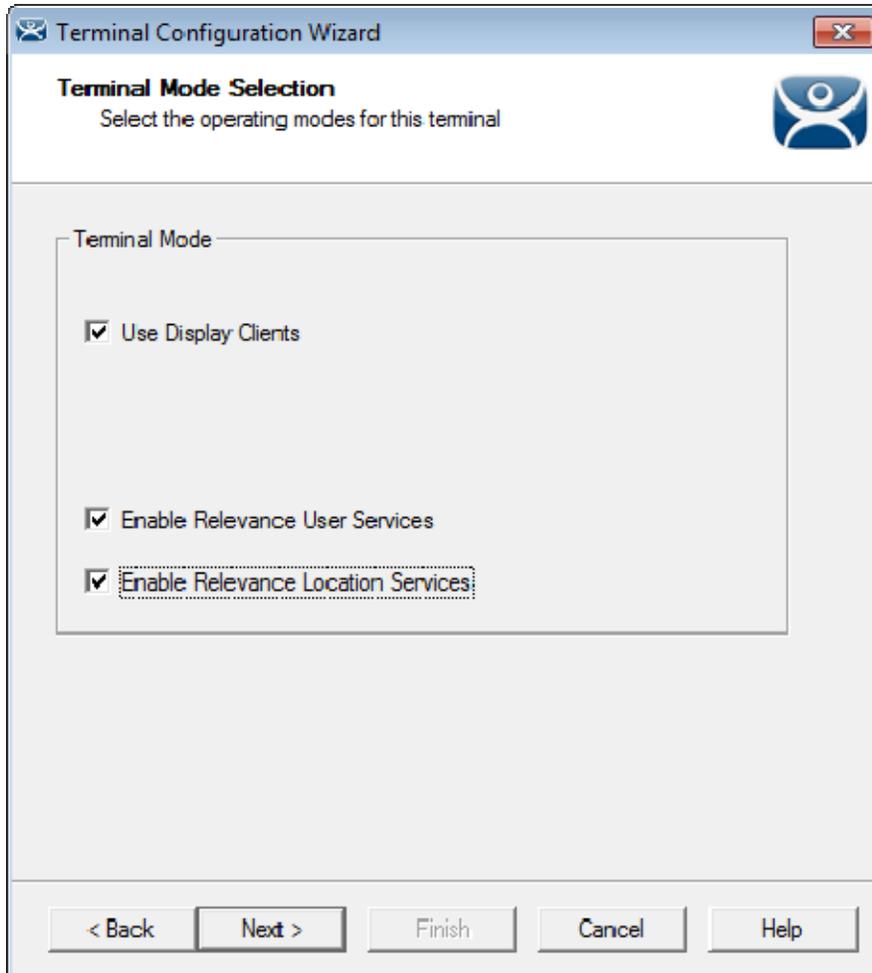
Clear

Edit

< Back Next > Finish Cancel Help

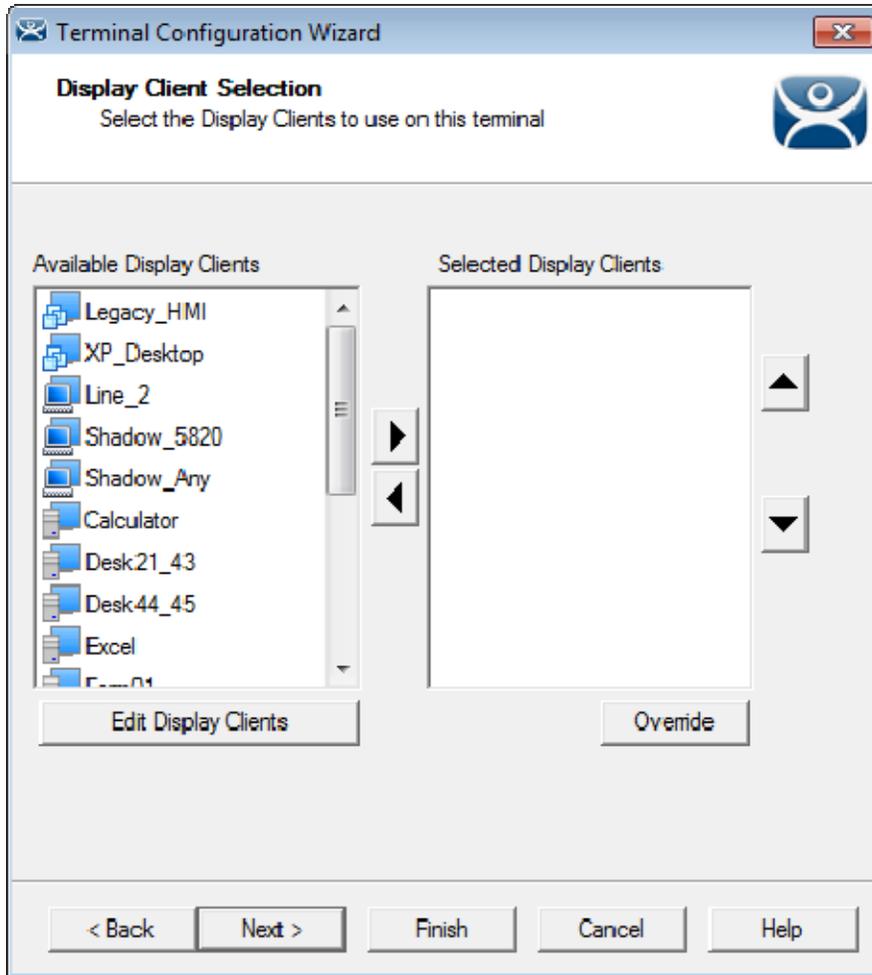
Terminal Hardware Page

Select your make and model of hardware. An iPad is **Apple / iPad**.
Navigate to the **Terminal Mode Selection** page by clicking **Next**.



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**.

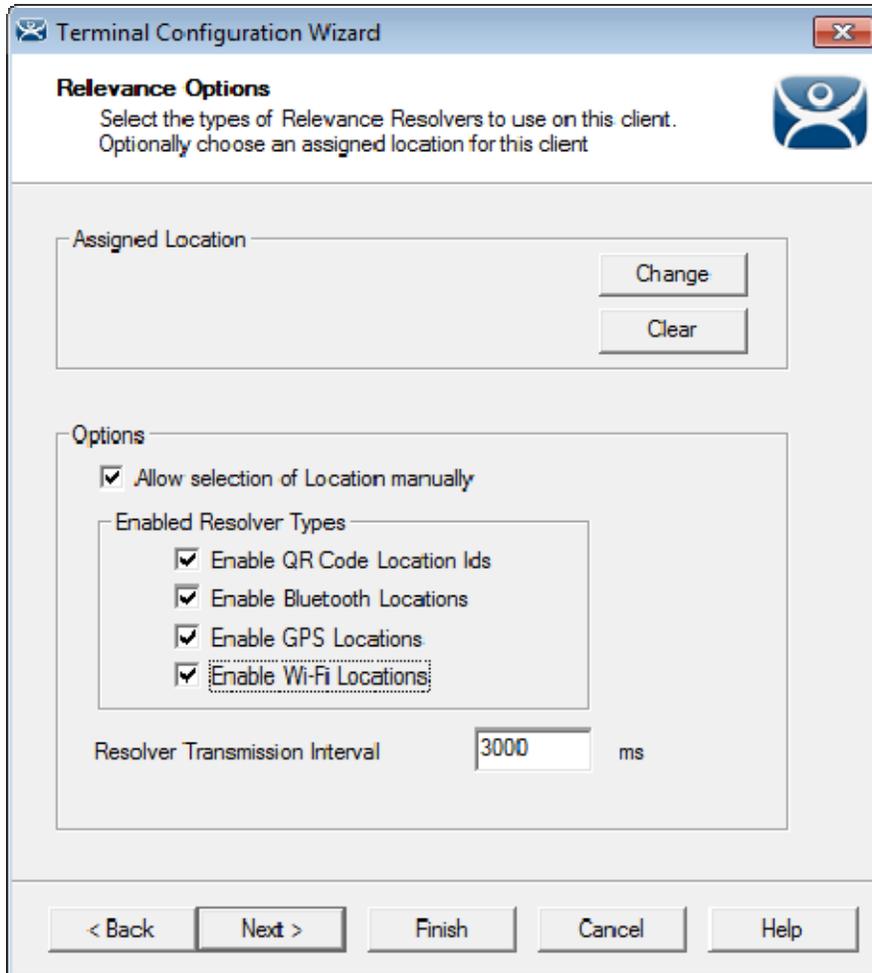


Display Client Selection Page

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 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.**

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

The screenshot shows a window titled "Terminal Configuration Wizard" with a close button in the top right corner. Below the title bar, the text "Log In Information" is displayed in bold, followed by the instruction: "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." To the right of this text is a blue icon of a person. Below the instruction is a section titled "Windows Log In Information" containing four input fields: "Username" (with the text "term 2"), "Password" (with a single asterisk), "Verify Password" (with a single asterisk), and "Domain" (which is empty). A "Verify" button is located to the right of the "Domain" field. At the bottom of the window, there are five buttons: "< Back", "Next >", "Finish", "Cancel", and "Help".

Log In Information Page

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

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

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.



Settings Page

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

Cancel Add ThinManager Server Save

Description
Cobalt

Primary ThinManager Server IP
10.

Secondary ThinManager Server IP
Enter IP ...

1 2 3 4 5 6 7 8 9 0 [X]

- / : ; () \$ & @ return

#+= undo . , ? ! ' " #+=

ABC [Space] ABC [Keyboard Icon]

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.

3.3. Associating the iPad to the Configuration

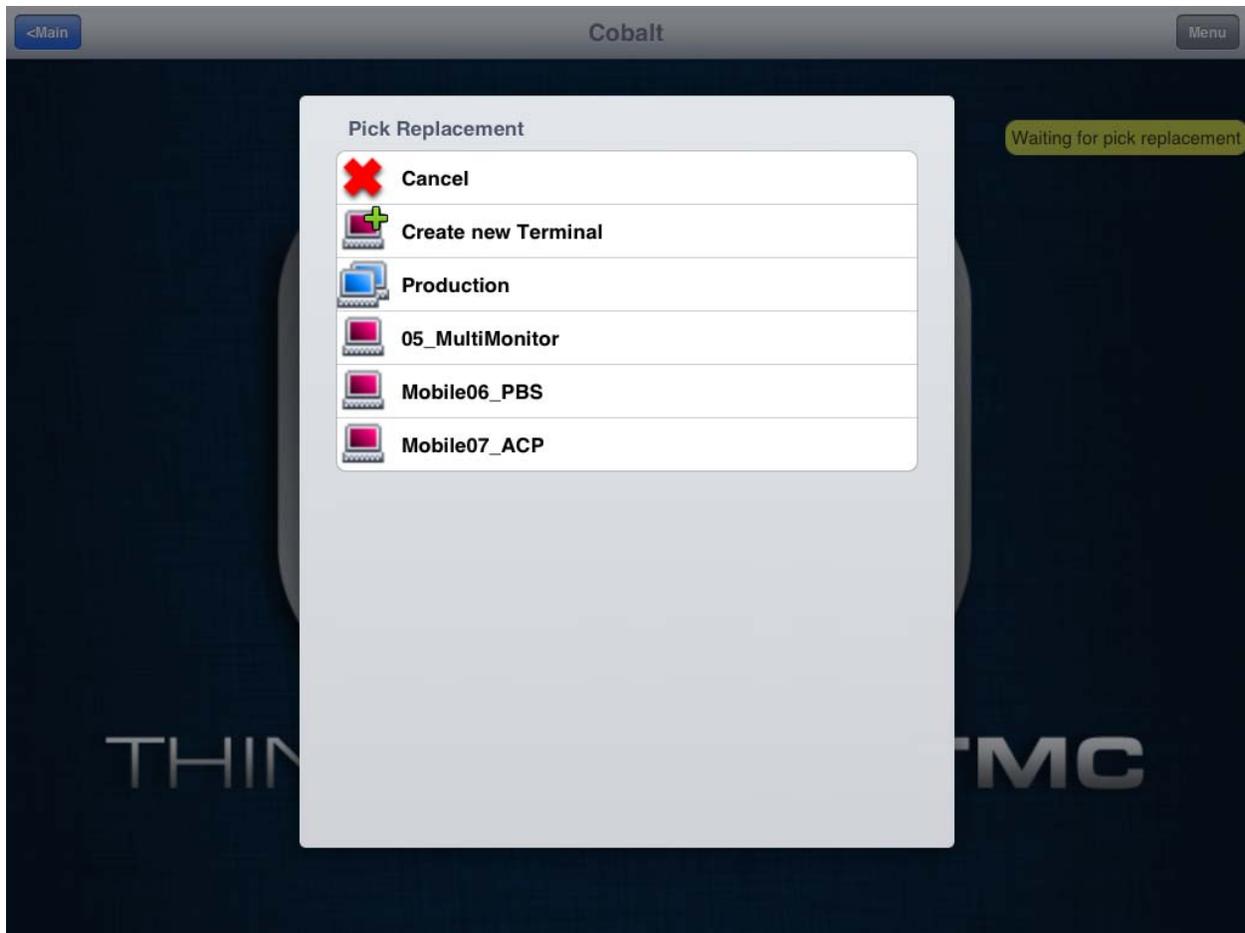
Once the ThinManager Server is defined on the iPad you need to associate the hardware to the iTMC configuration you created.



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.



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

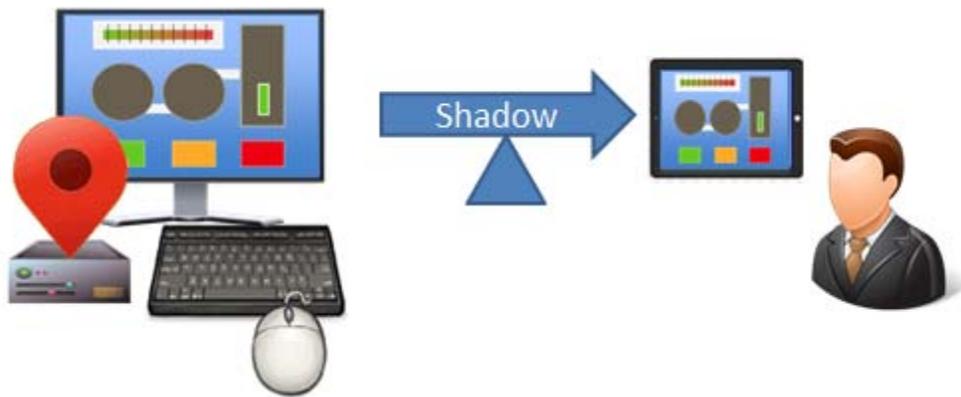
The terminal will be connected, logged on, but no applications are running because we left that blank. A dialog will open stating that “iTMC Would Like to Use Your Current Location”. This enables the GPS location tool.

✓ **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.

4. Manual Interaction with Locations

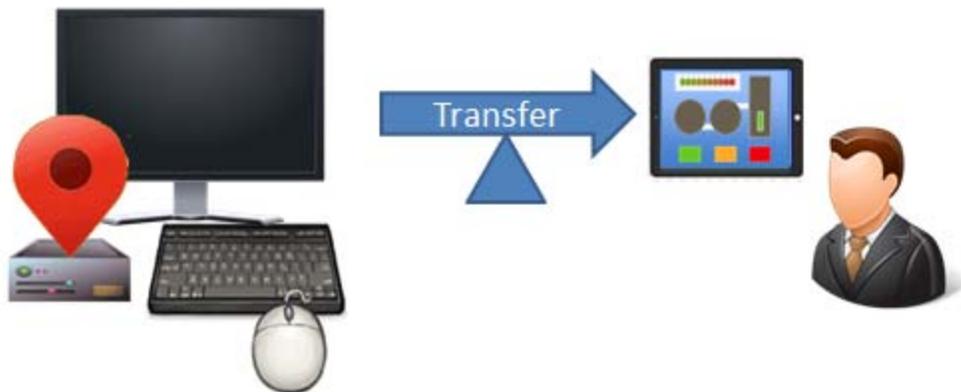
A mobile device can connect to a **Location** and manually interact with the applications. The methods are:

- **Shadowing** – Shadowing duplicates the graphic output of the Location screen and sends it to the mobile device.
- **Transferring** – 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.
- **Auto-Transferring** – Auto-Transferring sends the graphic output of the location to the mobile device instead of the location. This does not require the operator to manually allow the transfer.
- **Cloning** – Cloning will create a duplicate session for the mobile device using the configuration of the location and the user credentials of the mobile device.



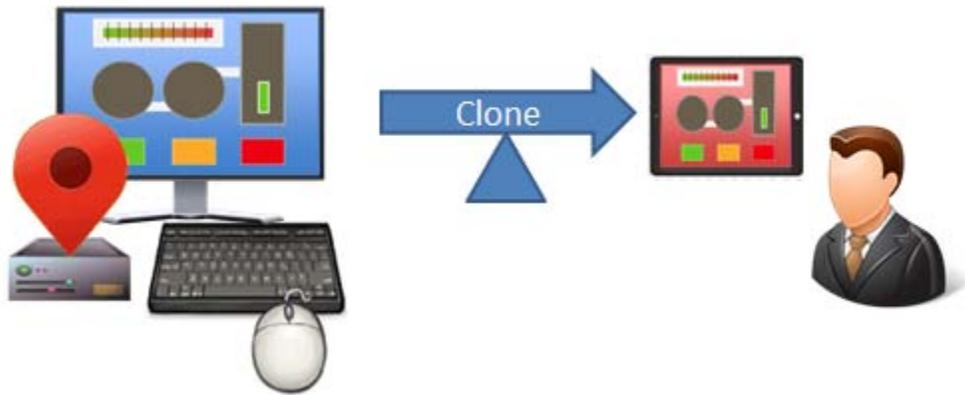
Shadowing

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



Transferring

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

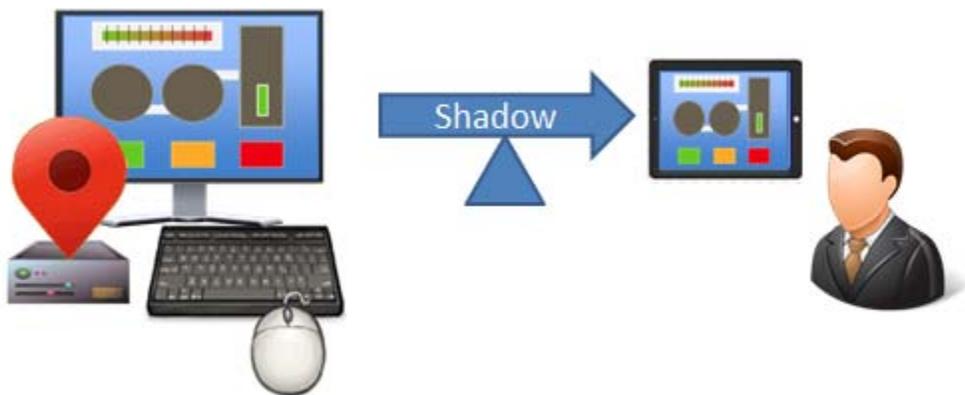


Clone

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 Menu

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



Select Location Menu

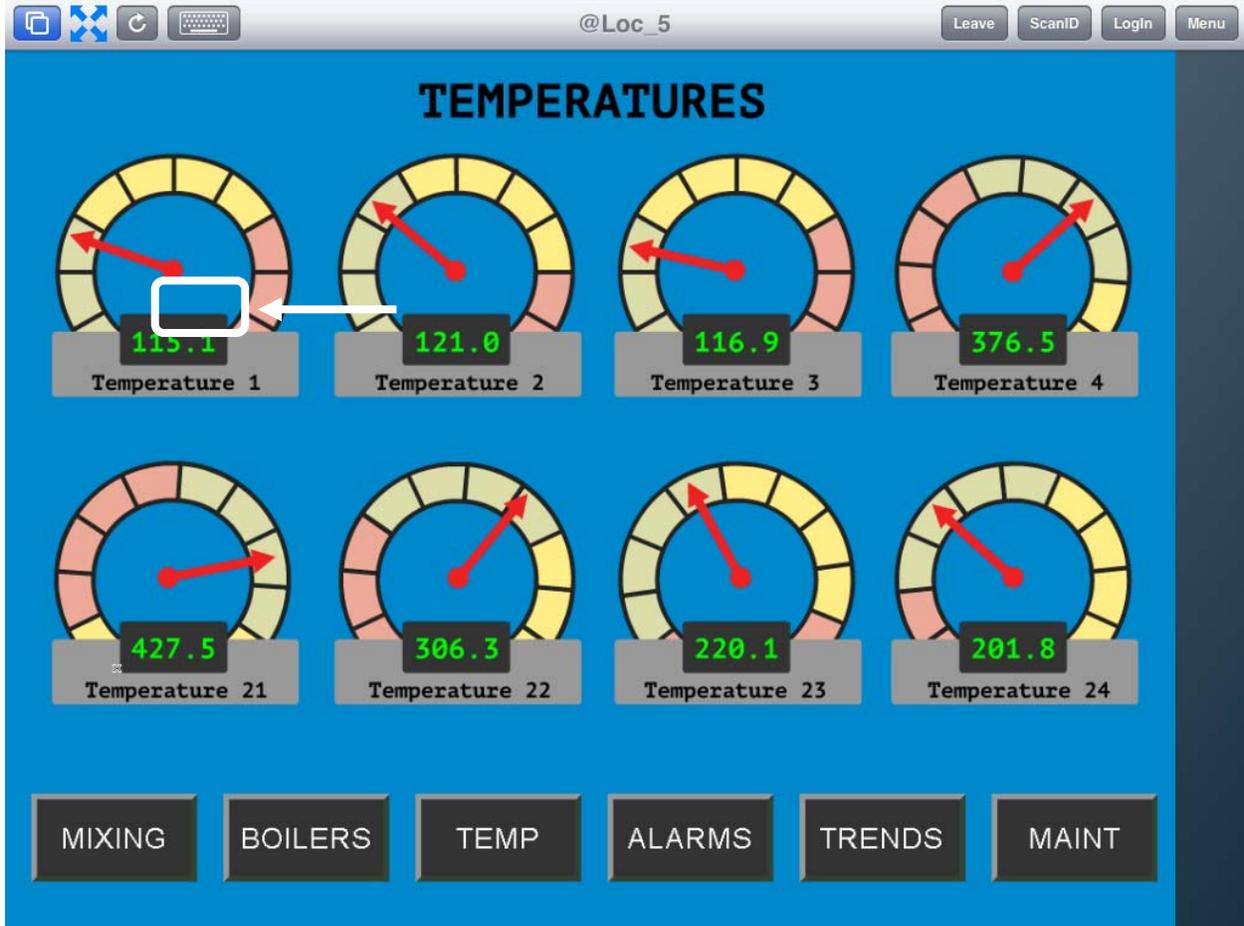
Select a location to open the **Select Action** window.



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.



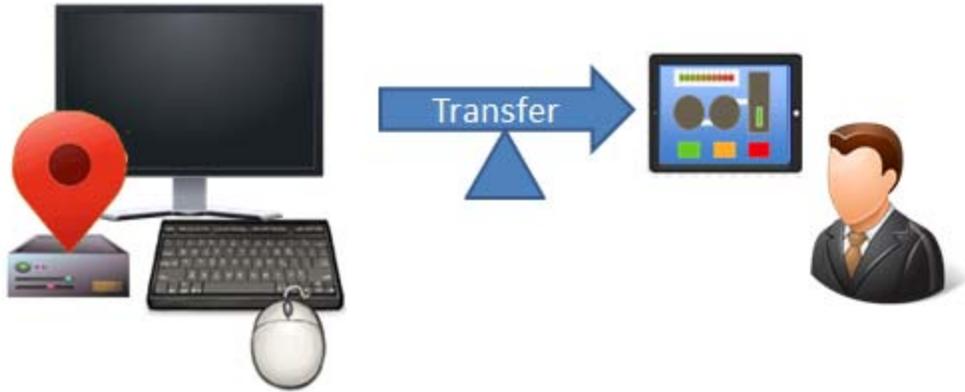
Single Display Client Shown in Shadow

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.

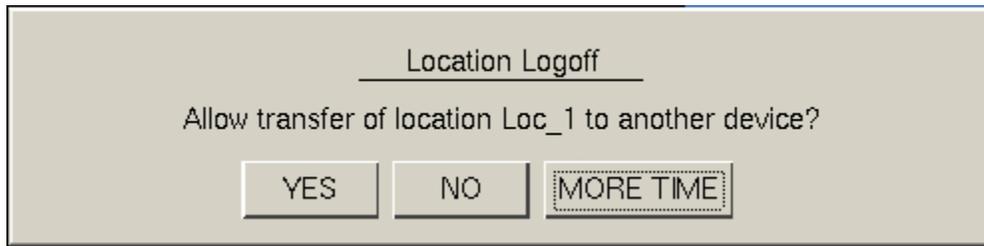


Wait for Transfer Permission Message

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 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 Dialog

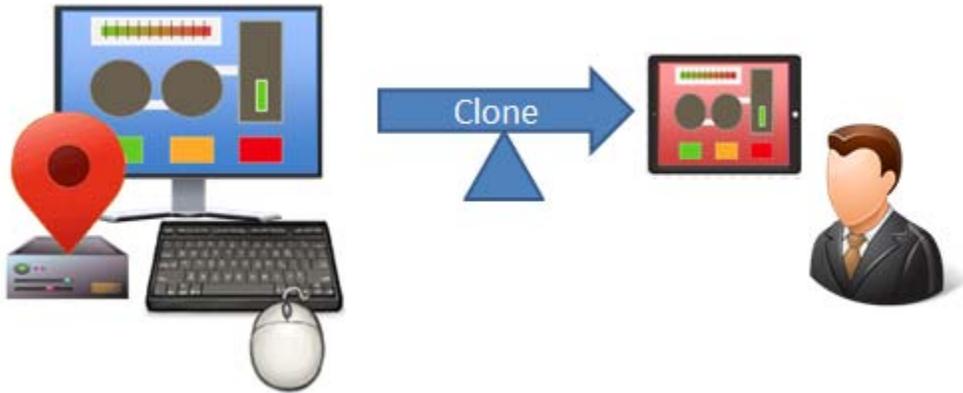
When the user at the location selects the Restore Transfer button a warning message will be sent to the mobile device.

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.

