Infor SCE Warehouse Management Visual Travel Audit Guide

Publication Information

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Contents

About this guide

This user guide provides an overview of the user interface, navigation, and functionality of the Supply Chain Execution (SCE) Warehouse Management (WM) Visual Travel Audit.

Intended audience

This user guide is intended for Infor SCE Visual Travel Audit users interested in viewing, investigating, and managing the labor configuration for the facility. This is typically the SCE users managing labor, travel paths, restrictions, and sections. It assumes that the reader has a general knowledge of the warehouse operations and the application.

Related documents

You can find the related SCE documents in the product documentation section of the Infor Xtreme Support portal, as described in "Contacting Infor" on page 5.

Contacting Infor

If you have questions about Infor products, go to the Infor Xtreme Support portal.

If we update this document after the product release, we will post the new version on this website. We recommend that you check this website periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Chapter 1 Overview

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The Visual Travel Audit page provides a visual look into the facility. It can be used to review the facility layout from a labor perspective. The screen uses a 3D rendering of the facility that allows users to evaluate travel scenarios and restrictions, and audit and validate the labor configuration. Additionally, optional filters can be used to provide a more concise view. The information gathered from this screen can be used to configure the travel data and provide an insight into the facility's current configuration.

To display a warehouse, the locations in the facility must contain coordinate information along with height, width, and length.

You can manipulate the view using your mouse:

- Zoom: Mouse Wheel
- Rotate: Mouse Left Click and Hold
- Pan: Mouse Right Click and Hold or use the arrow keys

Icon buttons on the toolbar can be used to re-center the view and to reset all of the display settings.

 Recenter the view

 Reset all display settings

 Open the page in a new window

If you hover the mouse over locations, the location is highlighted. If you click a location, the location is selected.

The initial view shows all of the locations associated with the default section of the facility. Travel sections are colored using the colors defined for the travel section and displaying them on the floor of the facility to highlight the delineation of the configured travel sections. The basic layout of the screen is the user selected menu option displayed along the left side of the screen while the majority of the rest of the screen shows the current facility.

Use the **SECTION** menu to select which locations are shown on the screen and are available while using the other menu options. Selections and functions used to interact with the facility also remain in the subsequent displays until the user changes the section or resets the filters and display. The list includes all of the sections from the section table configuration for the warehouse.

Locations are positioned on the facility viewer map using a Cartesian coordinate system. Locations are shown in the Facility Viewer based on these location configurations:

X Coordinate

The X Coordinate of the location. The X and Y coordinate of (0,0) is at the bottom left corner of the map. The X Coordinate increases as you move from left to right on the screen. This value must be provided as a positive whole number expressing the distance from the lower left corner.

Y Coordinate

The Y Coordinate of the location. The X and Y coordinate of (0,0) is at the bottom left corner of the map. The Y Coordinate increases as you move from bottom to top on the screen. This value must be provided as a positive whole number expressing the distance from the lower left corner.

The X and Y coordinates determine where the front center of the location is on the map. The units should be the same as the units used for item configuration and the location height, width, and length.

Z Coordinate

The Z Coordinate of the location. The Z coordinate is used to specify how high off the floor the location is. This value must be provided as a positive whole number expressing the distance from the floor.

Length

Length of the location. The length and width determine the size of the location on the map. The location is drawn of the length specified starting from the X coordinate. This value must be provided as a positive integer and not as a decimal.

Width

Width of the location. The length and width determine the size of the location on the map. The location is drawn of the width specified starting from the Y coordinate. This value must be provided as a positive integer and not as a decimal.

Height

Height of the location. The location is drawn of the height specified starting from the Z coordinate. This value must be provided as a positive integer and not as a decimal.

Level

The level of the location. Locations on the ground level are of value 0 and the value increases as you go up the level.

Orientation

The Orientation determines the direction that the location points to. It is the direction that you access inventory from the location. This field is configured as the number of degrees such as on a compass. For example, 0 is for a location where you access inventory toward the top of the map. In this case, the location is drawn below it.

- 90 degrees is for locations where inventory is accessed on the right side of the location and the location is drawn to the left.
- 180 degrees points to the bottom of the map.
- 270 degrees is for locations that face to the left.

In each case, the X/Y coordinate determines where the front/center of the location is, and the remainder of the location is drawn behind it.

Use Visual Travel Audit to:

- Ensure valid X, Y, and Z coordinates for your locations
- Validate location orientation
- Find locations in the warehouse
- Determine warehouse zones
- Verify travel sections
- Review aisle and section restrictions
- Validate distance engine paths and calculations

Chapter 2 Location Menu

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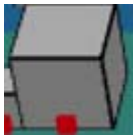
The location menu contains three options: Orientation, Filter, and Select. These options provide for further details into the section of the facility to verify the proper configuration and data setup.

Location > Orientation

Using this option, a small red box appears on each location, showing the direction the location is facing and what is considered the opening or front of the location.



The orientation value is in the location configuration table as a degree value (for example, 0, 90, 180). The Orientation determines the direction that the location points to. It is the direction that you access inventory from the location. This field is configured as the number of degrees such as on a compass. For example, 0 is for a location where you access inventory toward the top of the map. In this case, the location is drawn below it.

- 90 degrees is for locations where inventory is accessed on the right side of the location and the location is drawn to the left.
- 180 degrees points to the bottom of the map.
- 270 degrees is for locations that face to the left.

In each case, the X/Y coordinate determines where the front/center of the location is, and the remainder of the location is drawn behind it.