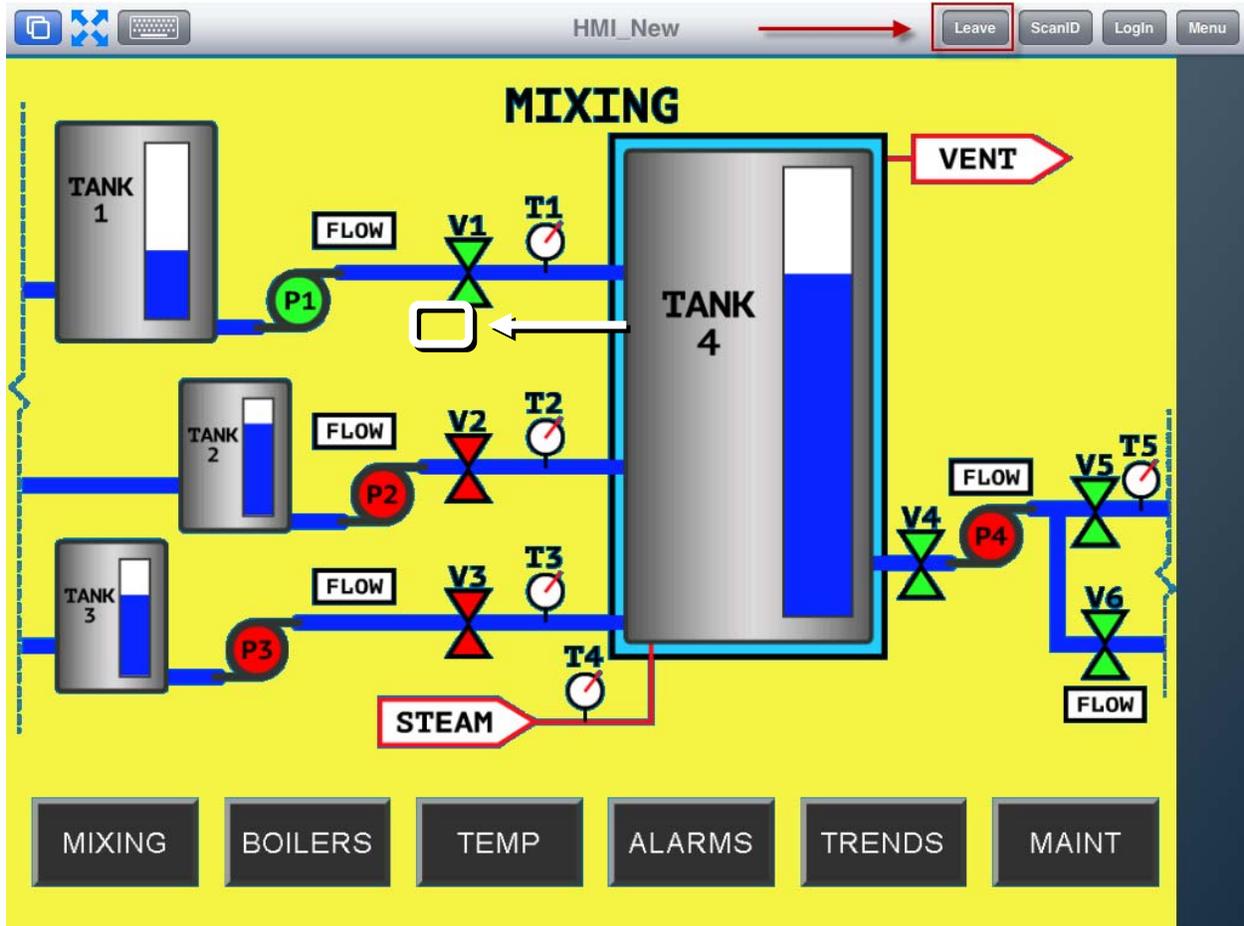
Open the iTMC program, select your ThinManager Server, and touch the **Menu** button in the upper right corner to launch the **Main Menu** window.

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

Relevance can use several resolvers to locate the mobile device.

Resolvers include

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

This section will cover each of the Resolvers.

5.1. QR Codes and Bar Codes

Relevance can use QR and bar codes as location resolvers. The iTMC program uses the built in camera as a scanner and can read both QR codes and bar codes. QR Codes can contain text, numbers, and URLs while bar codes are limited to numbers.

The procedure is:

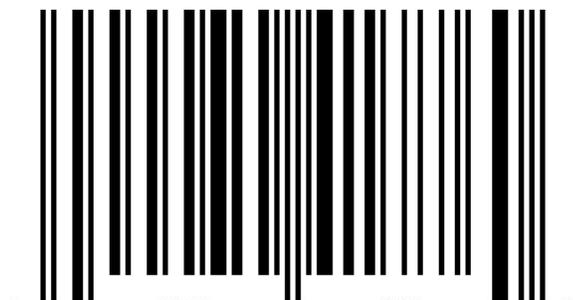
- Create the QR codes or bar codes.
- Launch the iTMC program and select the Settings button.
- Select the Register QR Code command under Relevance Resolvers. If you have more than one ThinManager Server defined you will need to pick the ThinManager Server you want the QR code registered.
- Scan the 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**.

The procedure is the same for bar codes.



QR-01

Sample QR Code



Bar-01

Sample Bar Code



ThinManager iTMC Program

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

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



Settings Screen

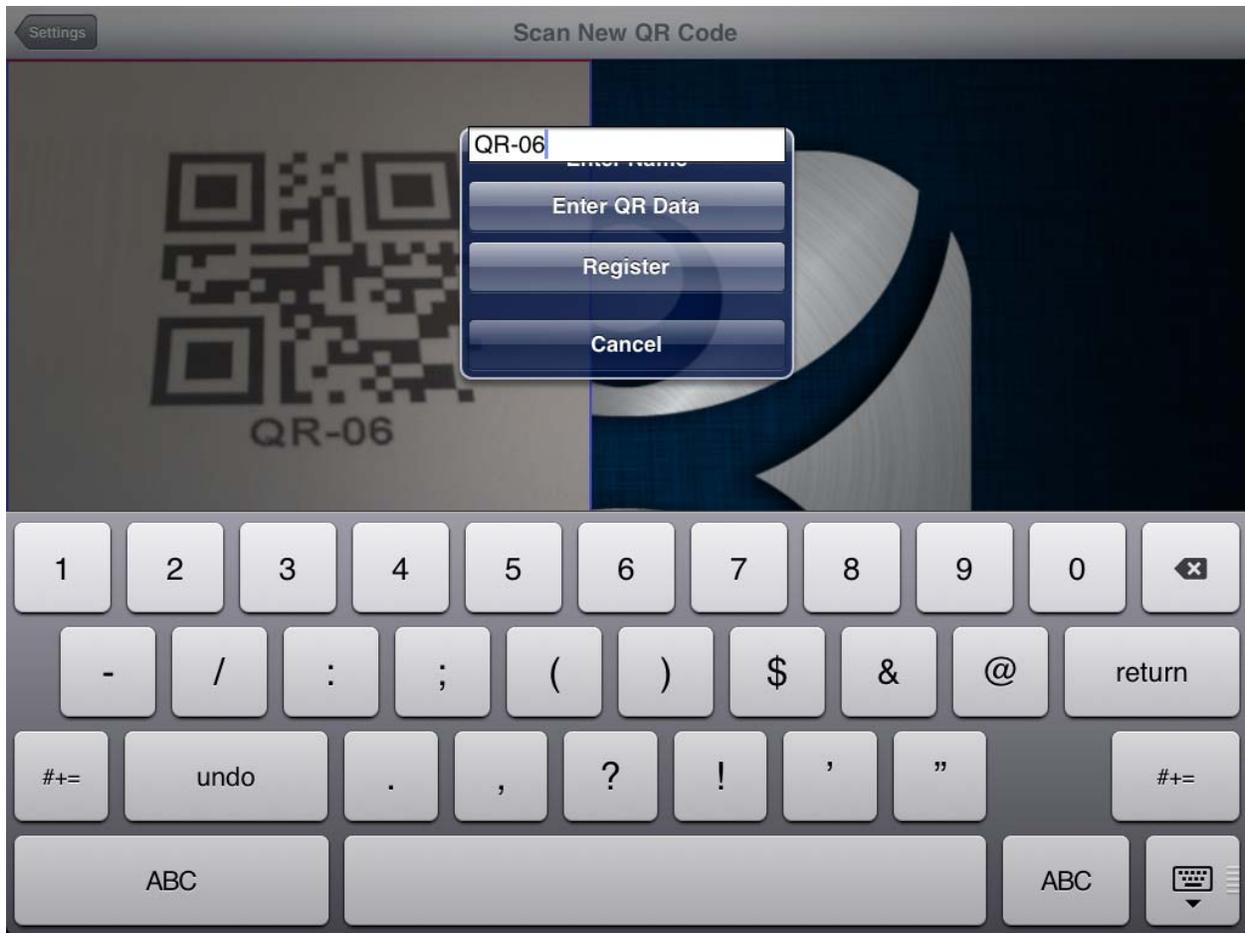
Select **Register QR Code** from the **Relevance Resolvers** menu.



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.



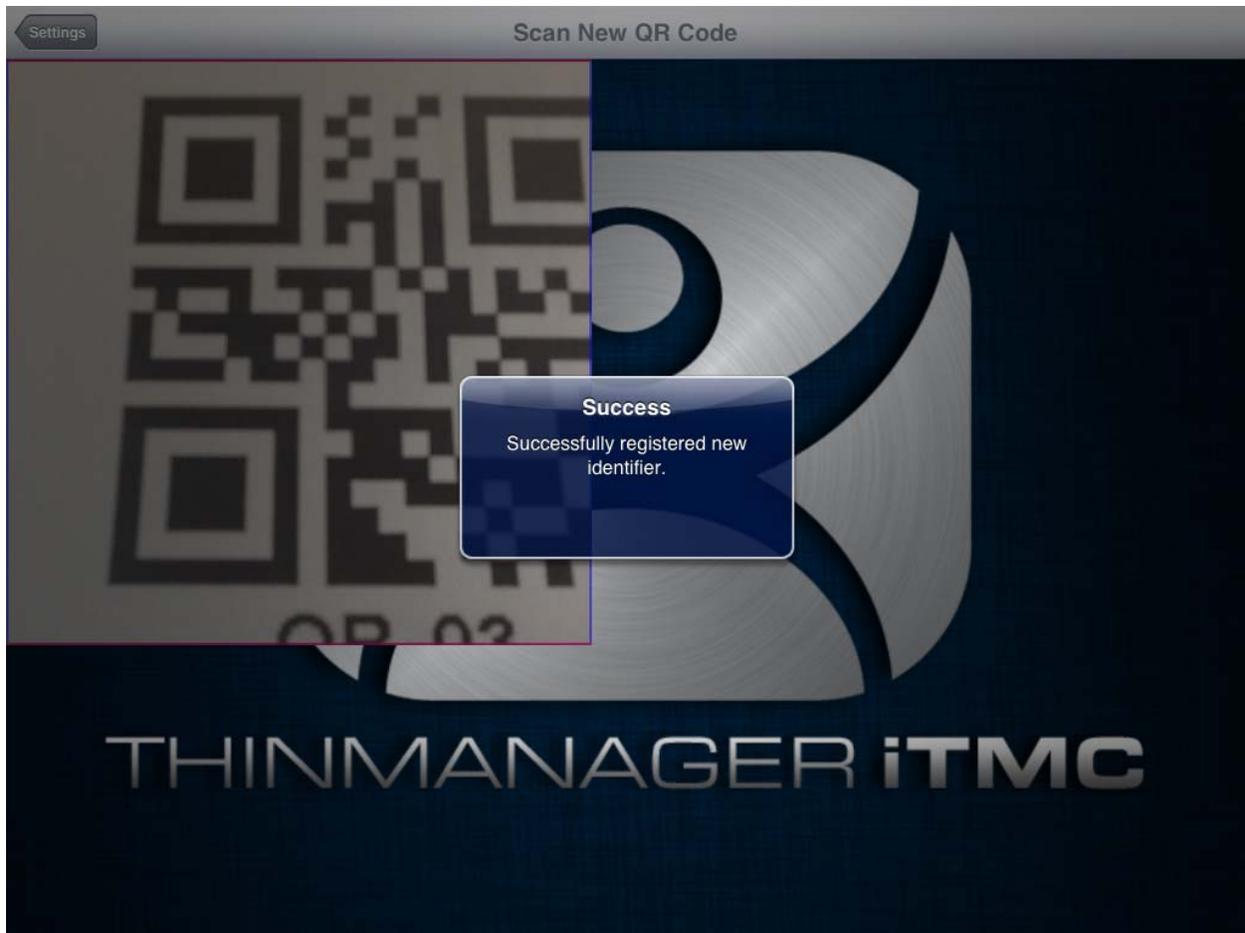
Scan New QR Code and Enter Name

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.

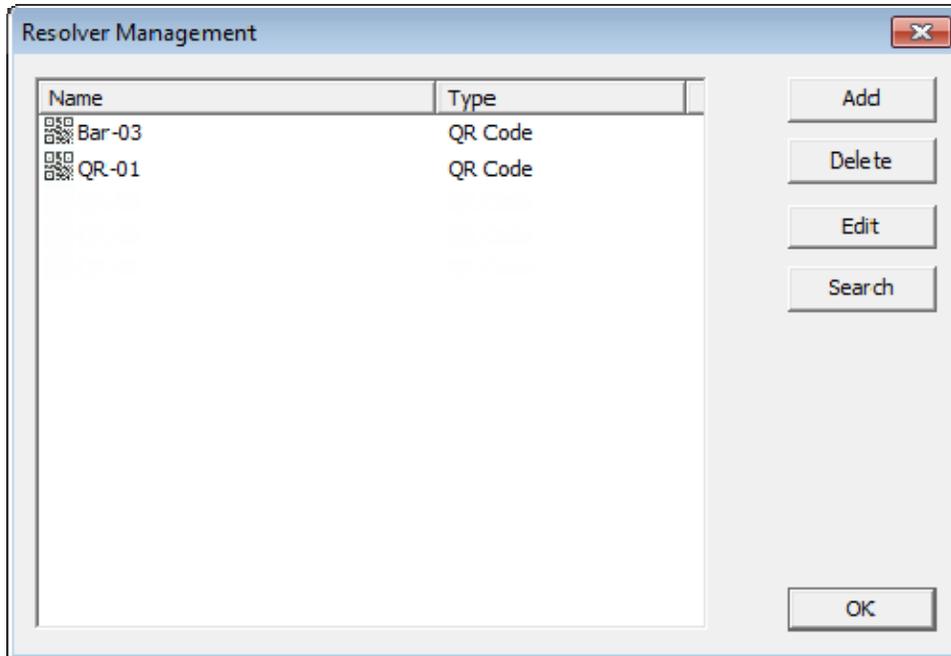
Enter a name in the field.

Select the **Register** button.



Successful QR Code Registration

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



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

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.

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**.



ThinManager iTMC Program

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

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

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	<input checked="" type="checkbox"/>
User Sounds	<input checked="" type="checkbox"/>
TOOLBAR	
Show Toolbar	<input checked="" type="checkbox"/>
Show Menu Button	<input checked="" type="checkbox"/>

Register Bluetooth Beacon Command on the Settings Page

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



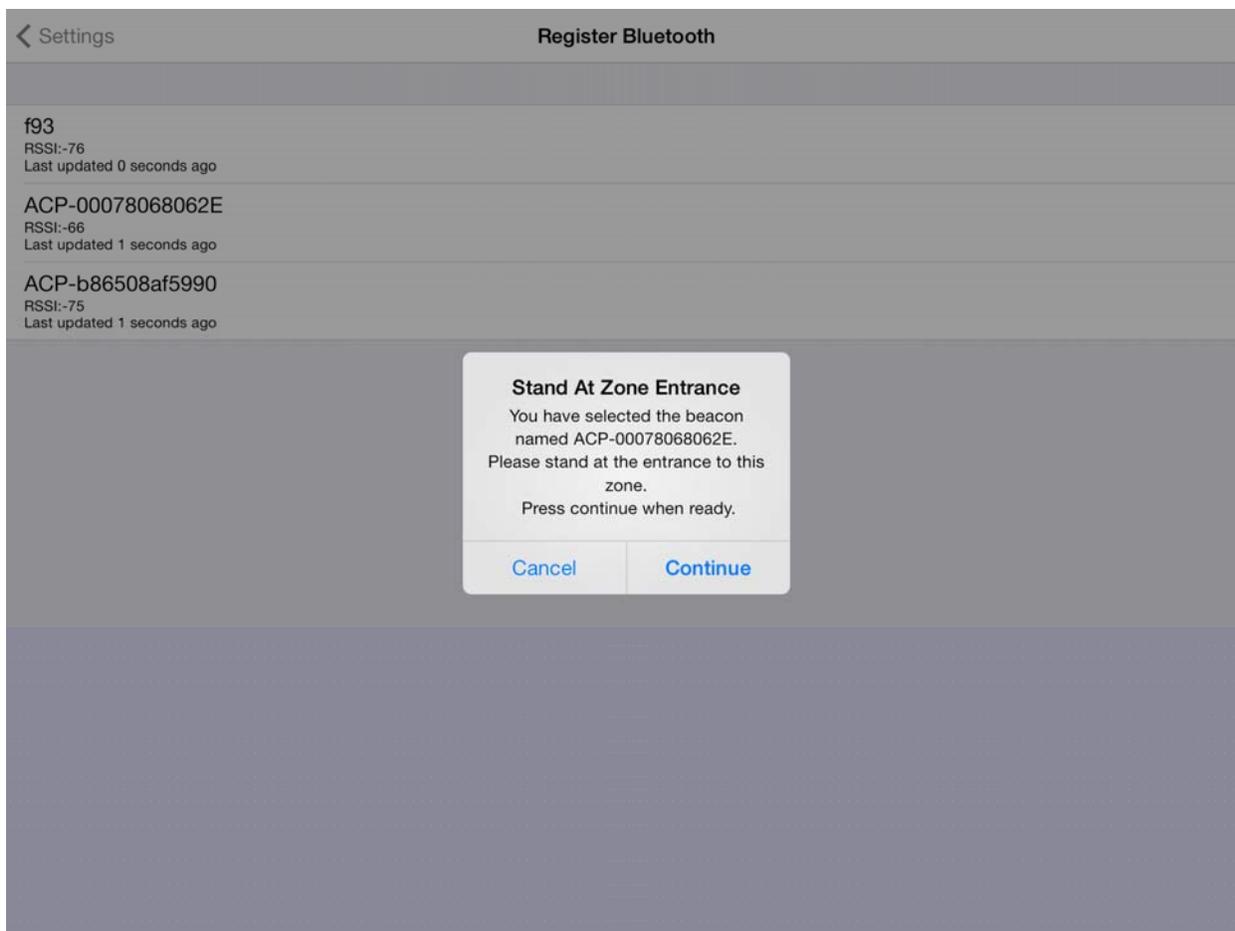
Select Configuration

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

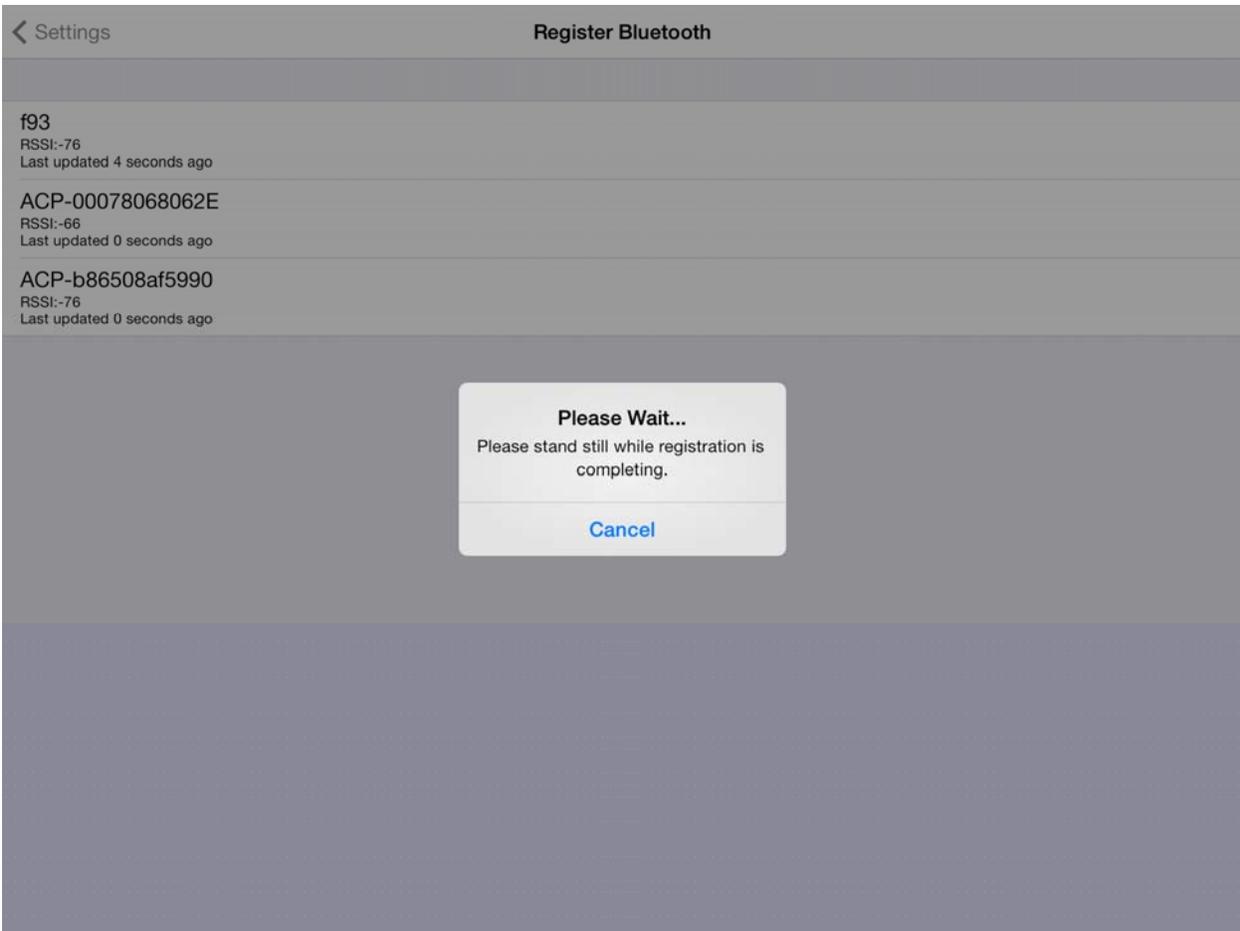
Available Bluetooth Beacons

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



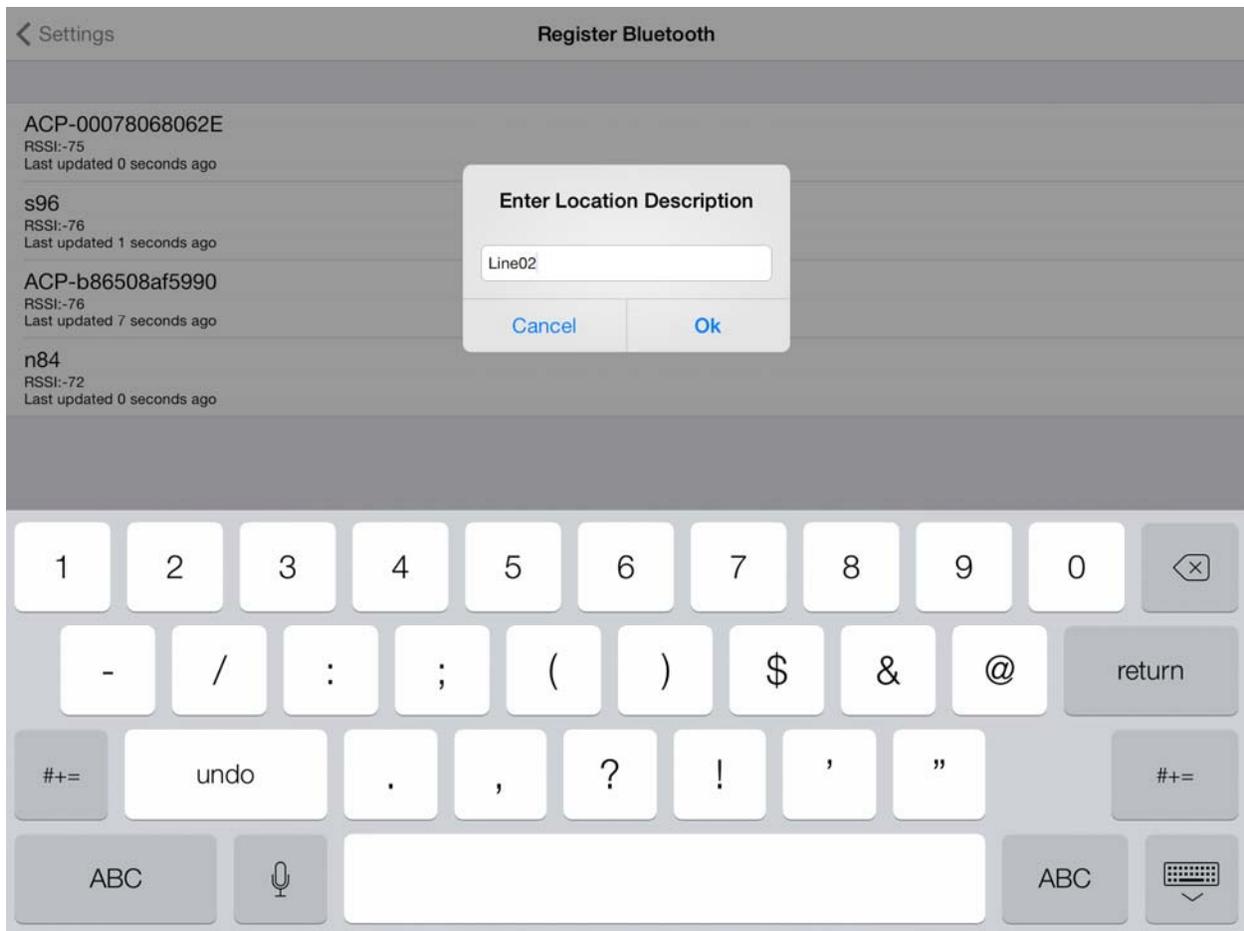
Stand At Zone Entrance Dialog

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



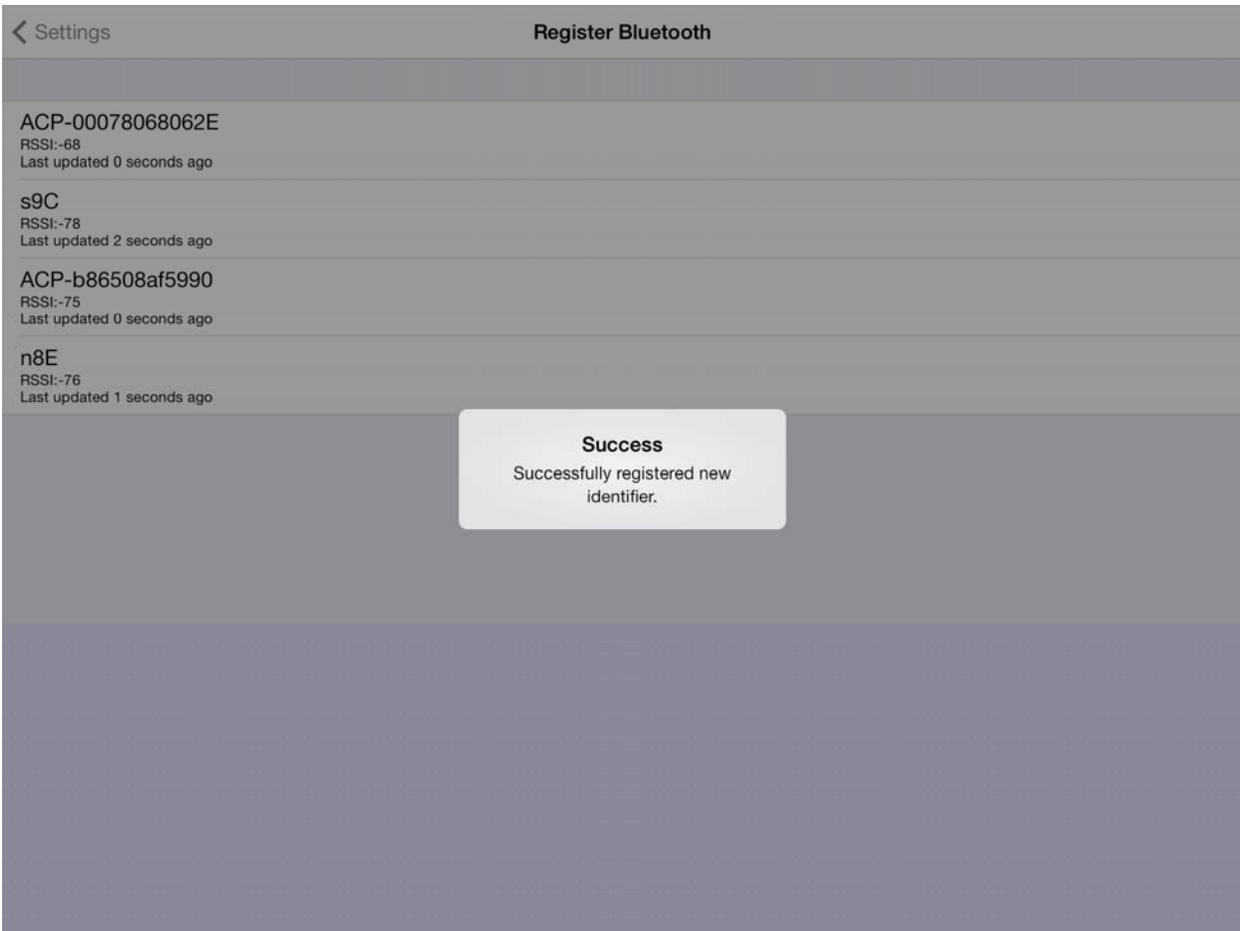
Please Wait Message

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



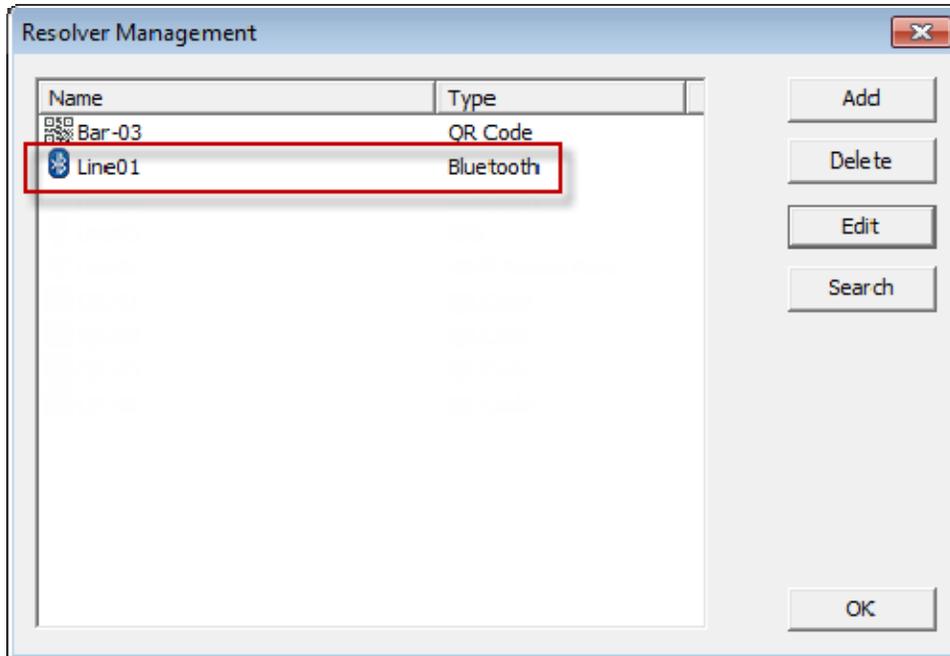
Enter Location Description

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



Success Dialog

The program will confirm successful Bluetooth registrations.



Resolver Management Window

6. 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

Relevance can use Wi-Fi access points as location resolvers.

The procedure is:

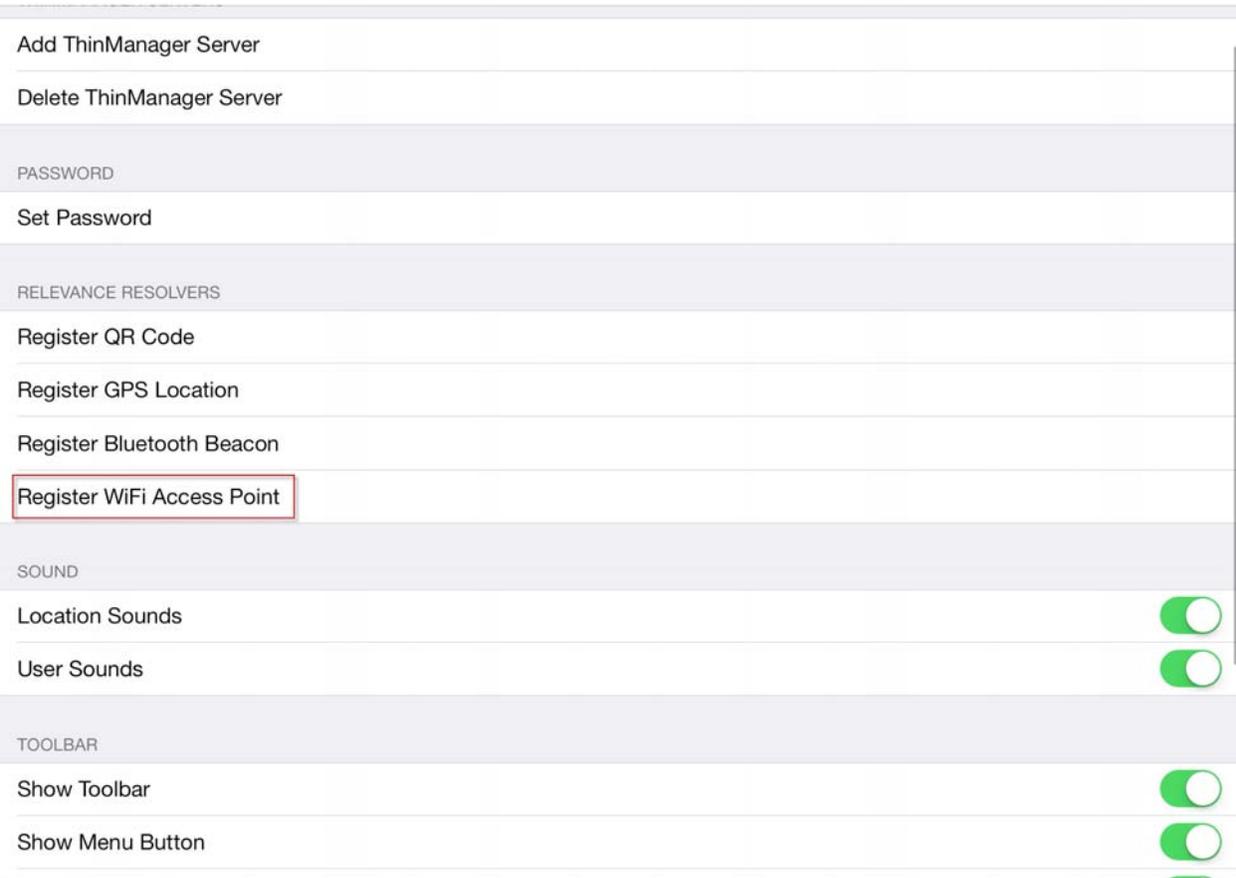
- Add Wi-Fi access points.
- Launch the iTMC program and select the **Settings** button.
- Select the **Register Wi-Fi Access Point** command under Relevance Resolvers. If you have more than one ThinManager Server defined you will need to pick the ThinManager Server you want the QR code registered.
- 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**.



ThinManager iTMC Program

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

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



Register Wi-Fi Access Point Command on the Settings Page

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



Select Configuration

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

INFO

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

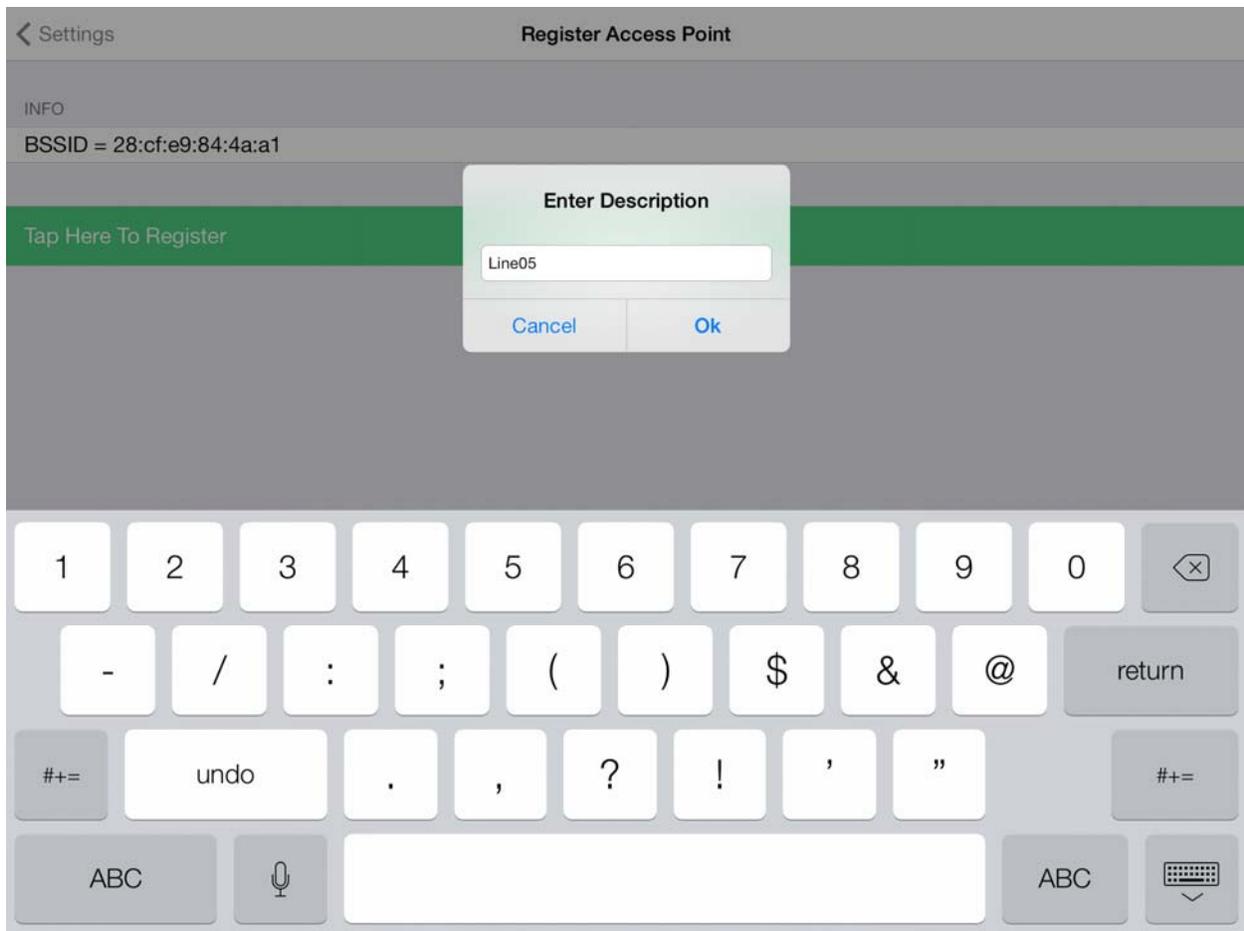
Tap Here To Register



Available Wi-Fi Access Points

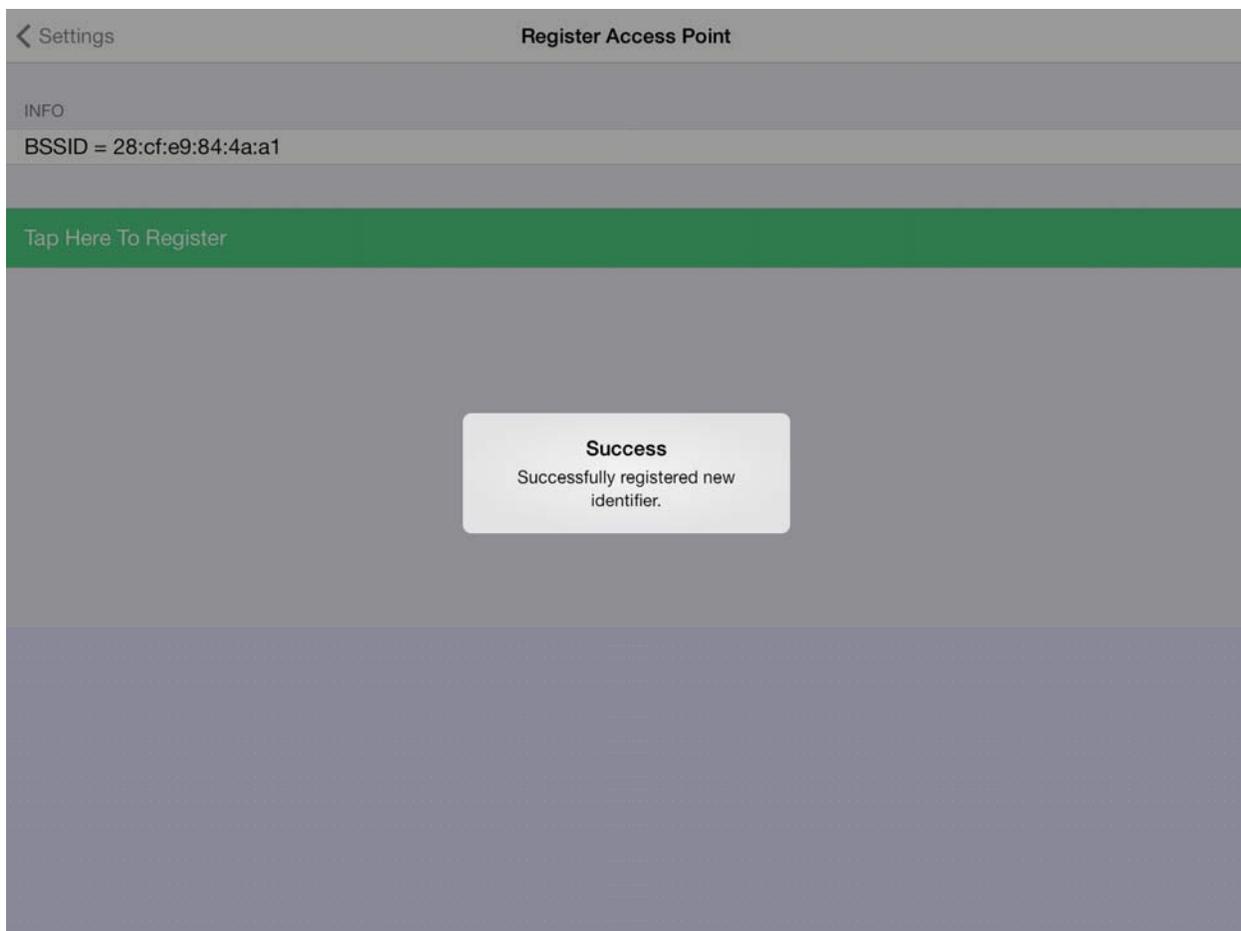
The mobile device will search for Wi-Fi Access Points and list them on the **Register Access Points** page.

Select the desired access point.



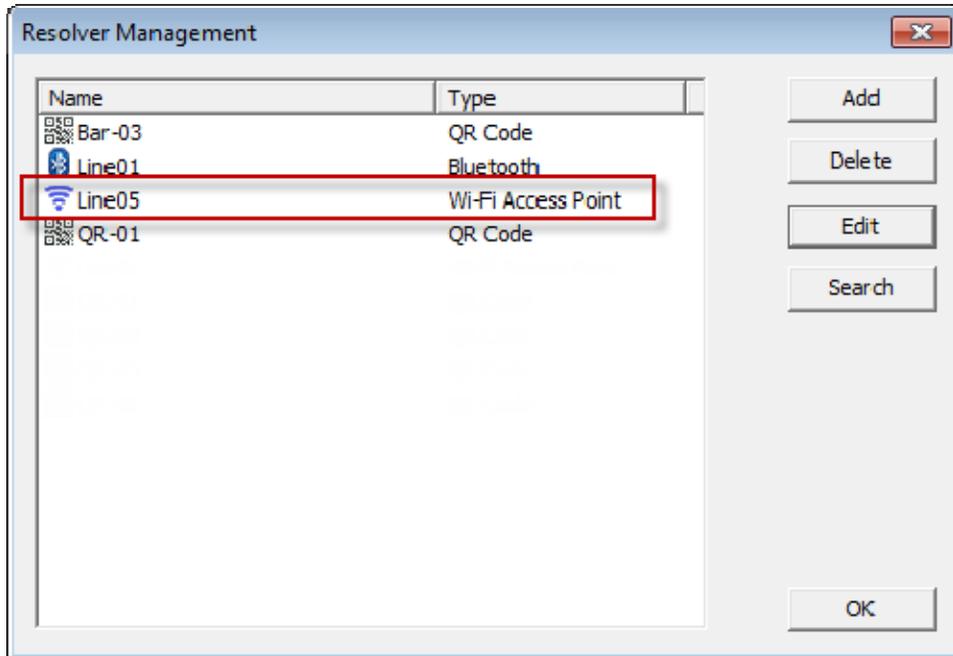
Enter Location Description

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



Success Dialog

The program will confirm successful Wi-Fi registrations.



Resolver Management Window

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

5.3. 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.



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.

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**.



ThinManager iTMC Program

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

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

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	<input checked="" type="checkbox"/>
User Sounds	<input checked="" type="checkbox"/>
TOOLBAR	
Show Toolbar	<input checked="" type="checkbox"/>
Show Menu Button	<input checked="" type="checkbox"/>

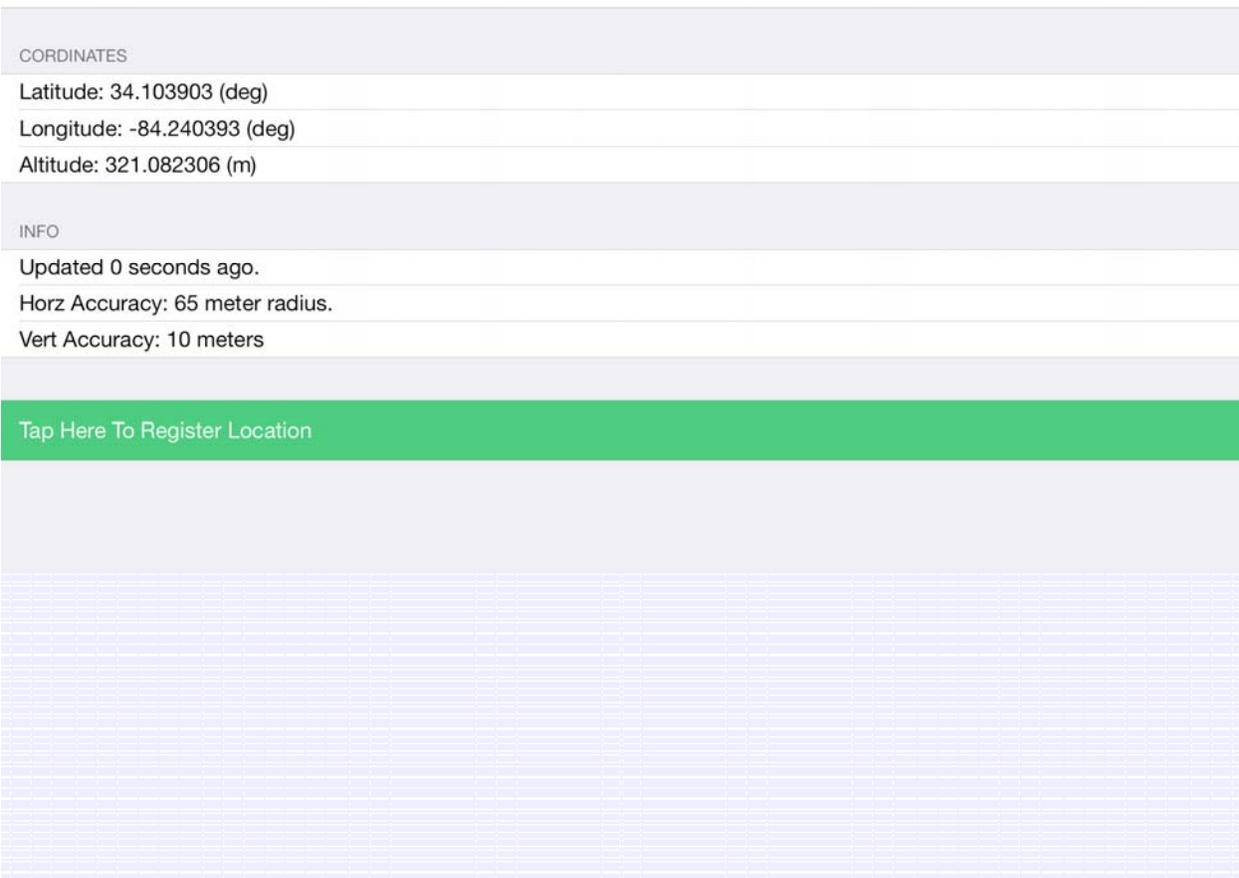
Register GPS Location Command on the Settings Page

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



Select Configuration

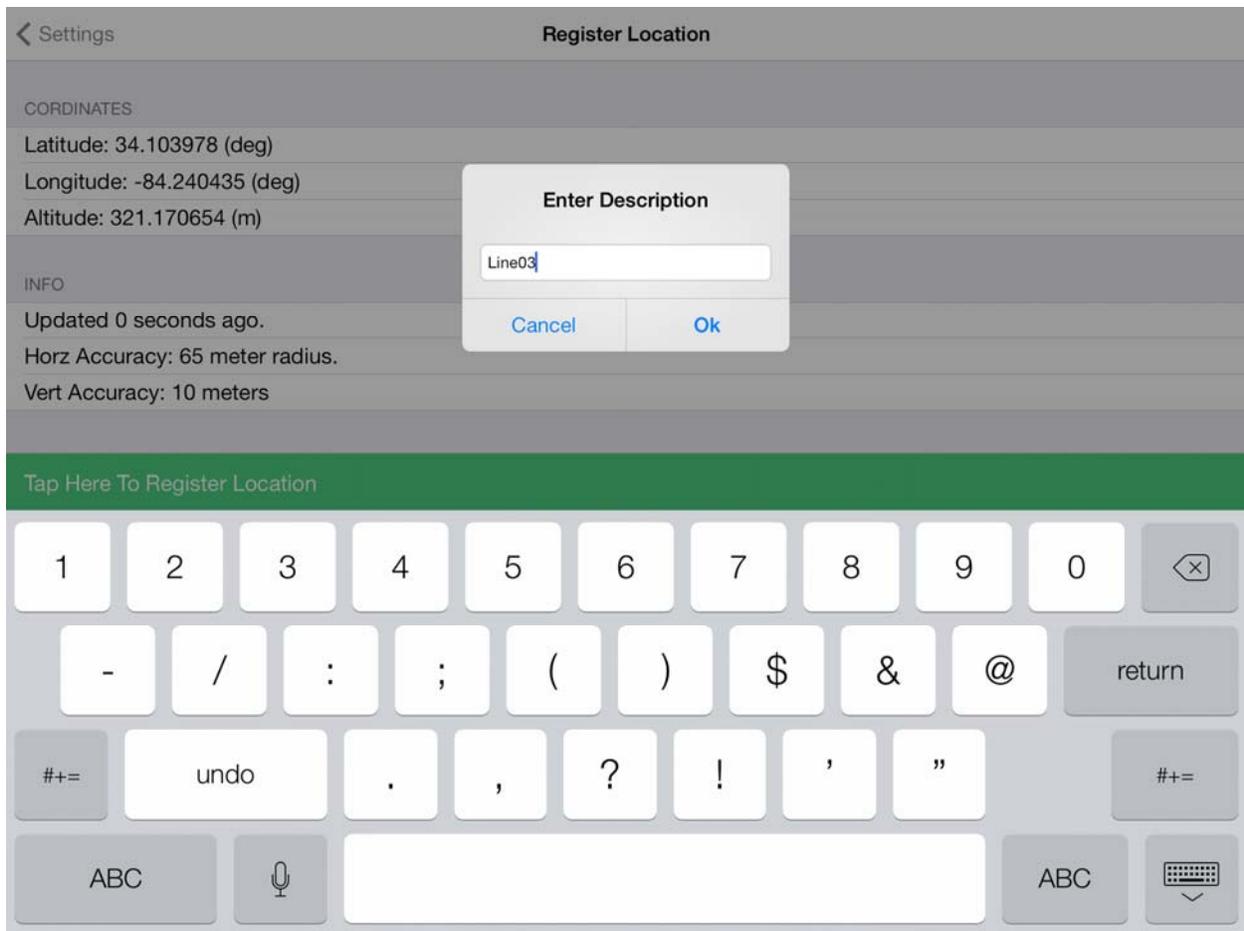
Select the ThinManager Server you want to register the GPS location.



GPS Location

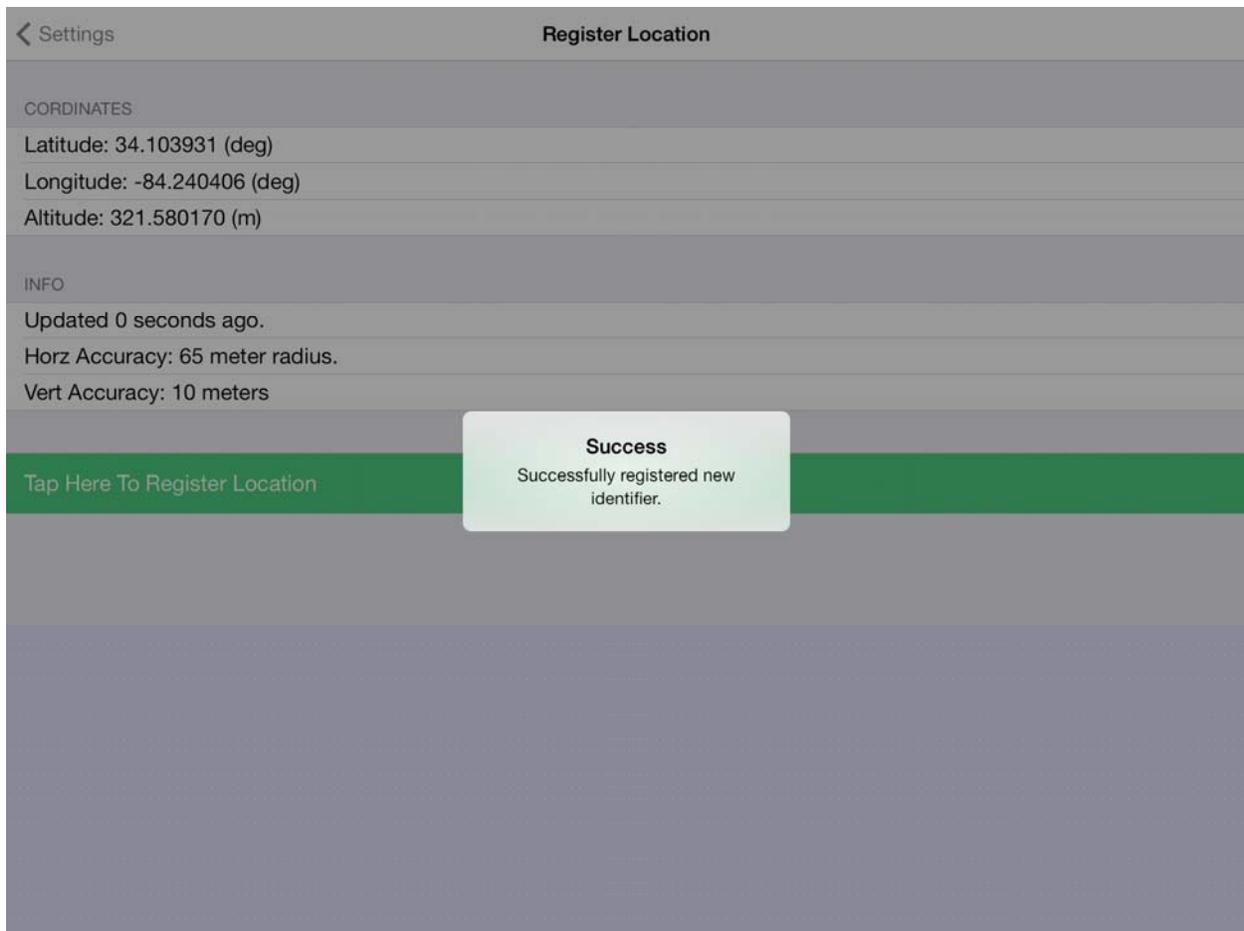
The mobile device will access the GPS location and list it on the **Register Location** page.

Select the **Register Location** command.



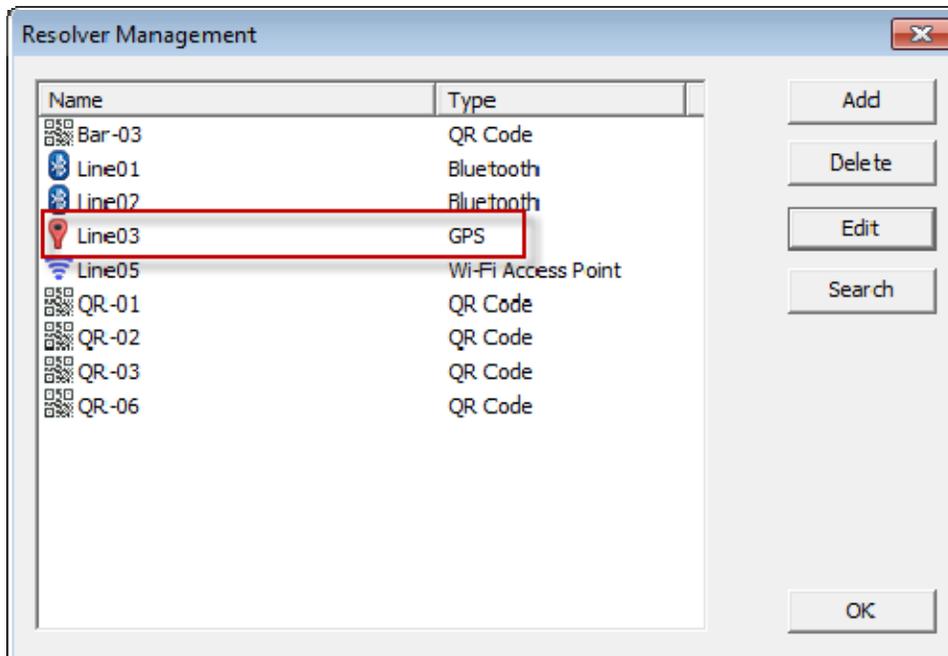
Enter Location Description

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



Success Dialog

The program will confirm successful GPS registrations.



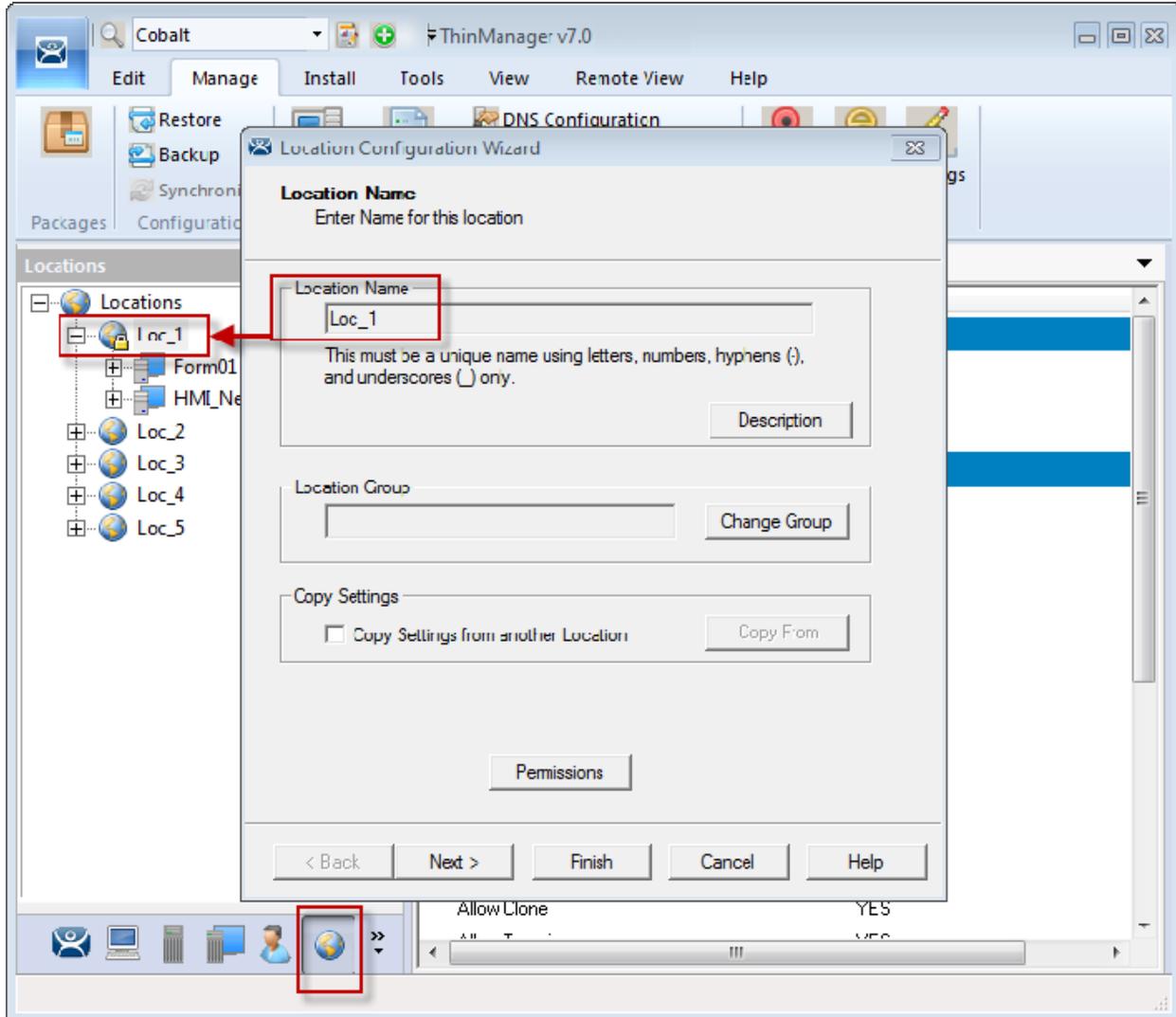
Resolver Management Window

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

5.4 Adding Actions to Resolver Codes

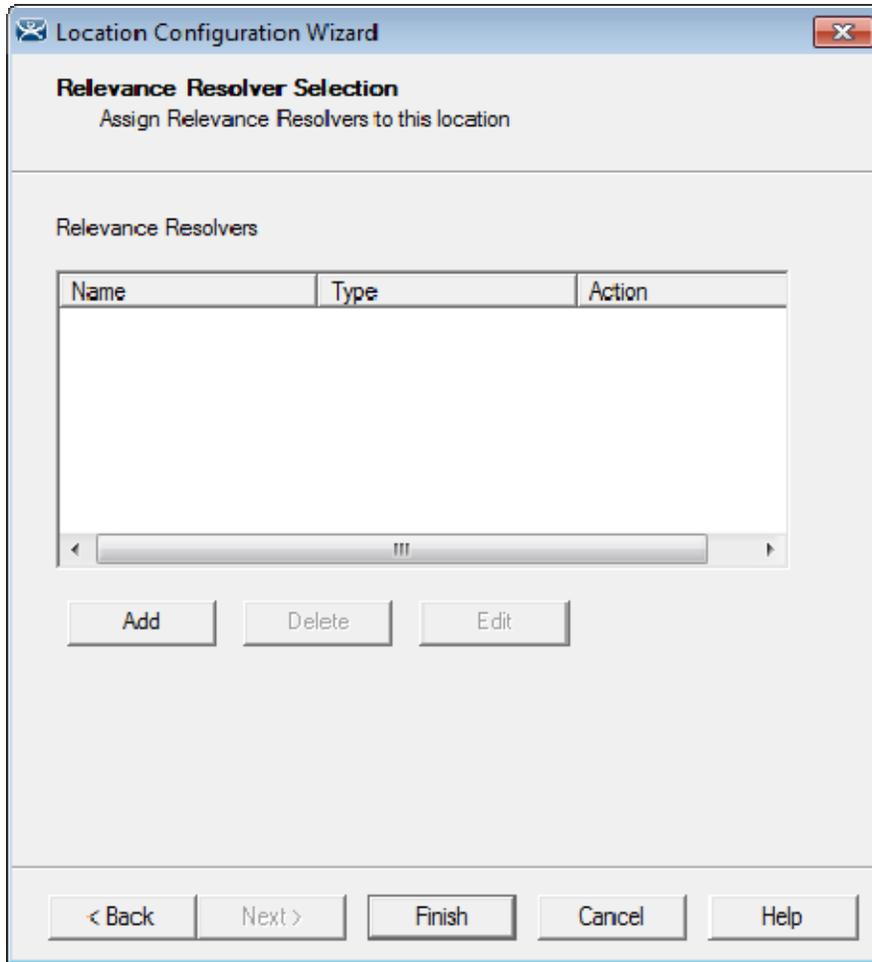
The Resolvers can be applied to a location and can have an action associated with it so that using a resolver will launch a particular action.

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



Location Configuration Wizard

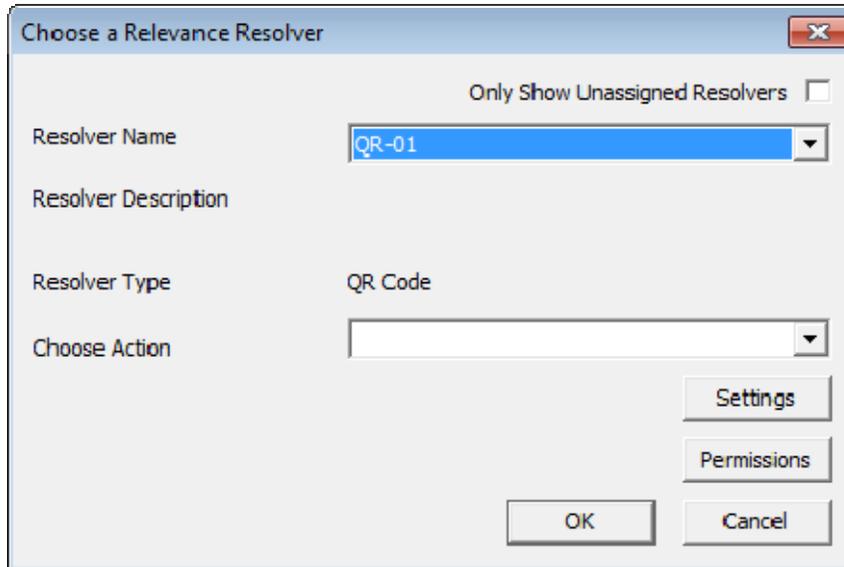
Double click a location to open the Location Configuration Wizard.



Relevance Resolver Selection Page

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

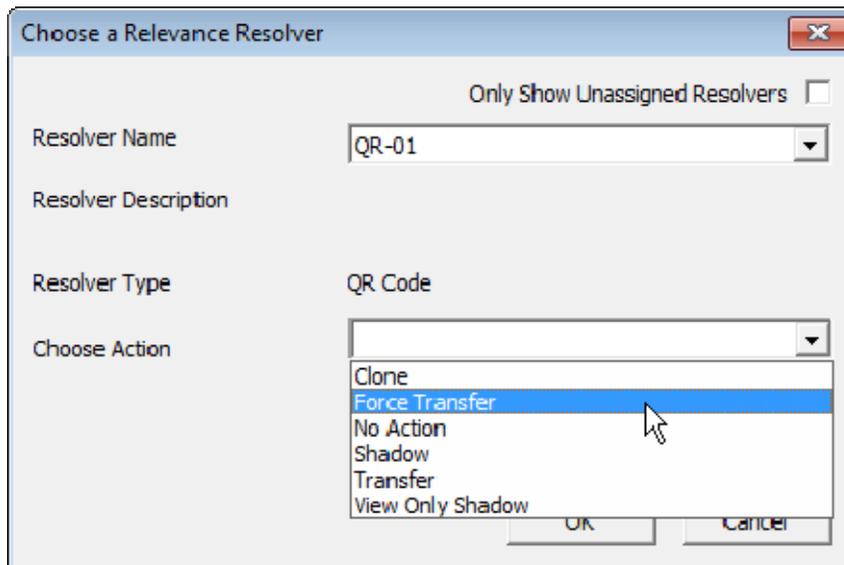
Select the **Add** button to open the **Choose a Relevance Resolver** window.



Choose a Relevance 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.



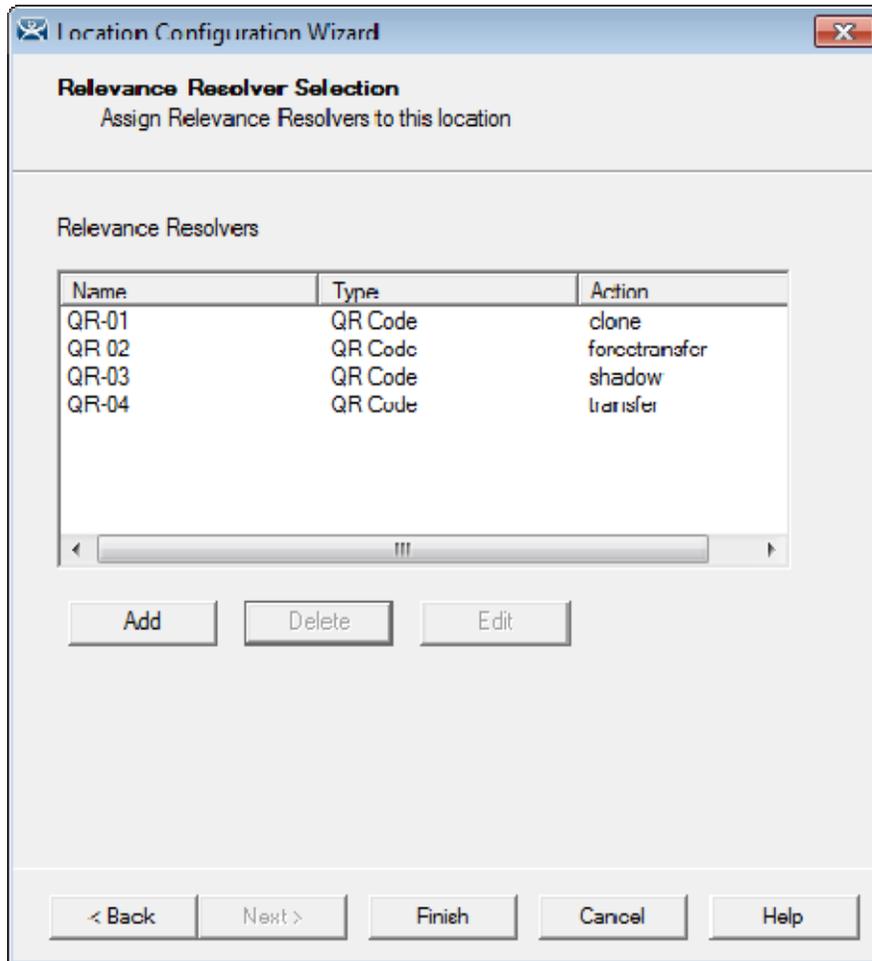
Choose Action Selection

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.



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	Clone
QR-02	Force Transfer
QR-03	Shadow
QR-04	Transfer

8. 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.

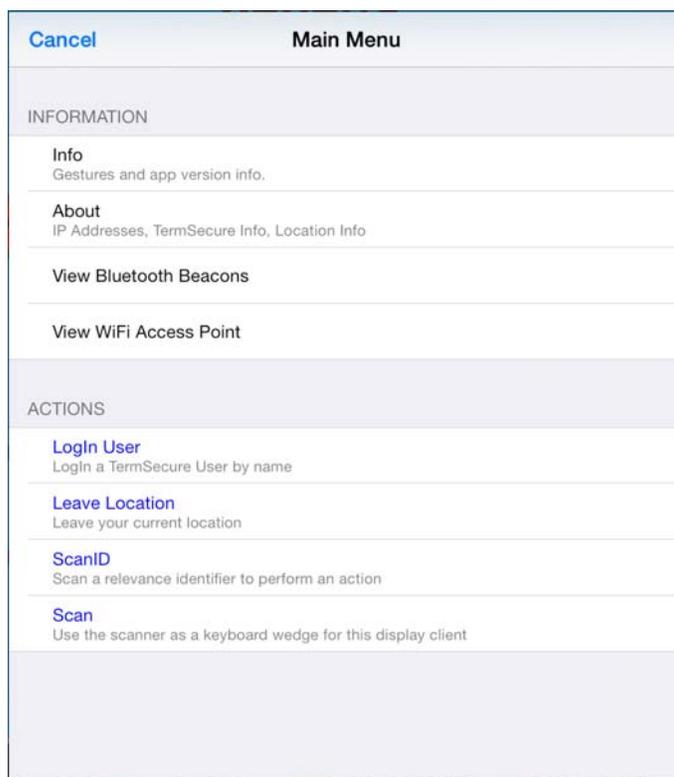


iTMC Menu Bar

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.



Main Menu

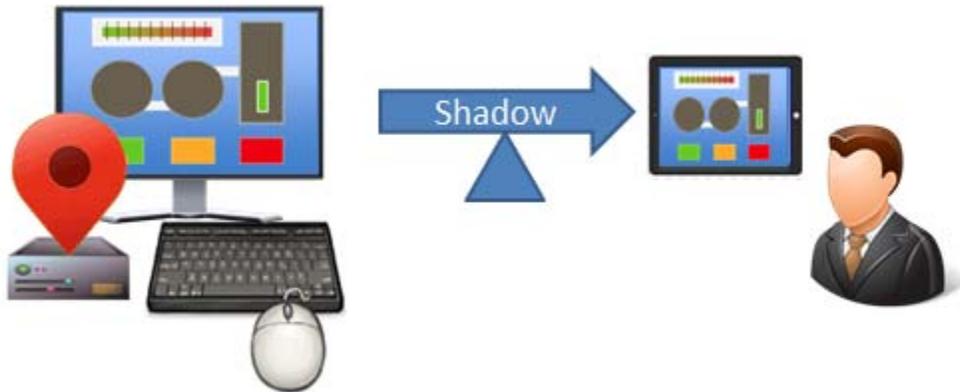
The **Main Menu** has a variety of functions.

- **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.

8.1. Shadow

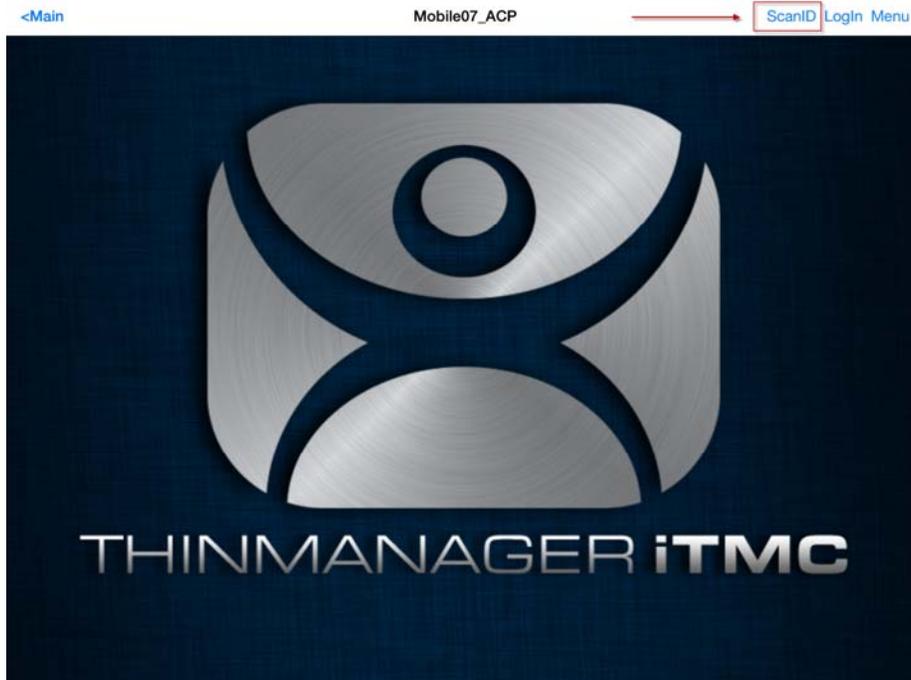
Shadowing duplicates the graphic output of the location and sends it to the mobile device.



Shadowing

Launch the iTMC application.

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



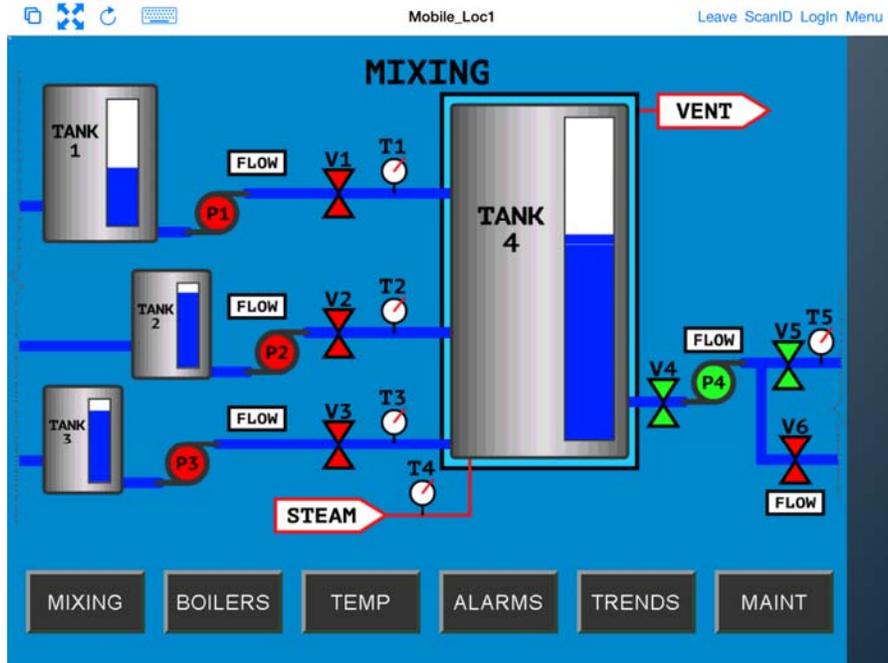
ThinManager iTMC Main Screen

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.

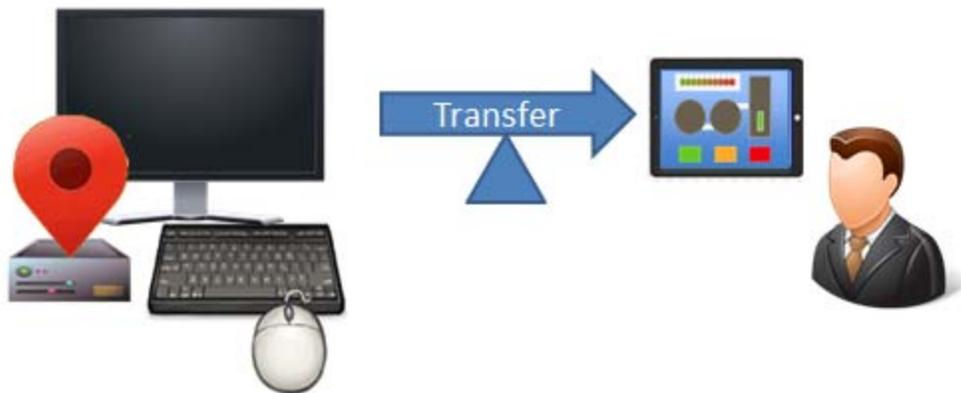


Shadowed Session on iTMC Client

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.

8.2. Forced Transfer



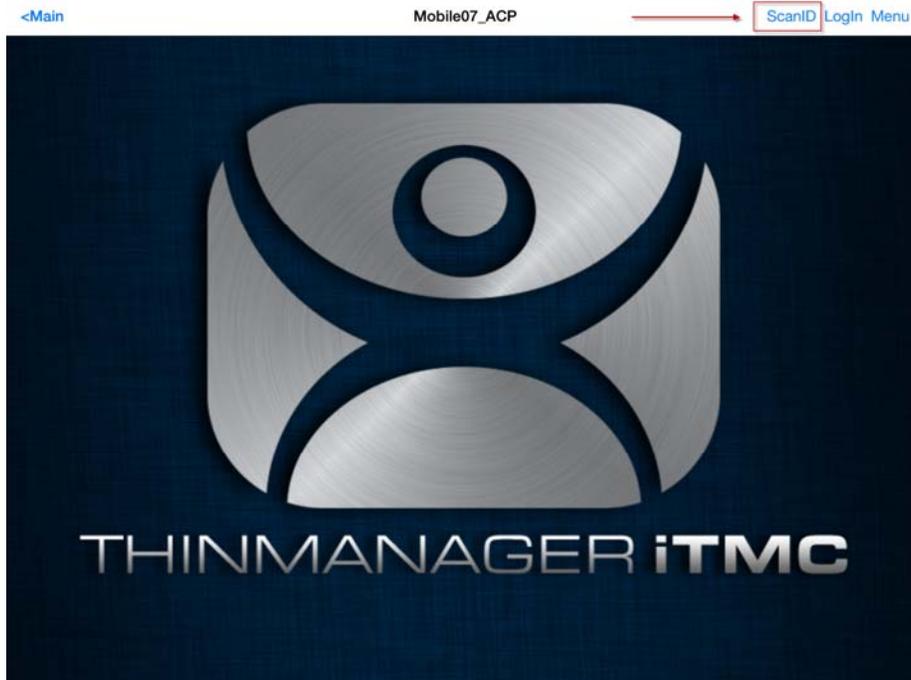
Transferring

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**.

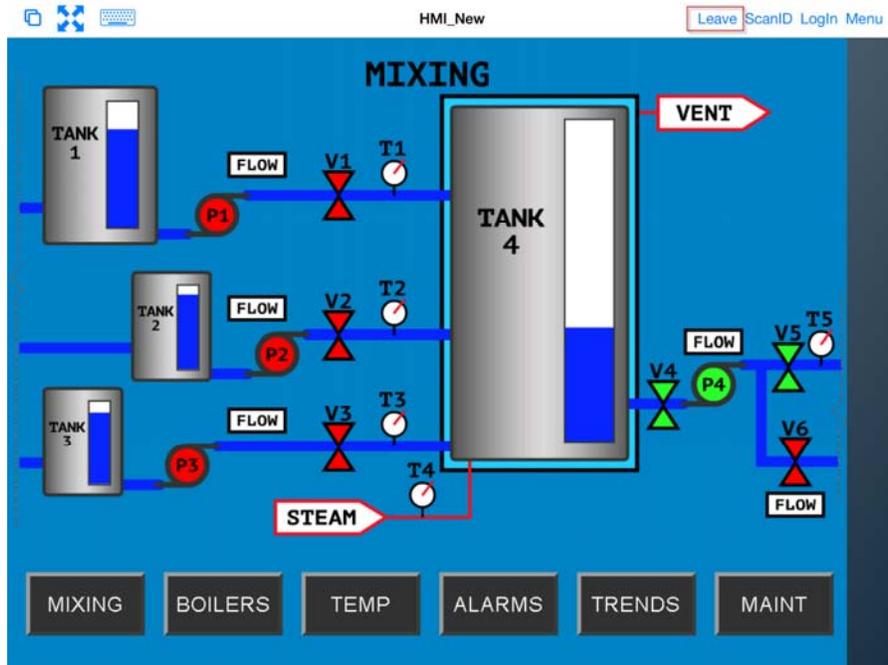
Touch the **ScanID** button in the upper right to launch the **Scan Identifier** window.

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.

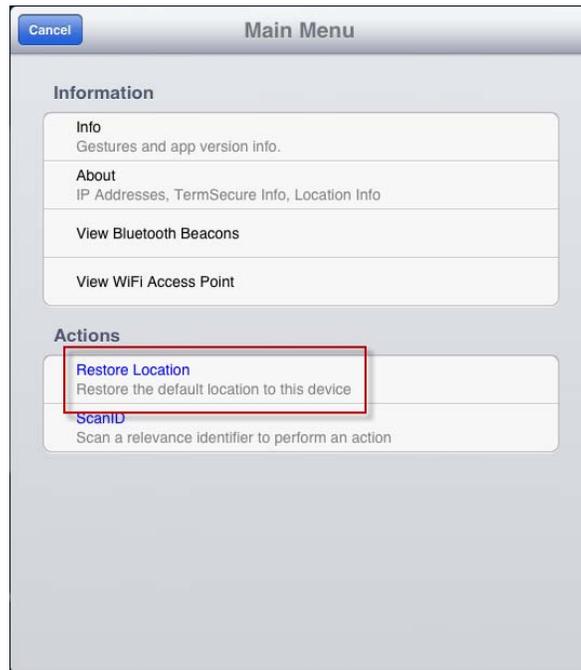


Transfer on the Mobile Device

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

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

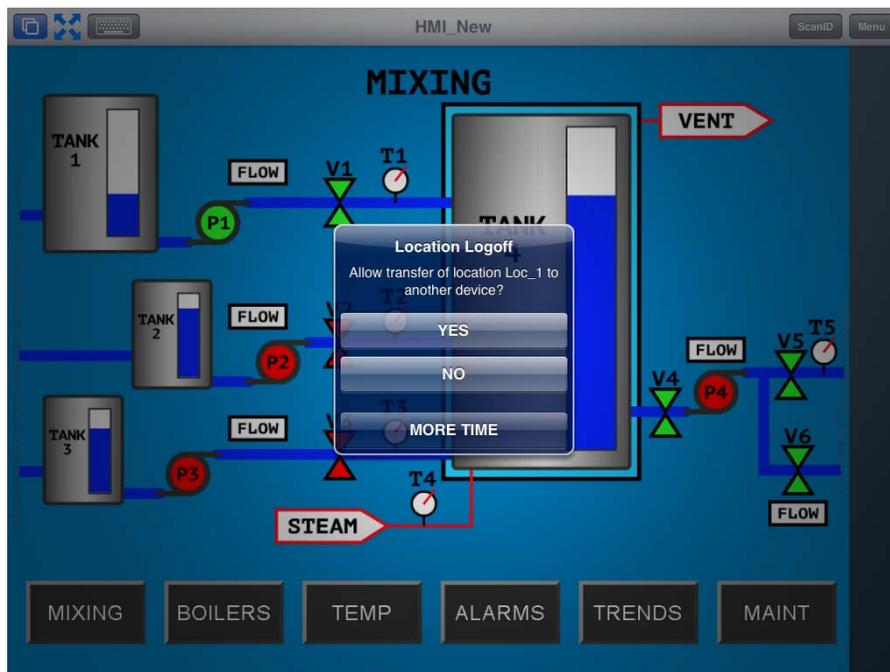
When the action of the resolver is “**Forced Transfer**” the display at the location will automatically be transferred to the scanning iTMC client



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.

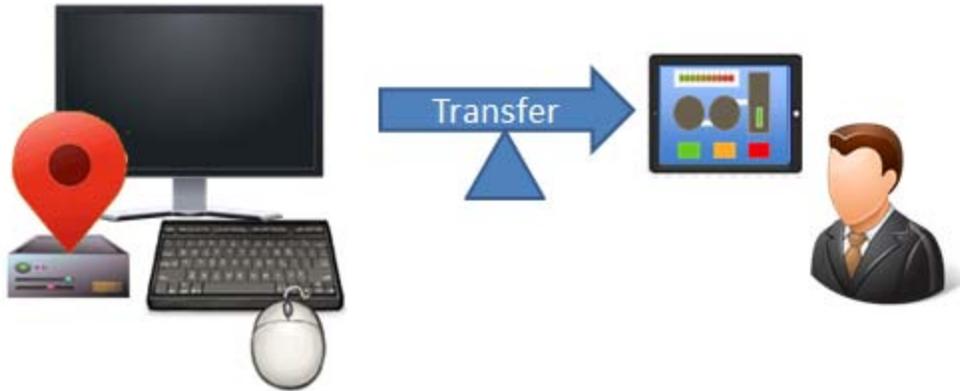


Location Logoff Dialog Box

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.

8.3. Transfer

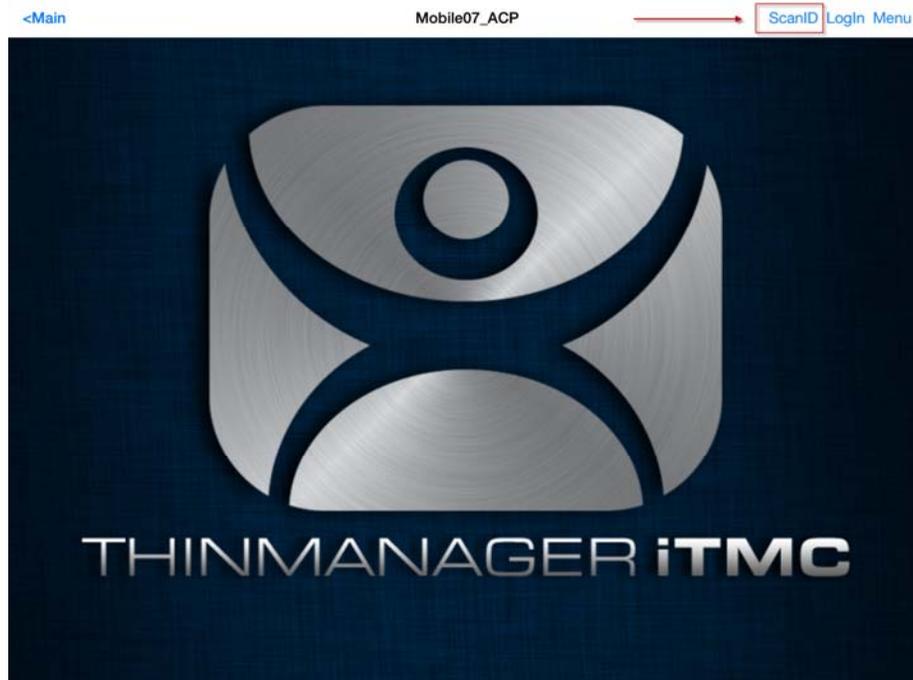


Transferring

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**.

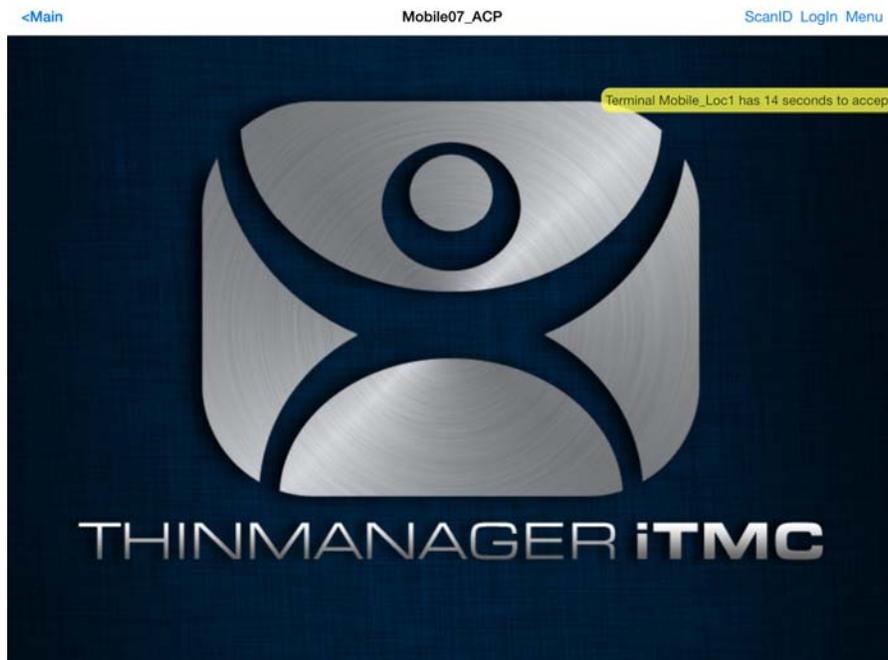
Touch the **ScanID** button in the upper right to launch the **Scan Identifier** window.

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



Scan Identifier Window

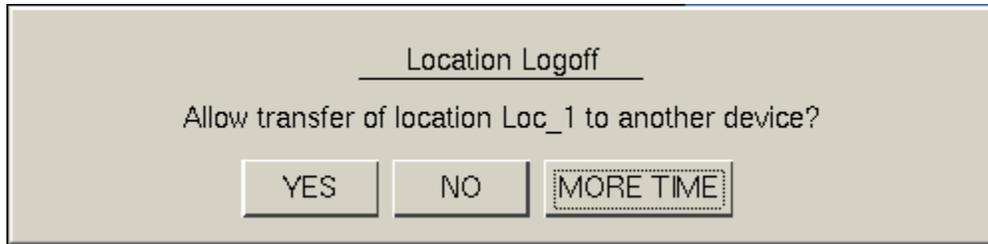
Scan the resolver associated with **Transfer**. A request for transfer will be sent to the location.



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.

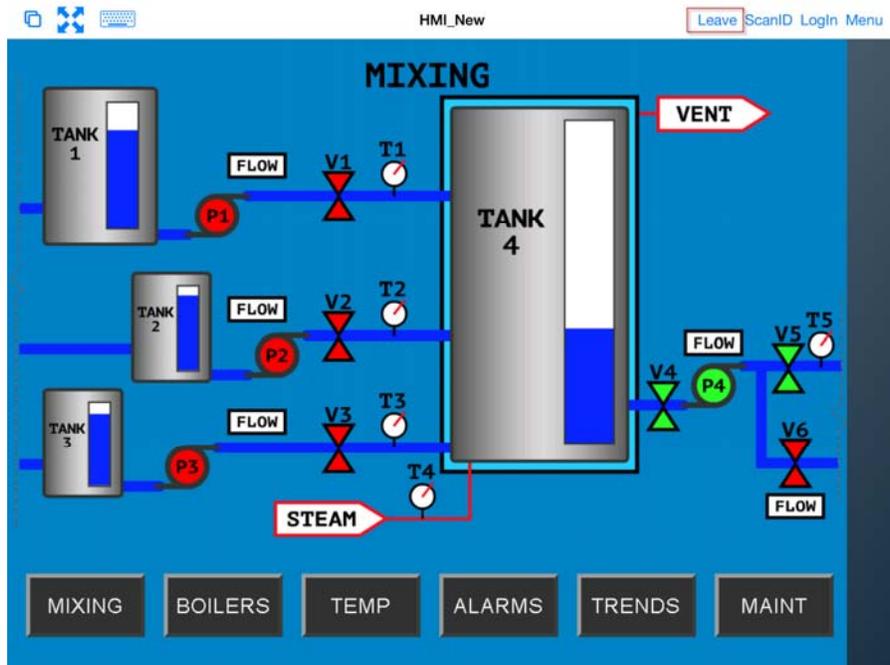


Location Logoff Dialog Box

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.

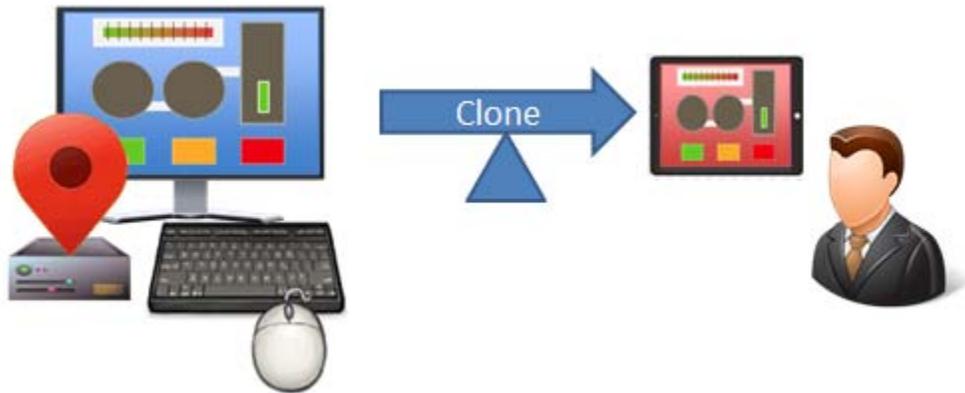


Location Logoff on the Mobile Device

Go to the iTMC client.

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

8.4. Clone

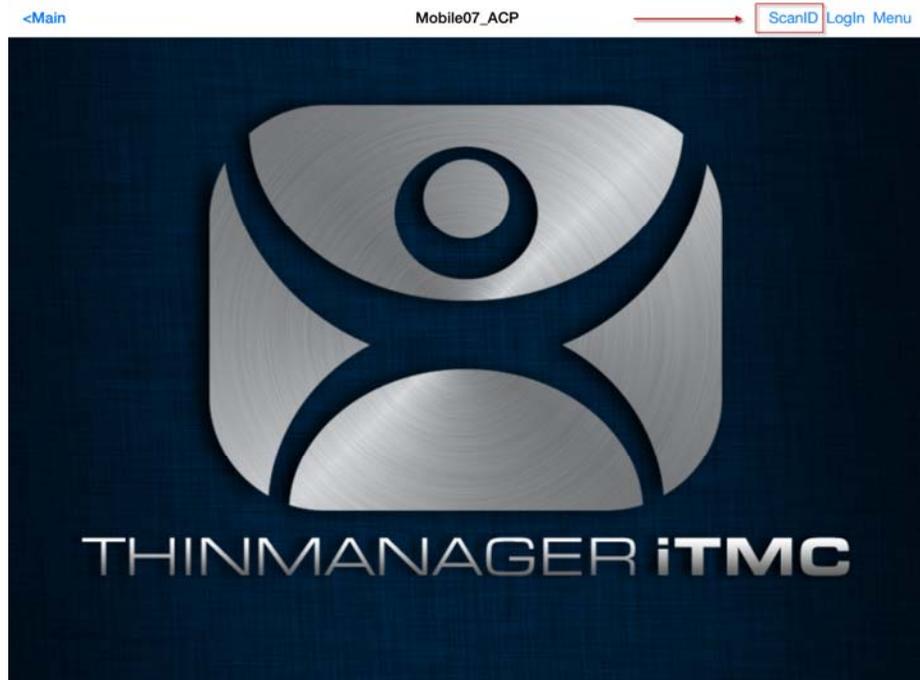


Clone

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.

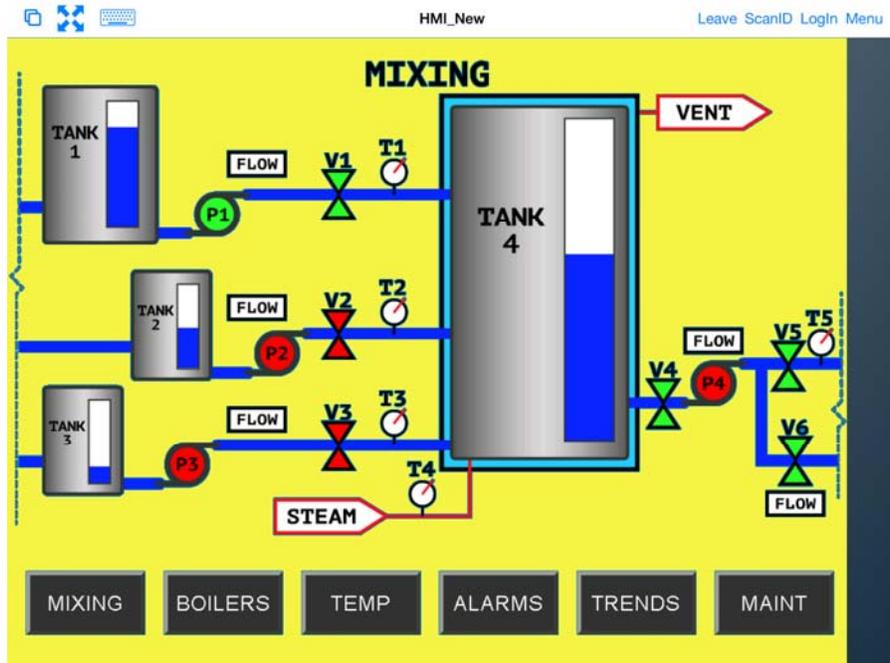
Touching the **Scan ID** button will launch the onboard camera as the **Scan Identifier** window.



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.

9. 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.

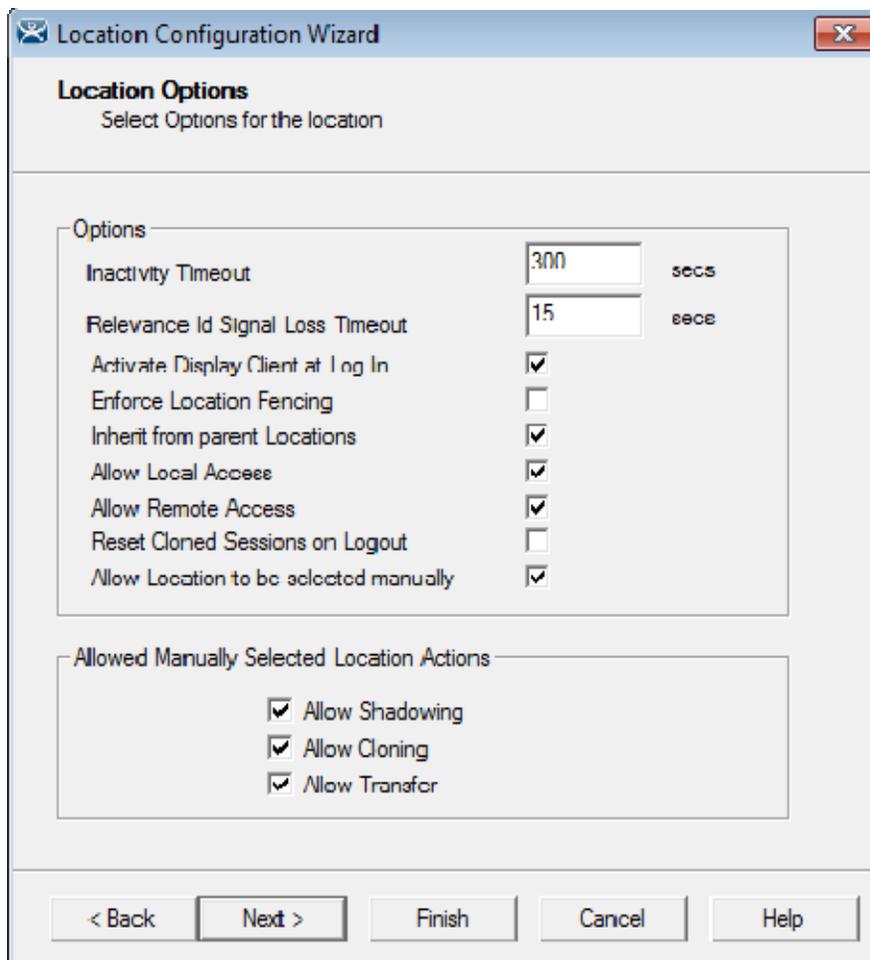
9.1. Create a Location

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**.



The screenshot shows the 'Location Configuration Wizard' dialog box, specifically the 'Location Options' page. The title bar reads 'Location Configuration Wizard' with a close button. Below the title bar, the text 'Location Options' is displayed, followed by the subtitle 'Select Options for the location'. The main area contains two sections: 'Options' and 'Allowed Manually Selected Location Actions'. The 'Options' section has a list of settings with checkboxes and input fields. The 'Allowed Manually Selected Location Actions' section has three checkboxes. At the bottom, there are five buttons: '< Back', 'Next >', 'Finish', 'Cancel', and 'Help'.

Option	Value/Status	Unit
Inactivity Timeout	300	secs
Relevance Id Signal Loss Timeout	15	secs
Activate Display Client at Log In	<input checked="" type="checkbox"/>	
Enforce Location Fencing	<input type="checkbox"/>	
Inherit from parent Locations	<input checked="" type="checkbox"/>	
Allow Local Access	<input checked="" type="checkbox"/>	
Allow Remote Access	<input checked="" type="checkbox"/>	
Reset Cloned Sessions on Logout	<input type="checkbox"/>	
Allow Location to be selected manually	<input checked="" type="checkbox"/>	

Allowed Manually Selected Location Actions	Status
Allow Shadowing	<input checked="" type="checkbox"/>
Allow Cloning	<input checked="" type="checkbox"/>
Allow Transfer	<input checked="" type="checkbox"/>

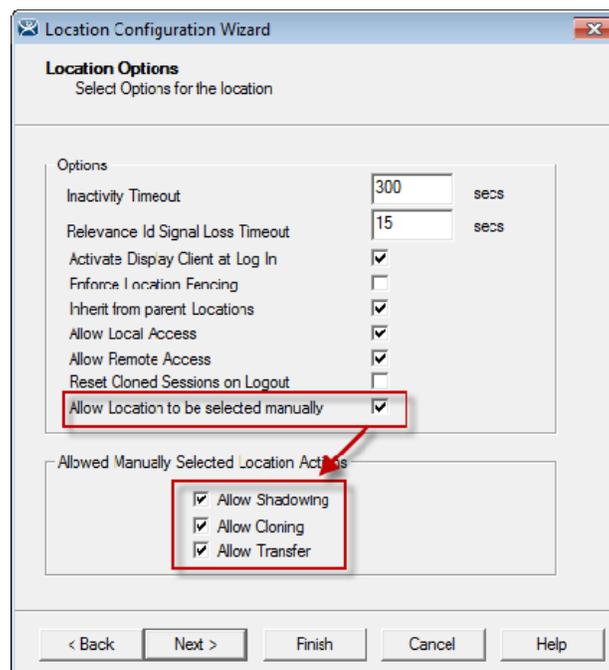
Location Options

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.



The screenshot shows a window titled "Location Configuration Wizard" with a sub-header "Location Options" and the instruction "Select Options for the location". The "Options" section contains a list of settings:

Option	Value	Unit
Inactivity Timeout	300	secs
Relevance Id Signal Loss Timeout	15	secs
Activate Display Client at Log In	<input checked="" type="checkbox"/>	
Enforce Location Fencing	<input type="checkbox"/>	
Inherit from parent Locations	<input checked="" type="checkbox"/>	
Allow Local Access	<input checked="" type="checkbox"/>	
Allow Remote Access	<input checked="" type="checkbox"/>	
Reset Cloned Sessions on Logout	<input type="checkbox"/>	
Allow Location to be selected manually	<input checked="" type="checkbox"/>	

Below the "Options" section is the "Allowed Manually Selected Location Actions" section, which contains three checked options:

- Allow Shadowing
- Allow Cloning
- Allow Transfer

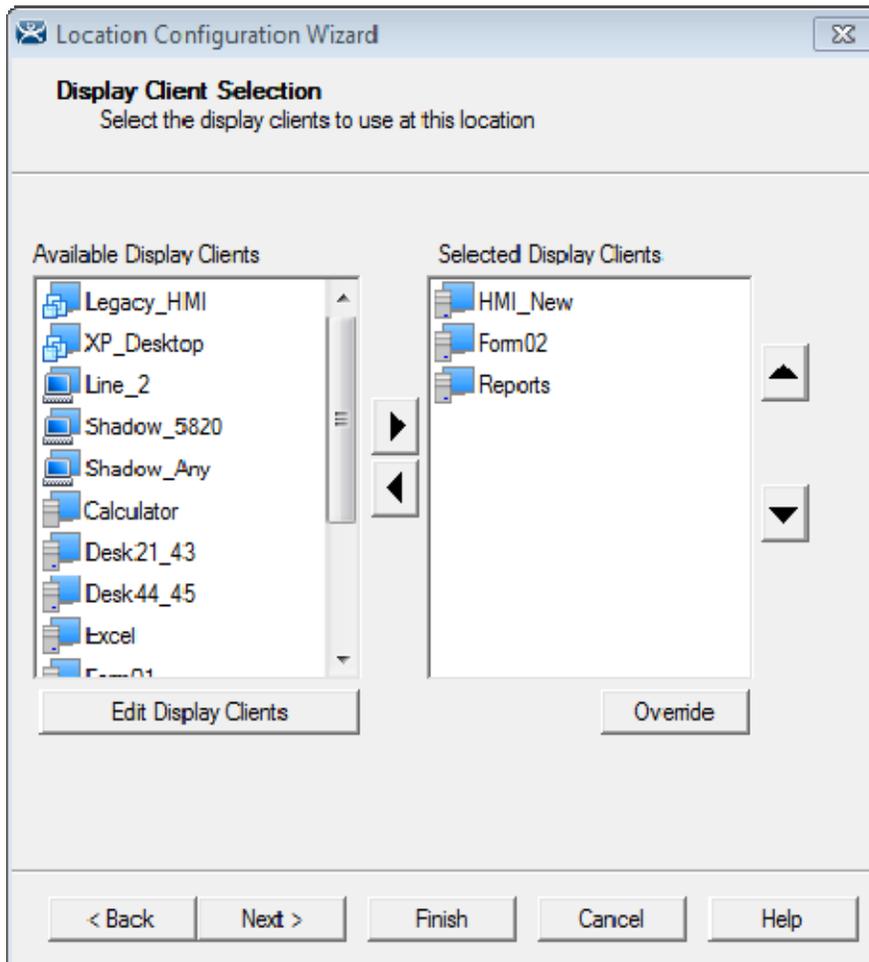
At the bottom of the dialog are buttons for "< Back", "Next >", "Finish", "Cancel", and "Help".

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.



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.

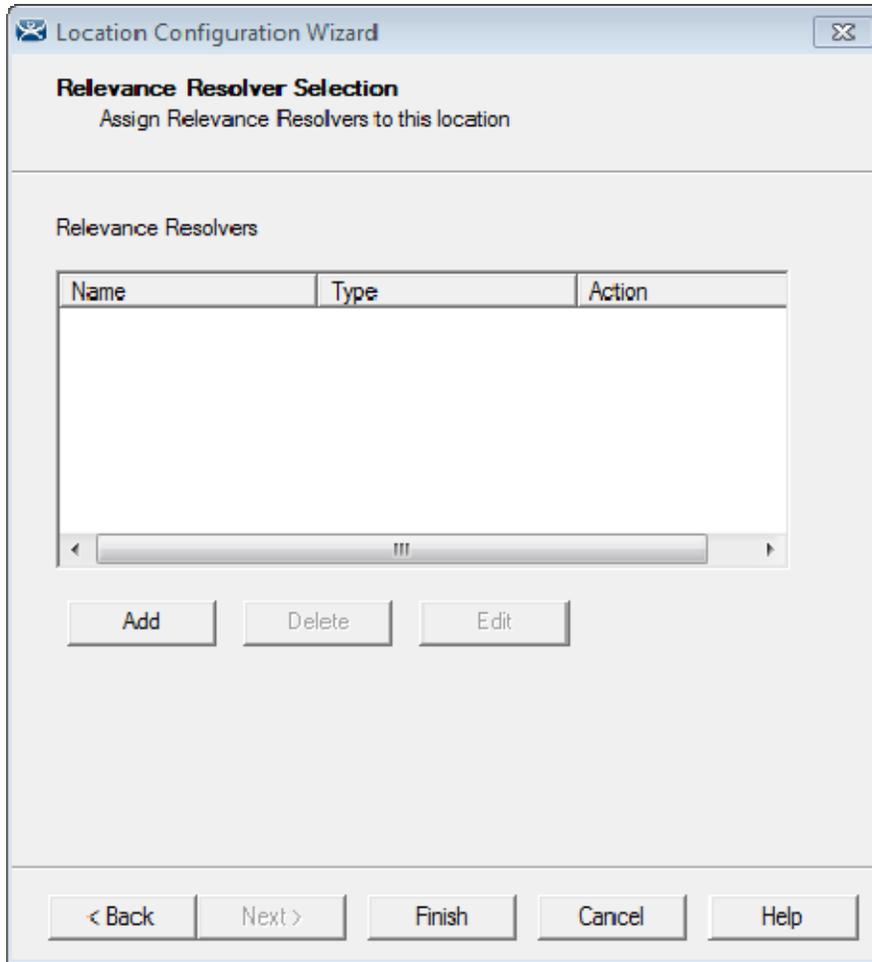
Select **Next** to continue.

The screenshot shows a window titled "Location Configuration Wizard" with a close button in the top right corner. Below the title bar, the text "Windows Log In information" is displayed in bold, followed by the instruction "Enter Windows username and password information." The main area of the window contains a form titled "Windows Log In Information" with the following fields: "Username" (containing "location5"), "Password" (containing a single asterisk), "Verify Password" (containing a single asterisk), and "Domain" (empty). A "Verify" button is located to the right of the "Domain" field. At the bottom of the window, there are five buttons: "< Back", "Next >", "Finish", "Cancel", and "Help".

Windows Log In Information Page

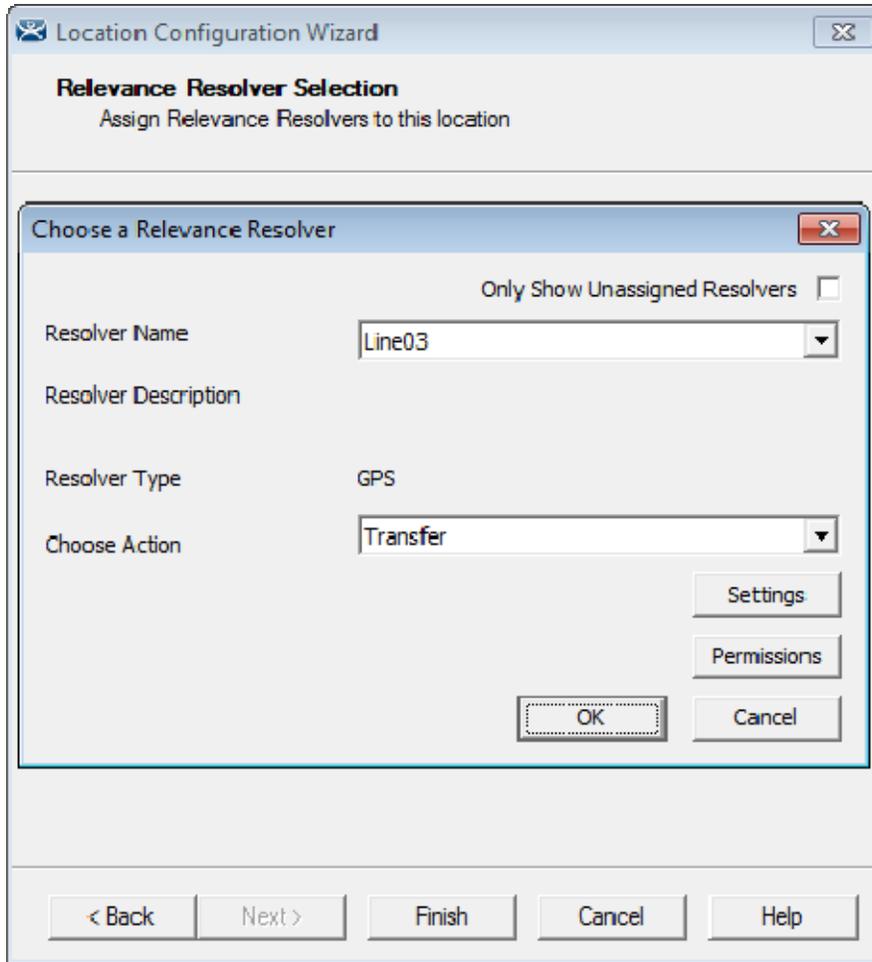
The Location will need a Windows user account entered in the **Username** field on the **Windows Log In Information** page.

Select **Next** to continue.



Relevance ID Selection Page

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



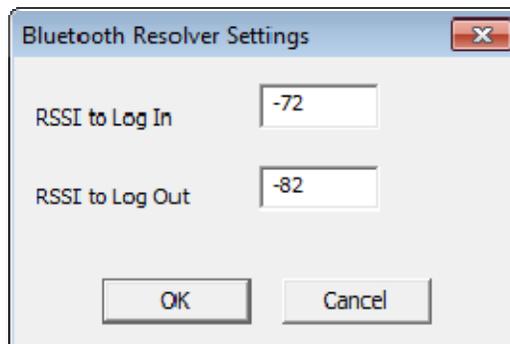
Choose a Relevance Resolver Page

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.



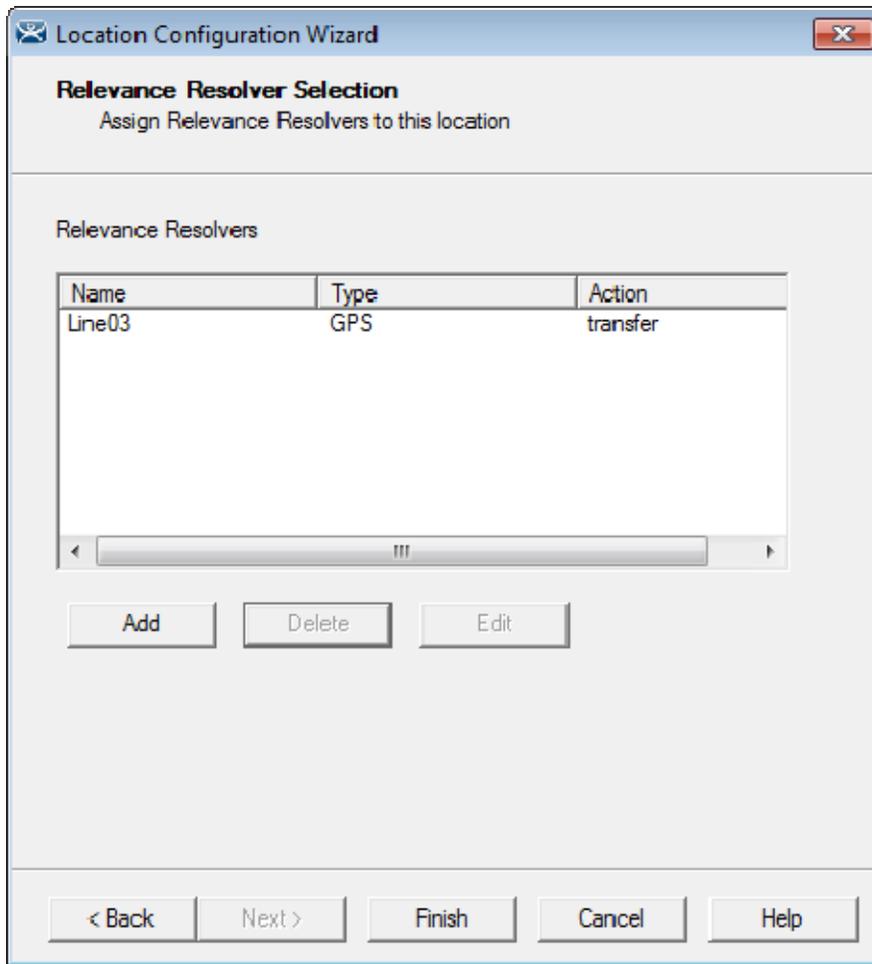
Bluetooth Resolver Settings

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**.

Field	Value
Latitude	34.103986
Longitude	-84.240446
Altitude	321.29
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 Range** are added automatically.



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.

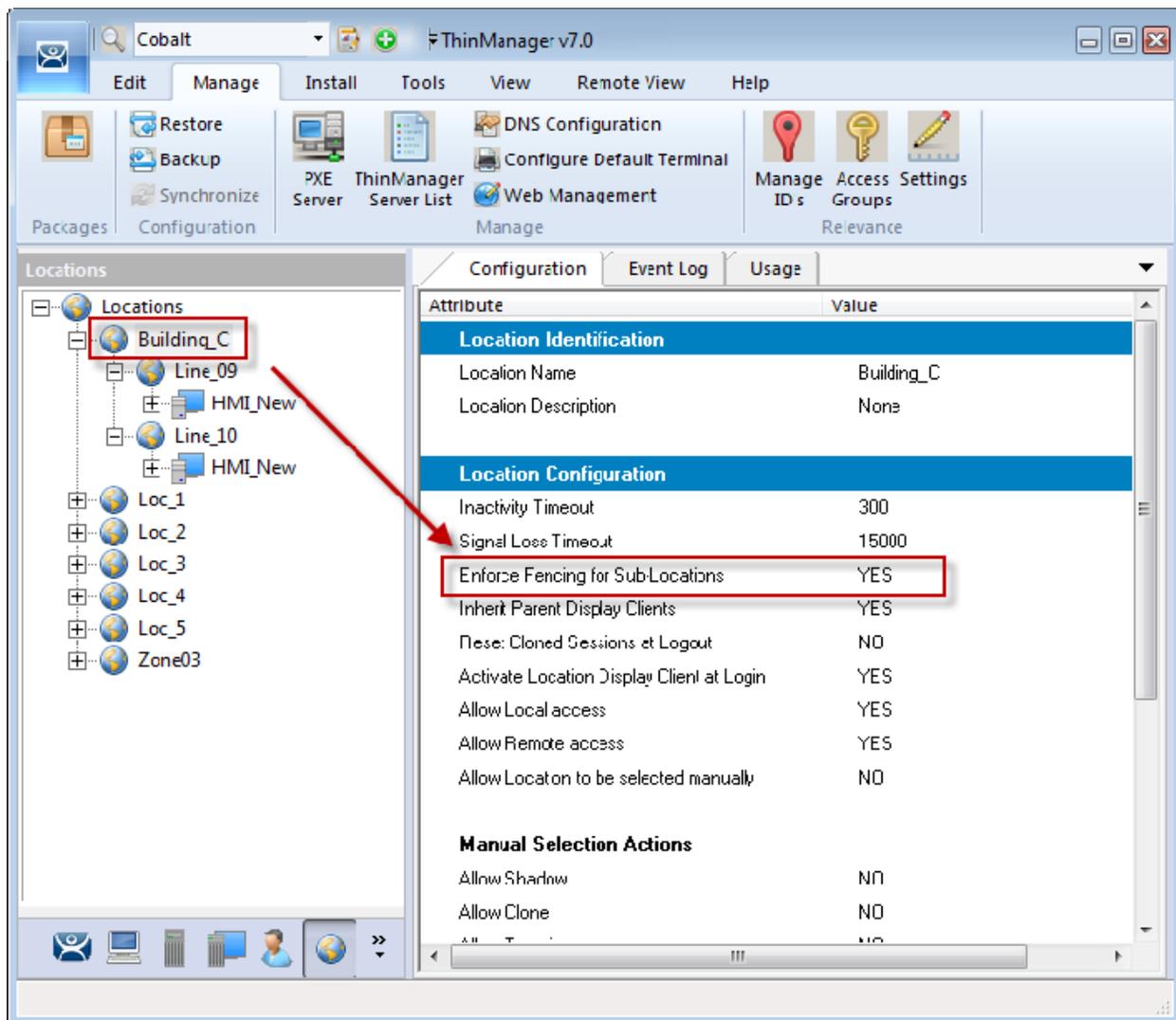
10. Fencing and Sub-Locations

You can organize locations by nesting locations within locations. This can be useful for organization but it also allows control of access through Fencing.

When you apply Fencing you 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 is in the right location before they can access a display client or action.

Fencing can be 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.**

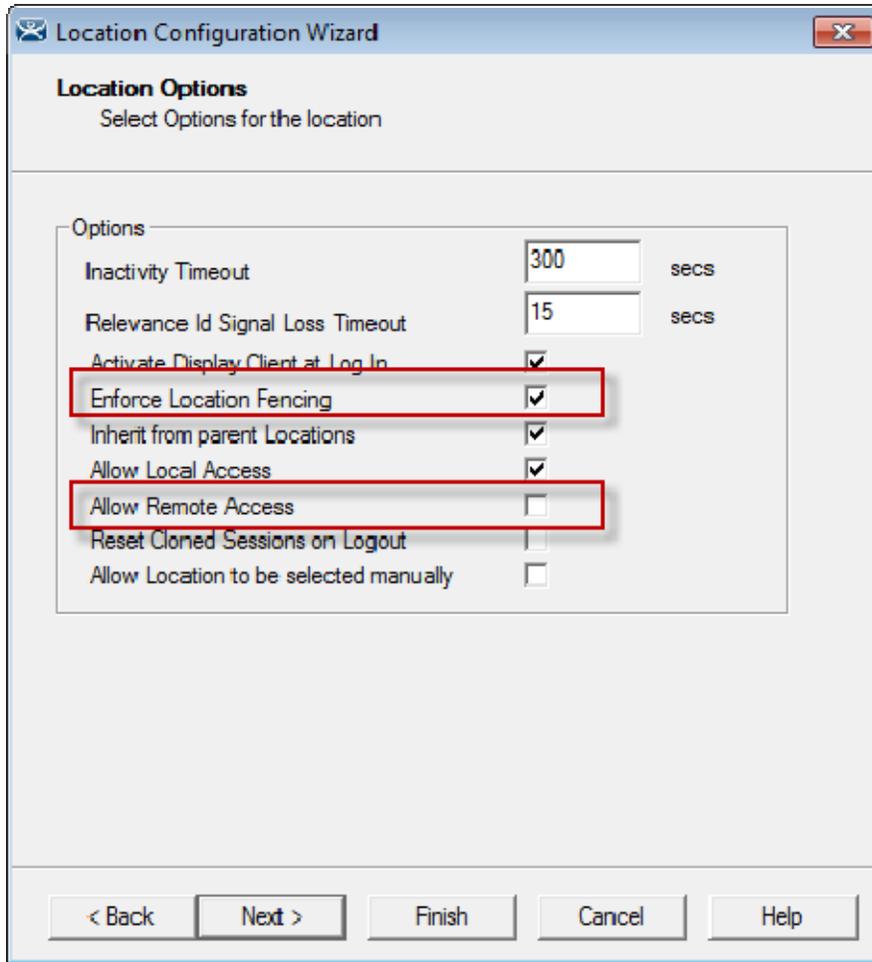


The screenshot shows the ThinManager v7.0 interface. On the left, a tree view under 'Locations' shows 'Building_C' selected, with sub-locations 'Line_09' and 'Line_10' (each containing an 'HMI_New' client). A red box highlights 'Building_C' and a red arrow points to the configuration panel on the right. The configuration panel shows the 'Enforce Fencing for Sub-Locations' attribute set to 'YES', which is also highlighted with a red box.

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
Prese: 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
Manual Selection Actions	
Allow Shadow	NO
Allow Clone	NO

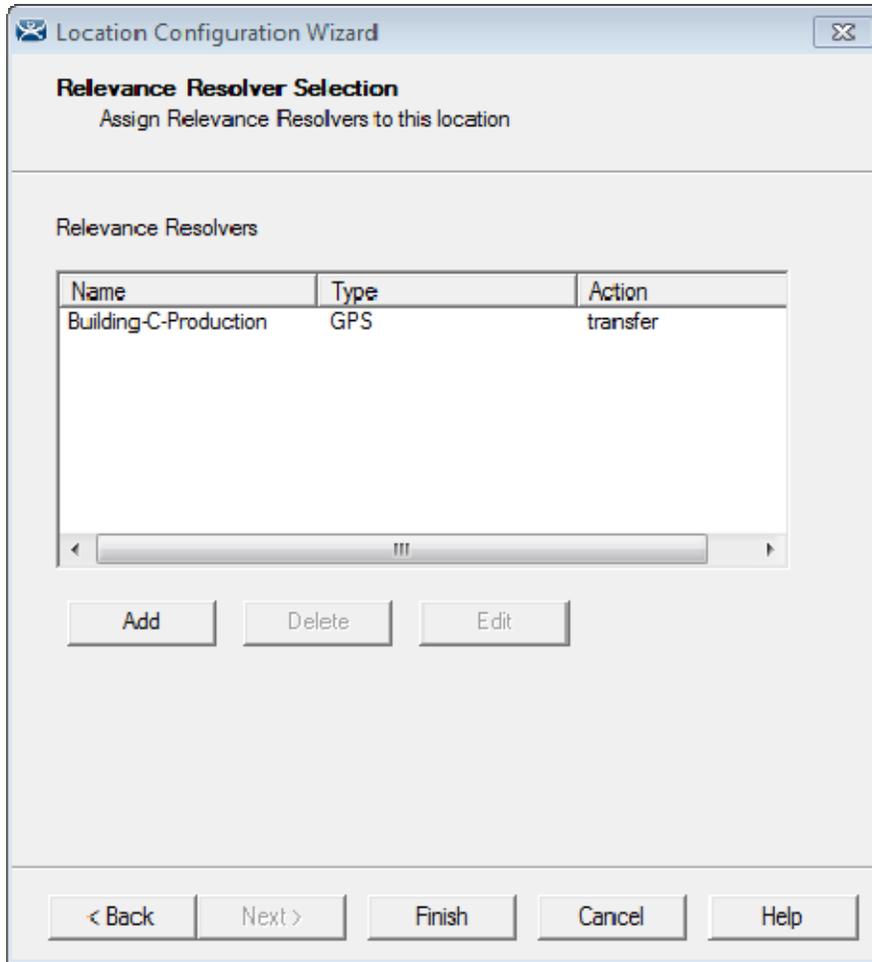
Location Using Fencing

The **Building_C** location 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.



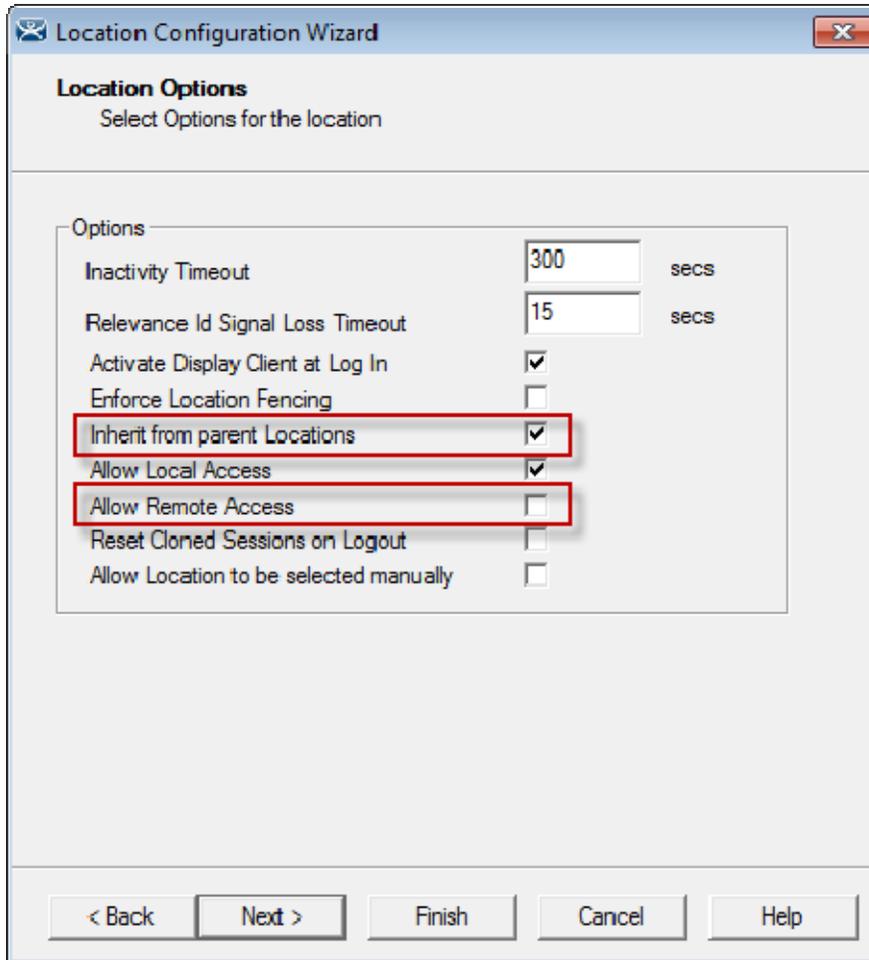
Location Options for Parent Location

The **Building_C** parent location has **Enforce Location Fencing** enabled and **Allow Remote Access** disabled.



Relevance Resolver Selection Page

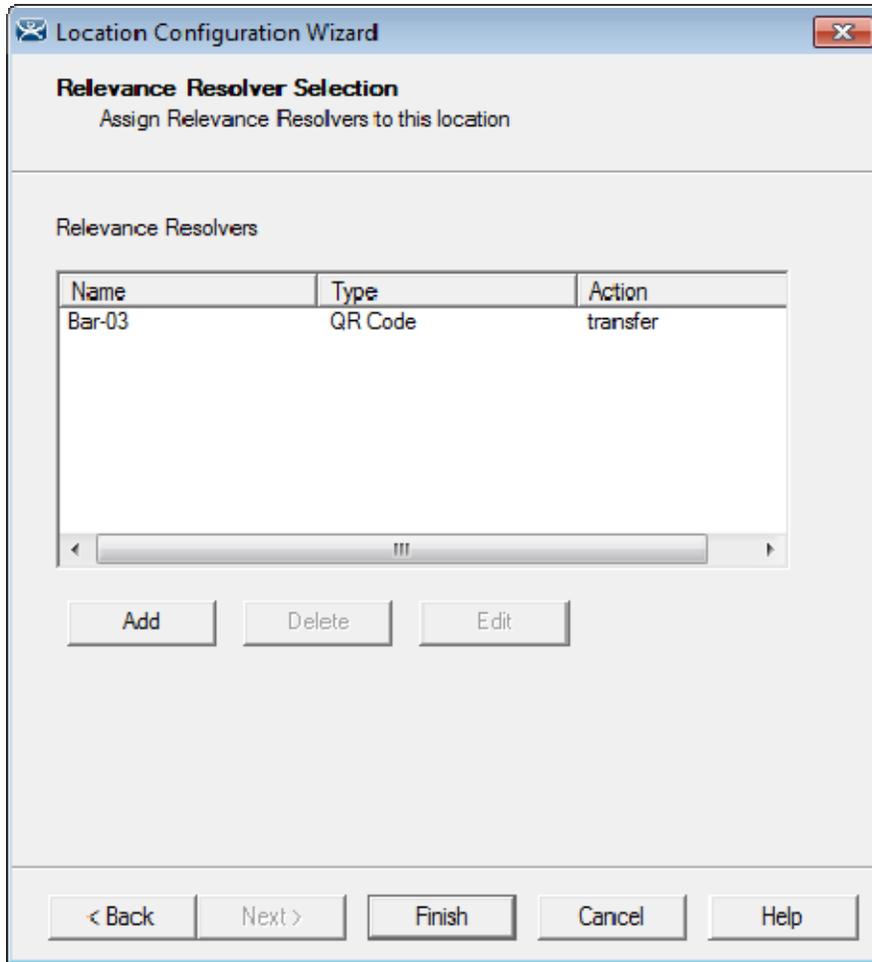
The **Building_C** parent location has the **Building-C-Production** resolver which uses GPS. A user will have to be within the GPS bubble to access the sub-locations.



Location Options for Sub- Location

The **Line_09** and **Line_10** sub-locations are configured to Inherit from parent Locations.

If they had sub-locations of their own they could have the Enforce Location Fencing applied. They don't in this example as they have no children location.



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.

11. 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

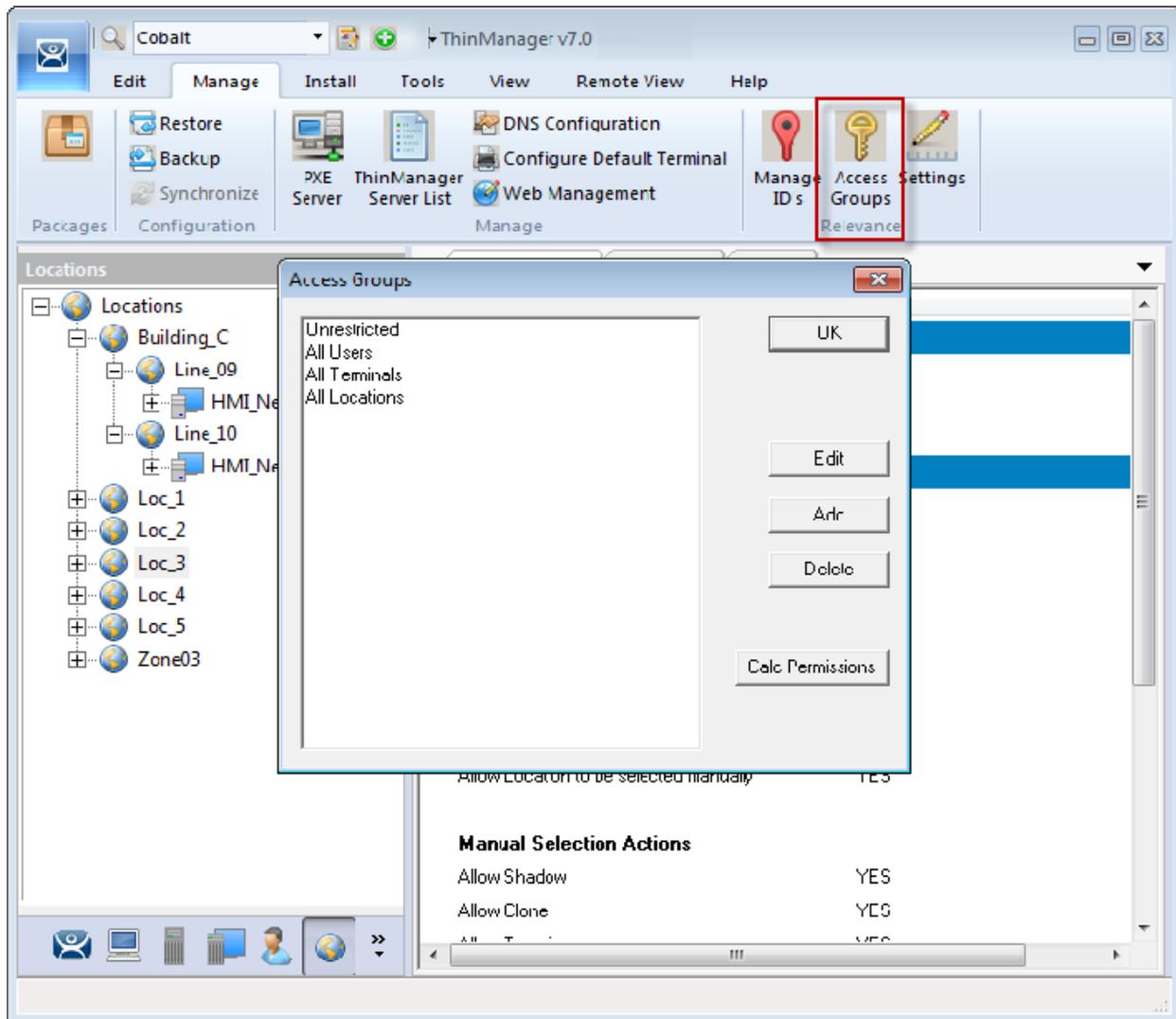


User Accessing Display Clients Using Permissions

11.1. Create Access Groups

Select the **Manage** menu.

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

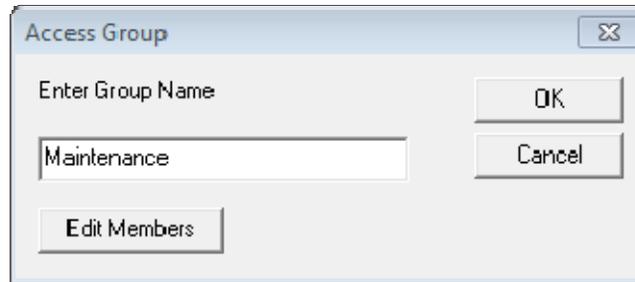


Access Groups

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

You need to add to these.

Select **Add** to open the **Access Group** window.



Access Group Window

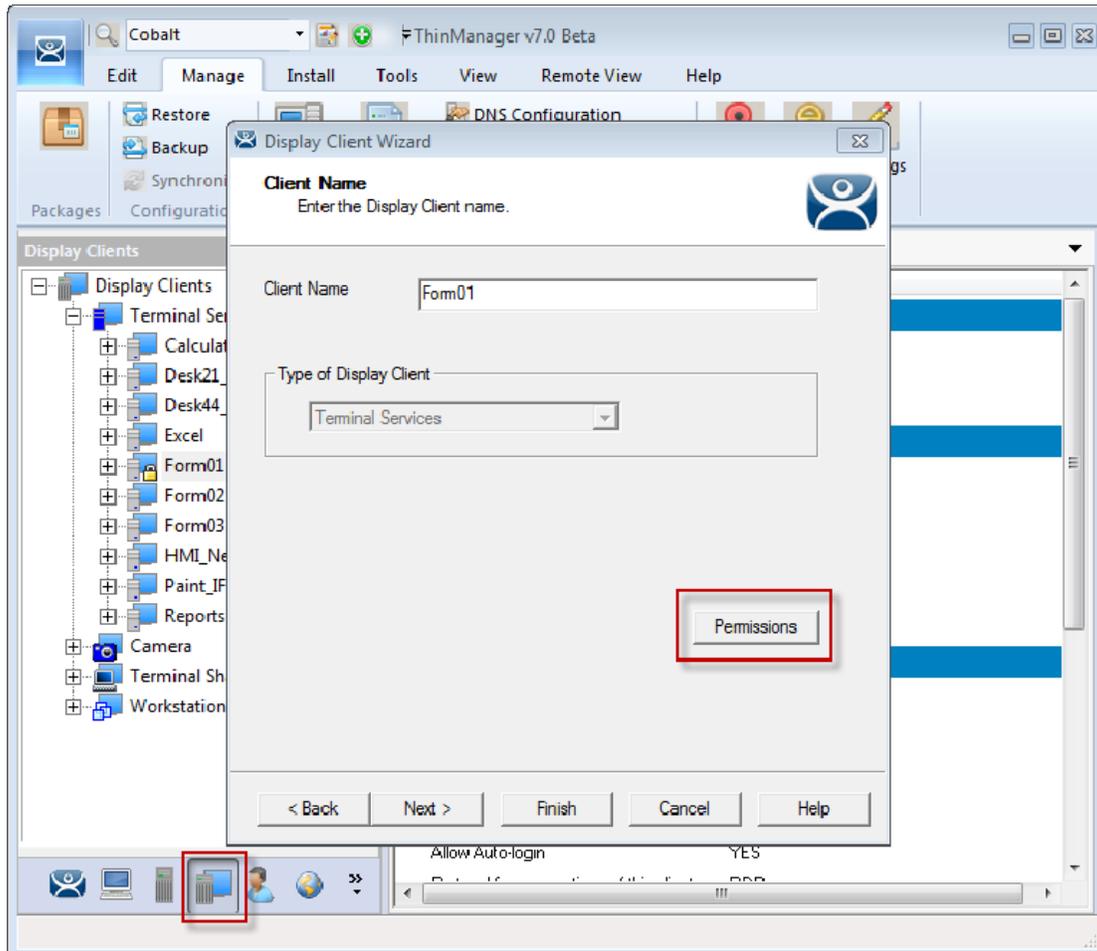
Enter a group name in the **Enter Group Name** field.

Select **OK** to add.

11.2. Apply Permissions to a Display Client Application

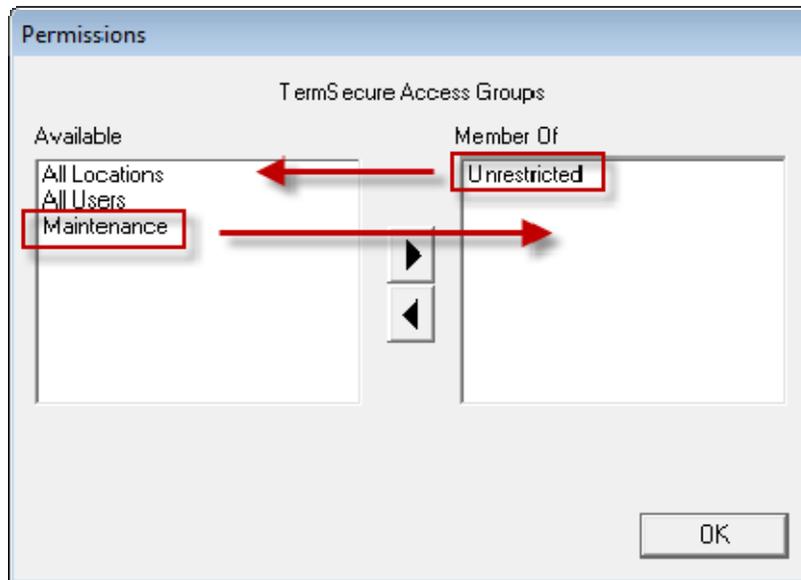
Select the **Display Client** tree and expand the **Terminal Services** branch.

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



Client Name Page of the Display Client Wizard

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



Permissions Window

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

Select **OK** to accept.

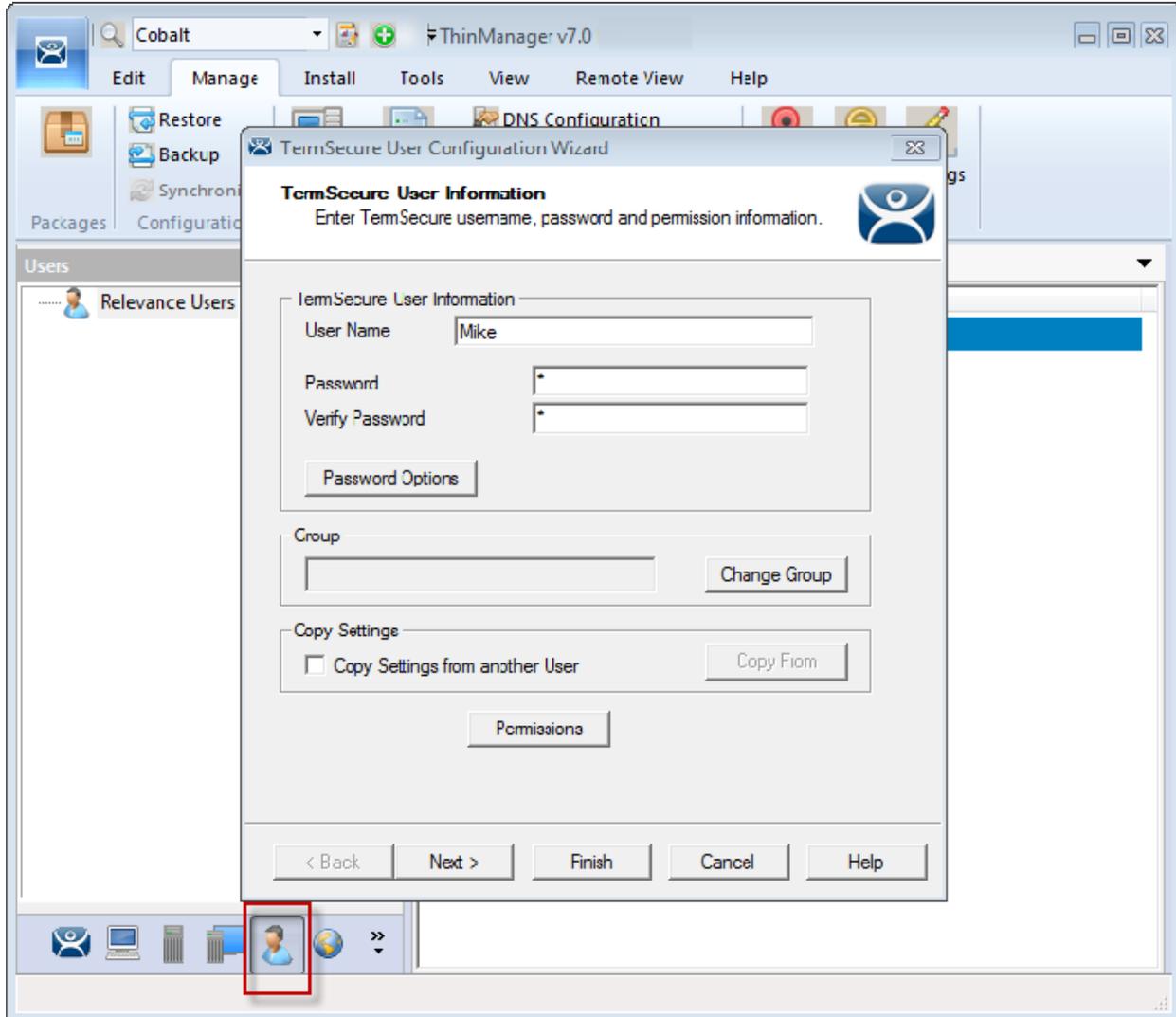
Select **Finish** to close the wizard.

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

11.3. Create Relevance Users

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

Open the **Relevance Users** branch by selecting the **User** icon, a person, in the **Tree Selector** at the bottom of the tree.



Relevance User Configuration Wizard

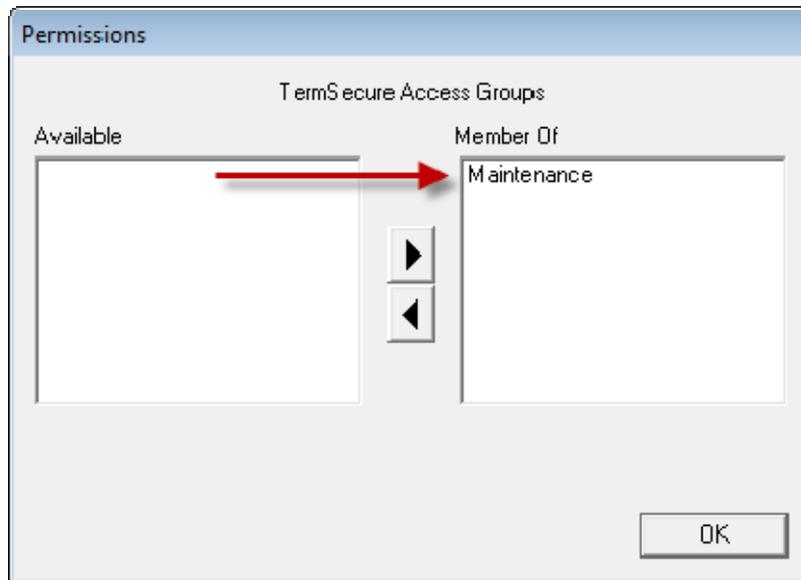
Right click on **Relevance Users** in the tree and select **Add Relevance User** to open the **Relevance User Configuration Wizard**.

Note: Relevance Access uses the TermSecure engine from ThinManager so some of the wizards may say TermSecure instead of Relevance. It is the same function

Enter a name in the **User Name** field of the Relevance User Information page. Add a password.

Note: This is a Relevance User Account. It does not have to be a Windows account.

Select the **Permissions** button to launch the TermSecure Access Groups window.



Permissions Window

Move the created Access Group into the **Member Of** list and select **OK** to close.

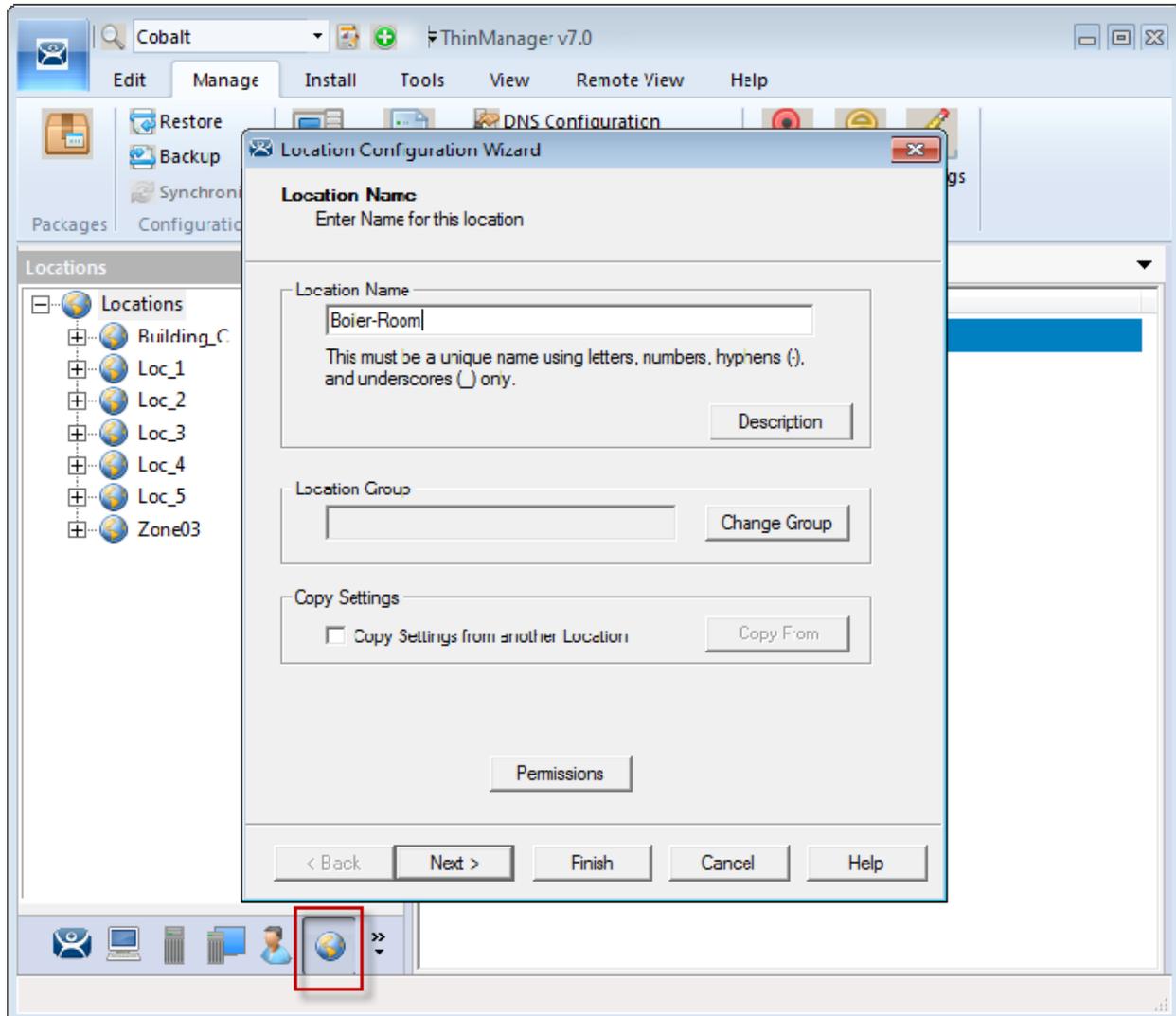
This makes your user a member of this access group.

Select **Finish** to create and close.

11.4. Creating a Location with Restricted Applications.

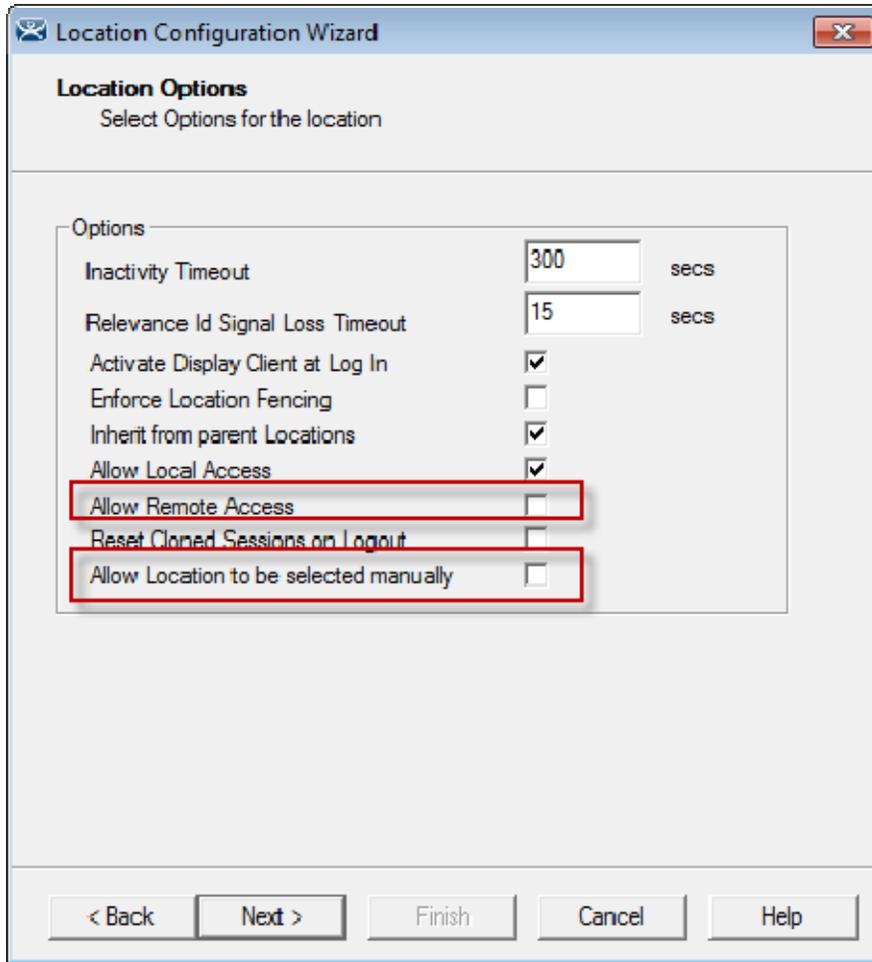
Open the **Locations** tree by selection the Locations icon on the Tree Selector.

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



Location Configuration Wizard

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



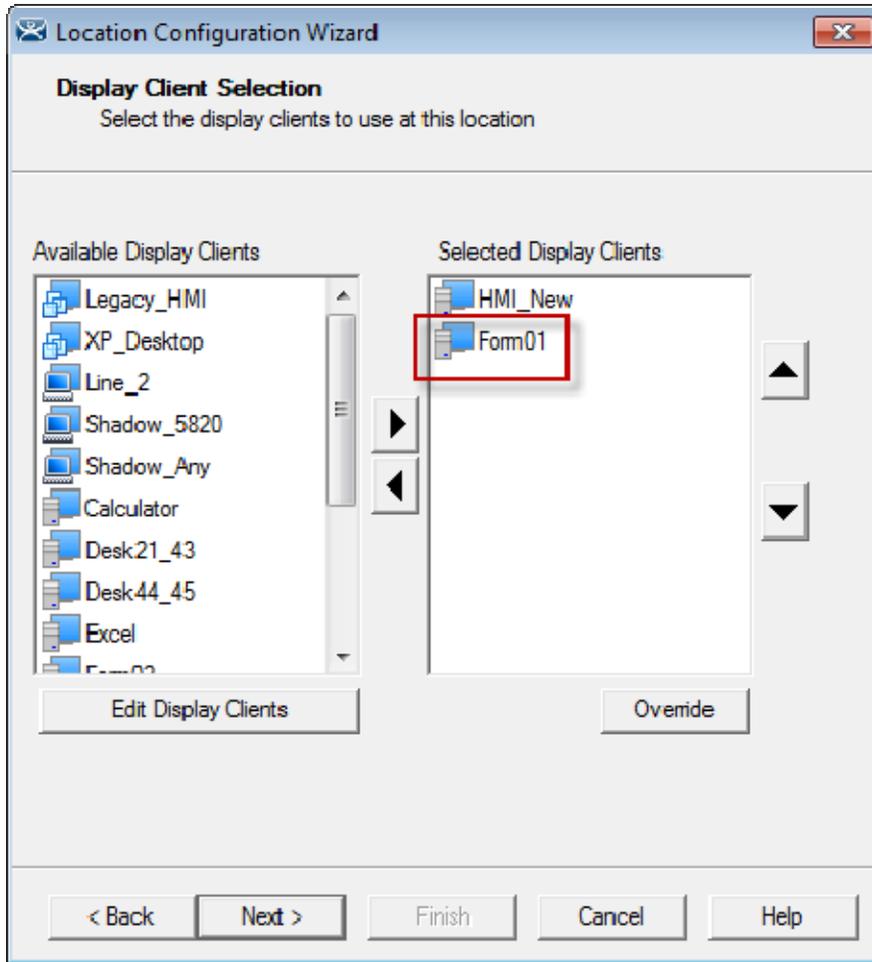
Location Options

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

Unchecking Allow Remote Access will force people to use the location locally.

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

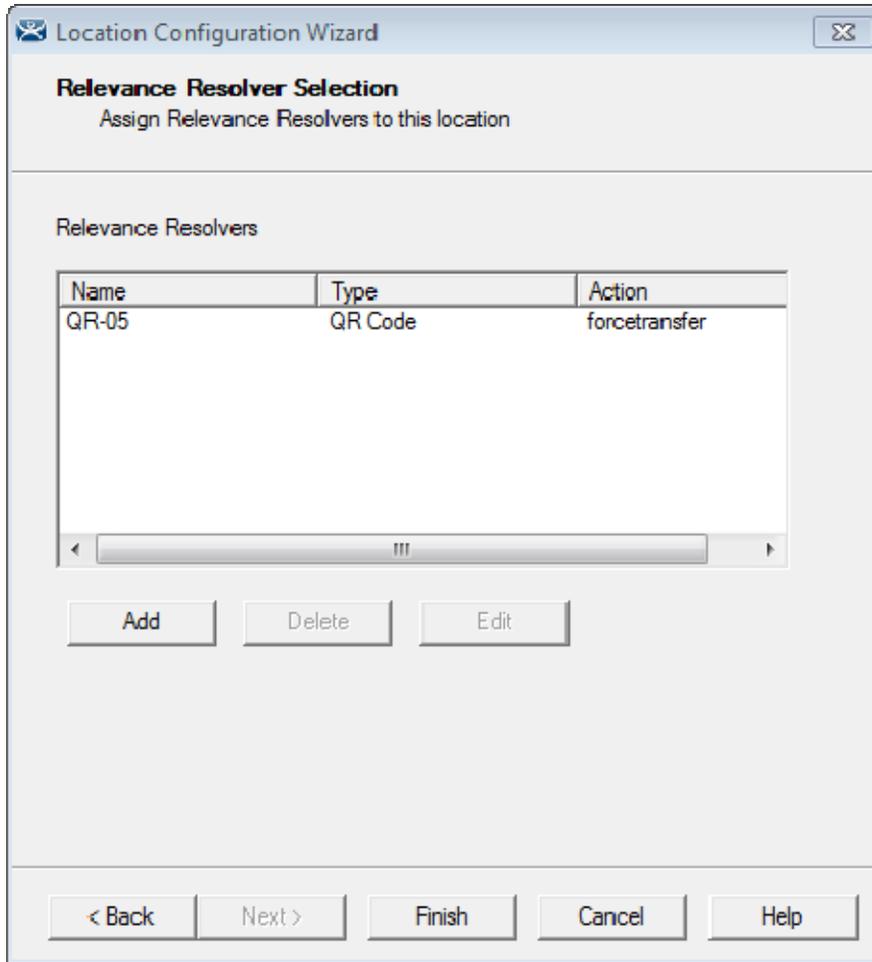
Select **Next** to continue.



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_New** display client is unrestricted but the **Form01** is restricted to members of the **Maintenance Access Group**.

Select **Next** to continue.



Relevance Resolver Selection

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

Select your action, Forced Transfer in this case.

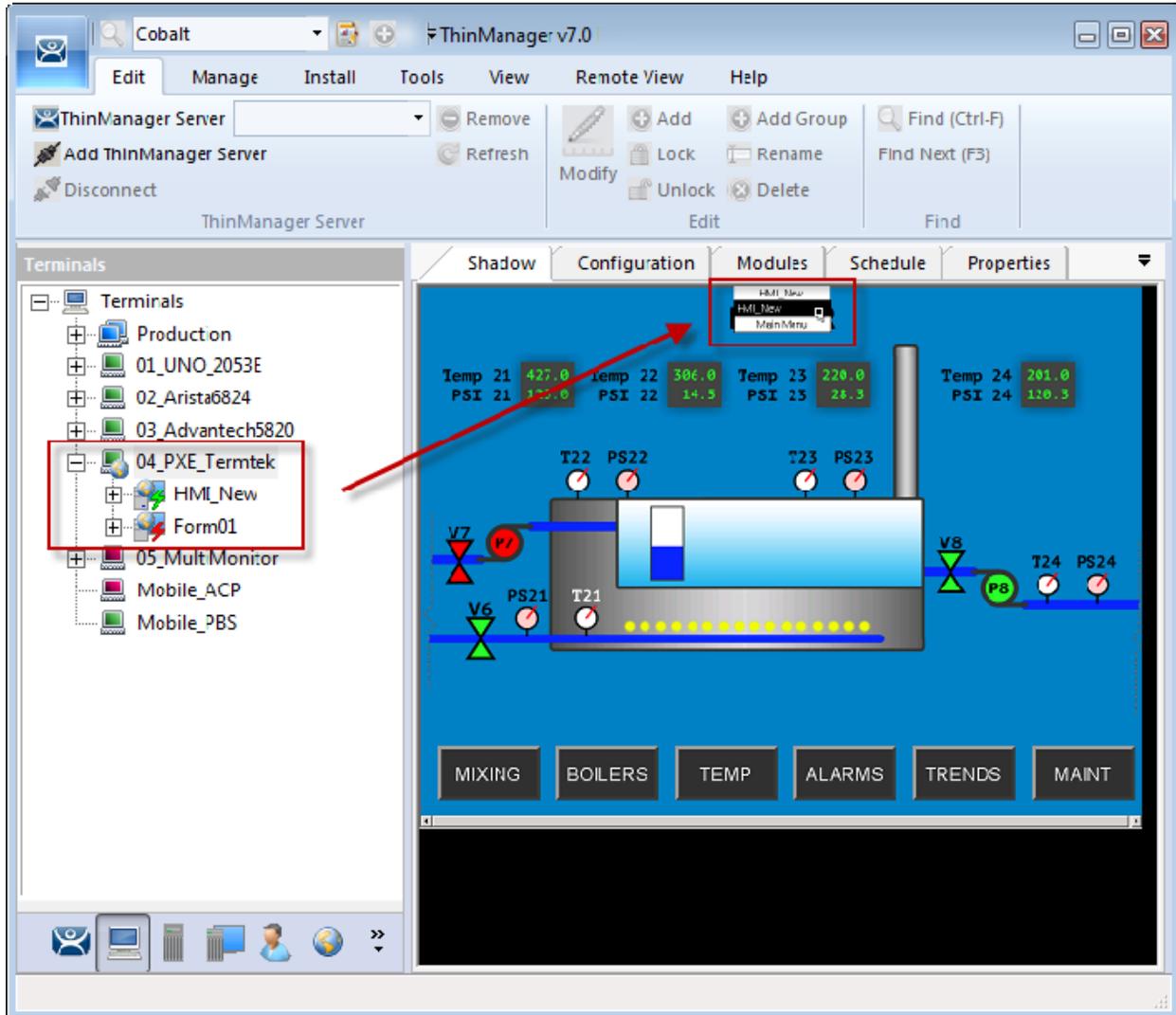
Select **Finish** to create the location and close the wizard.

11.5. Putting it Together:

You now have a location with two display client applications.

HMI_New 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.



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.

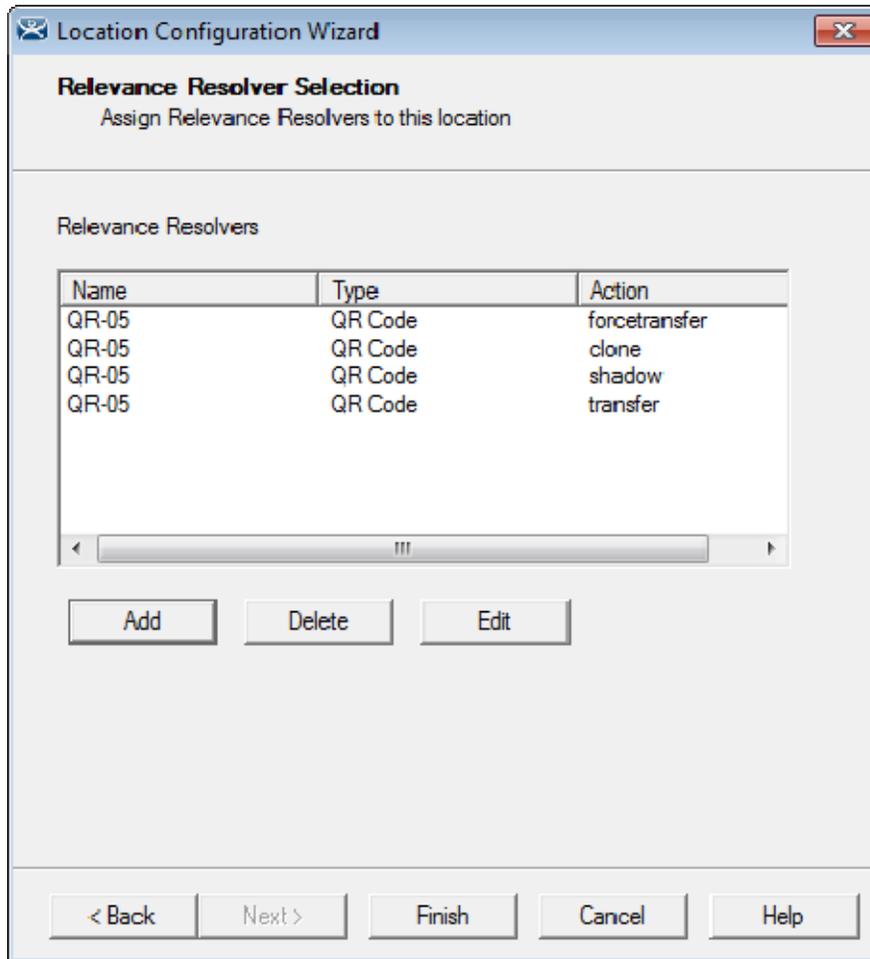
12. One QR Code, Multiple Actions

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 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.

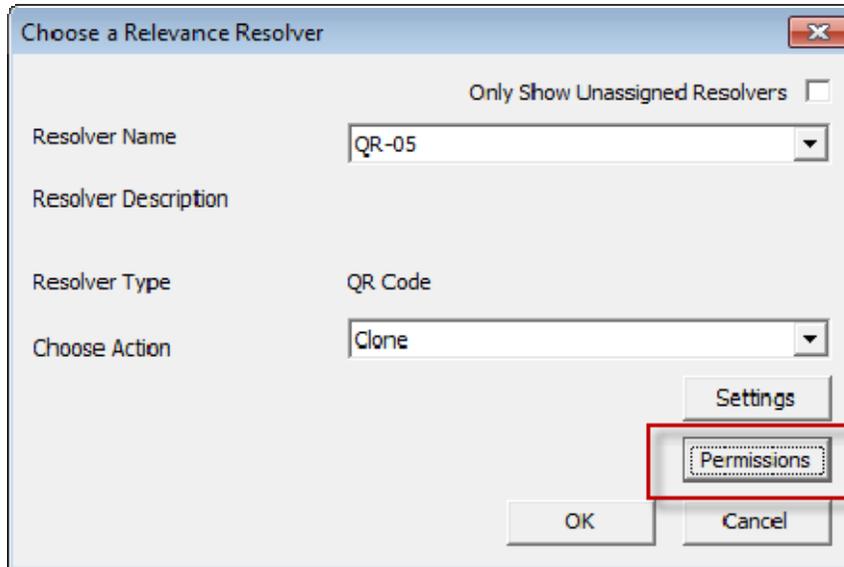
Highlight the terminal and double click or select **Modify** to open the **Location Configuration Wizard**.



Relevance ID Selection Page

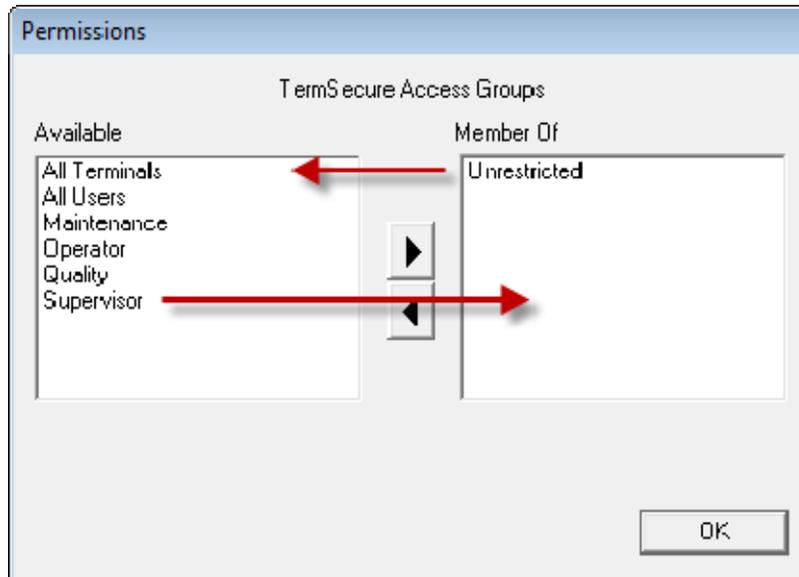
Navigate to the **Relevance ID Selection** page.

Add the same resolver, QR-05 in this example, to the location as many times as you have actions and access groups you want to involve.



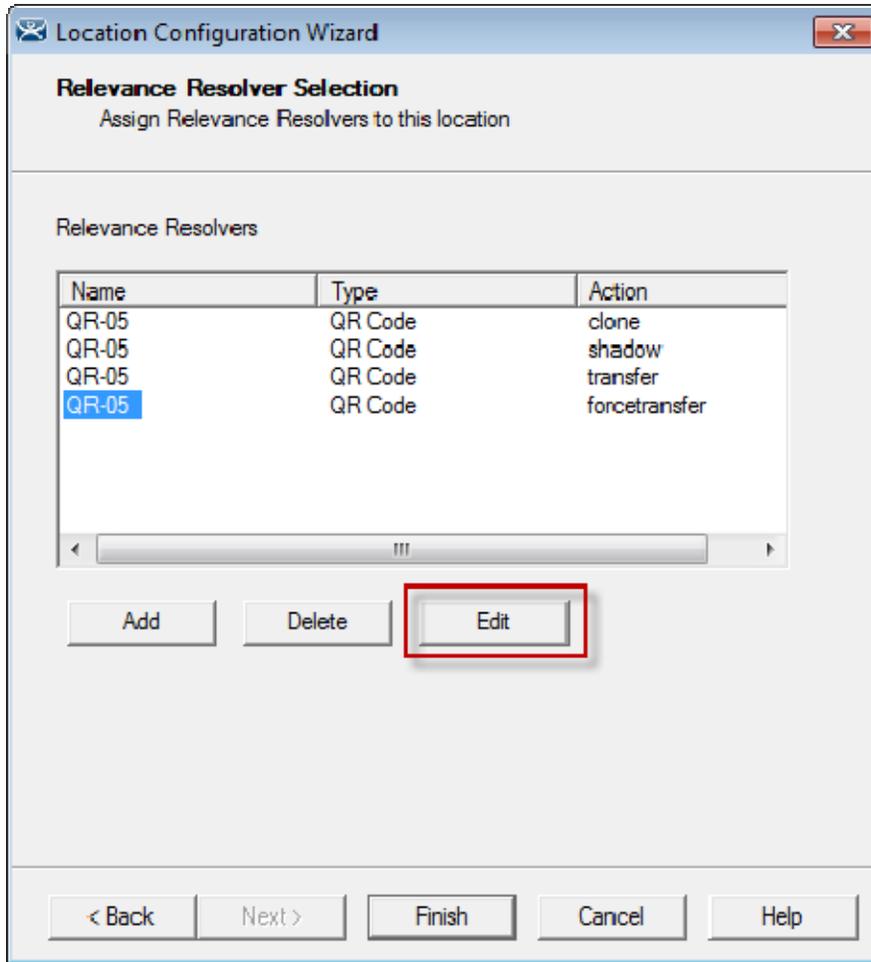
Choose a Relevance Resolver Window

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.



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
Boiler-Room	HMI_New Form01	QR-05	Clone	Supervisor
		QR-05	Shadow	Quality
		QR-05	Transfer	Maintenance
		QR-05	Force Transfer	Operator

If a Supervisor scans QR-05 they will clone the application and run it with their own Windows account.

If a Quality member scans the QR-05 code they will be able to shadow the location, leaving control with the operator.

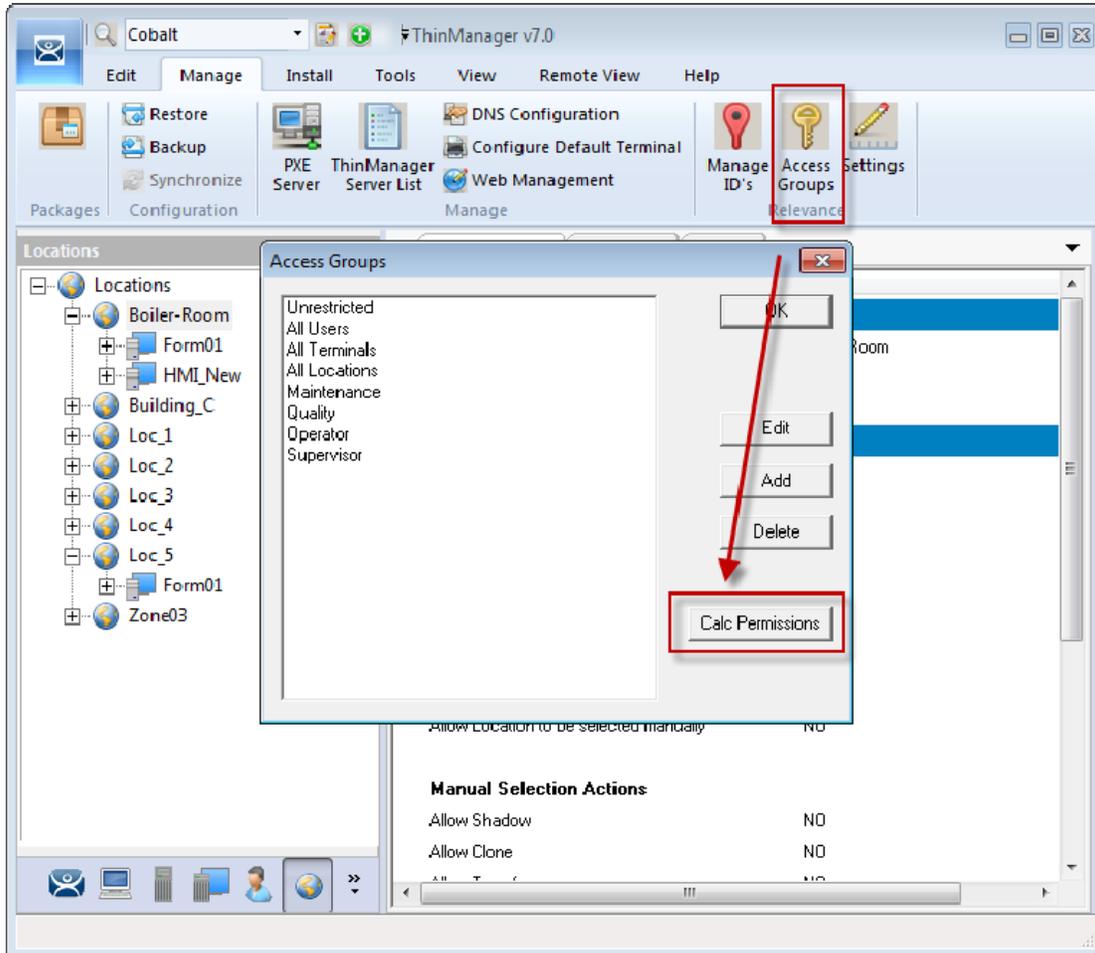
If a Maintenance member scans QR-05 they will transfer the application to their mobile device once the operator allows it.

If an Operator scans the QR-05 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

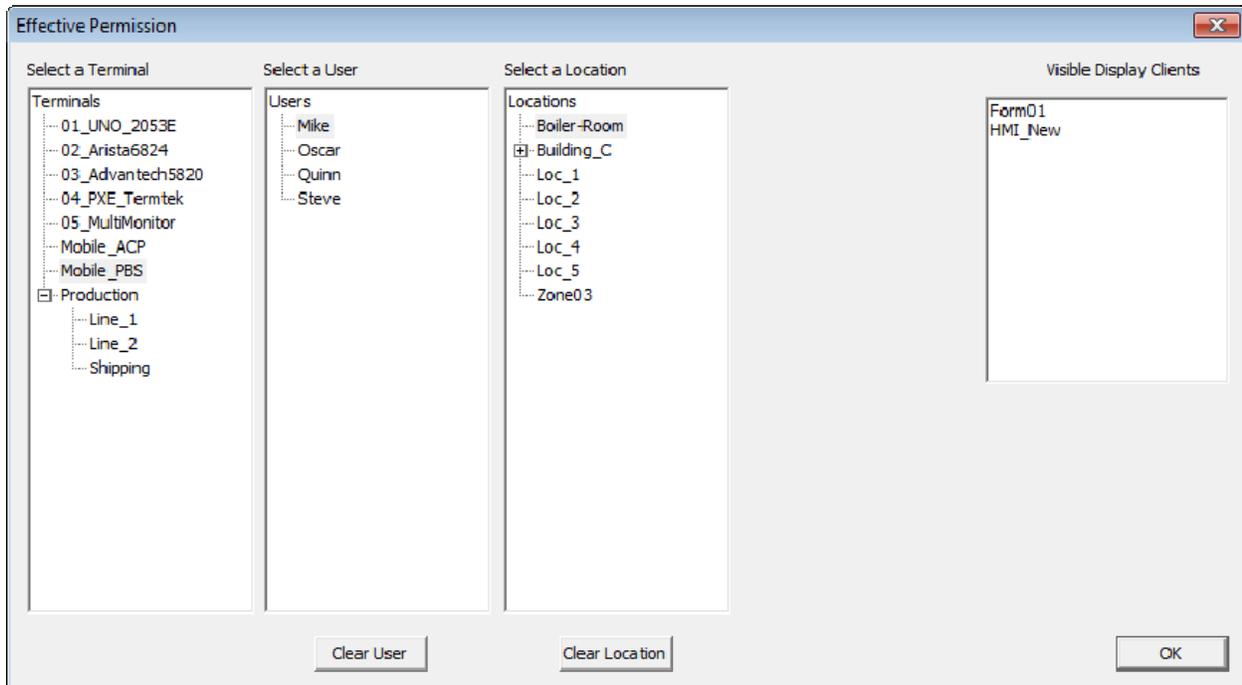
It is easy to lose track of the permissions as your system expands and more functions and features are added. Relevance has a Permission Calculator to help.

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



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,

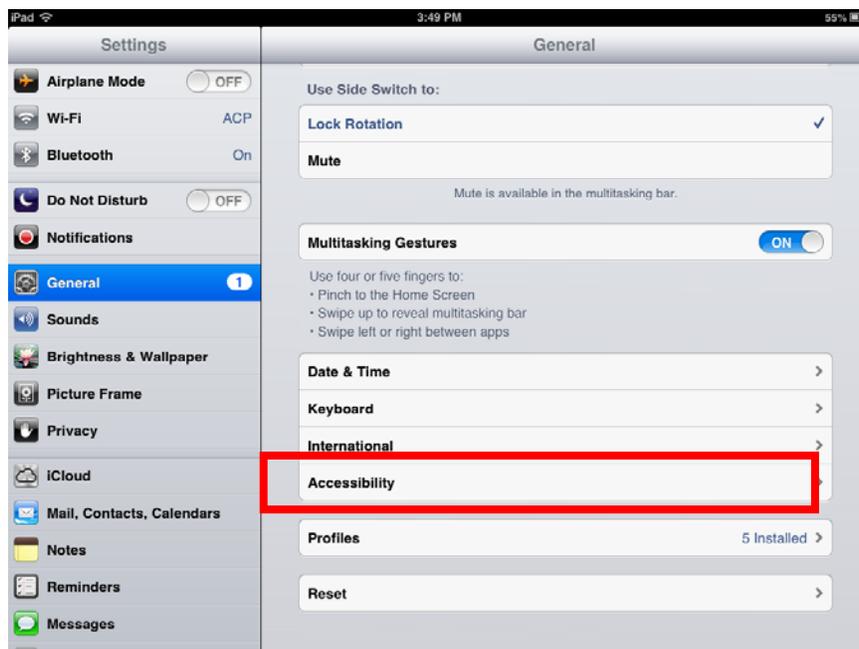
14. Guided Access on the iPad

Guided Access is 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.



Settings Page

Select the **General** setting.

Select **Accessibility**.



Accessibility Settings

Select the **Guided Access** setting.



Guided Access Settings

Turn **Guided Access** on.

Select **Set Passcode**.



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.



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.