For most cases, this is where the picking would take place at the location and where the operator would be directed to perform a putaway or replenishment command. The exceptions to this would be in gravity flow locations, and locations where picking and replenishments are performed on opposite sides of a location. In those cases, the orientation indication shows the front where picking is performed.

Location > Filter

The filter options are used to show specific attributes and characteristics of various locations in the facility. These filter options are: Level, Empty, Task (Type and Priority) and Inventory attributes (Owner, Item, Lot, LPN, and Hold).

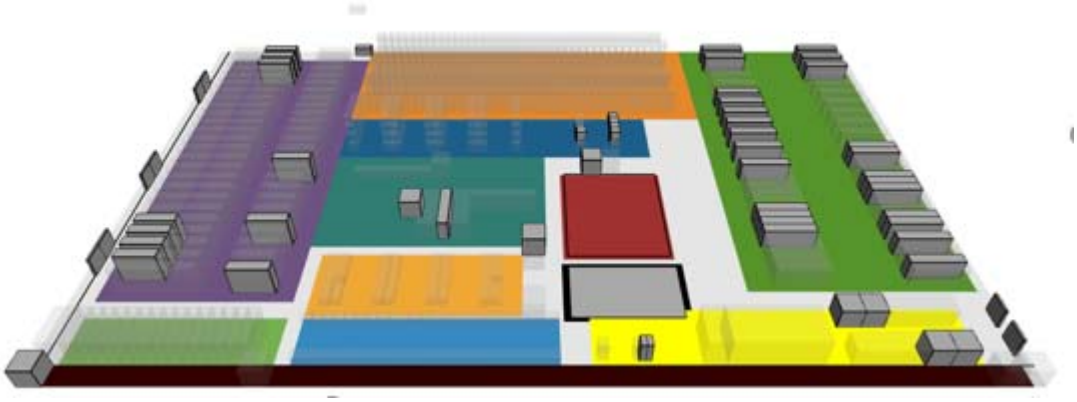
Level

The level filter option is set to show just that level in the section of the facility that is currently being displayed. Selecting a level from the drop-down list displays only the locations that have the same level attribute. Locations that do not share the same level attribute are removed from the display or shown with a ghosting effect.

The location table attribute of location level (loclevel) is necessary to enable the filter to display the corresponding locations.

Empty

Either separately or in addition to the level selection, you can select the check box (☐) to display empty locations. When the check box is selected (☑), all occupied locations in the facility are removed; only the empty locations are shown. If you use the Empty selection in combination with other options, only empty locations – with a specific level attribute or other shared attribute based on previous or subsequent menu selections – are displayed. The skuxloc table correlates inventory to locations and is used extensively in the implementation of this filter and the displayed location results.



Task - Type

The task filter can be used to show locations in the facility that are the source location for the type of task the user selects. For example, locations that contain a dynamic pick are displayed while

locations that do not have that type of command are displayed with a ghosting effect. This information is calculated from the taskdetail table.

Task - Priority

The priority filter further refines the type of command, limiting it to just the locations with commands that have a specific priority value. The taskdetail values are required to accurately display these locations in the facility.

Inventory – Owner, Item, Lot, LPN

Using the inventory filter, the display changes from the current locations shown on the screen to only the locations that contain an item with a specific owner, item number, lot attribute, or license plate number (LPN) based on which fields and values are specified.

Inventory - Hold

Similar to the owner, item, lot, and LPN inventory attributes, the inventory hold filter can be used to show inventory that contains a hold attribute that matches any of the values selected from the list. If you select a hold code to be included by clicking the corresponding check box (☐); included hold codes are indicated with a check mark (☑). Unlike the other task, level and inventory attributes which are limited to a single attribute value selected from the list, the user can select any number or combination of hold attributes by selecting the check box next to the hold code.

Location > Select

The menu option **SELECT** is used to show some of the detail attributes of the location. The attributes that are displayed are:

Location Name

XYZ Coordinate

Orientation

Level

Height

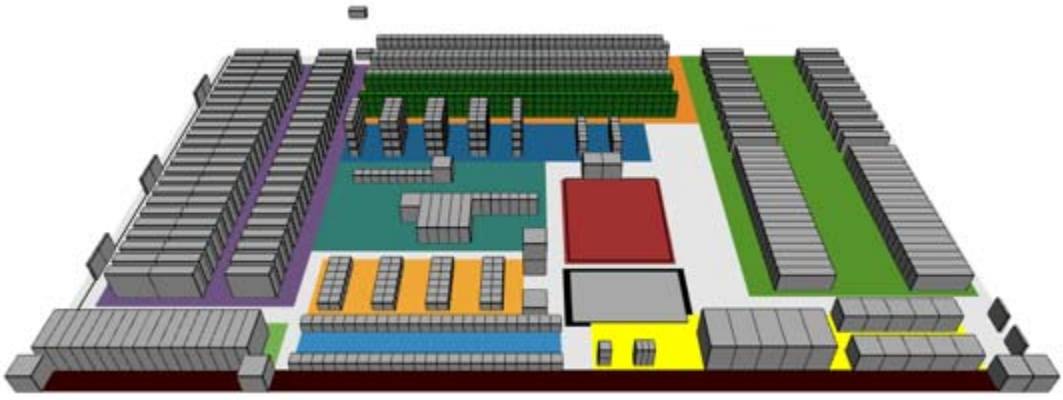
Width

Depth

Location type

Location section

Zone – The zone hyperlink can be used to highlight all of the locations that share the same zone attribute. When the zone is clicked, all locations in the same zone are shown in green.



Chapter 3 Travel Menu

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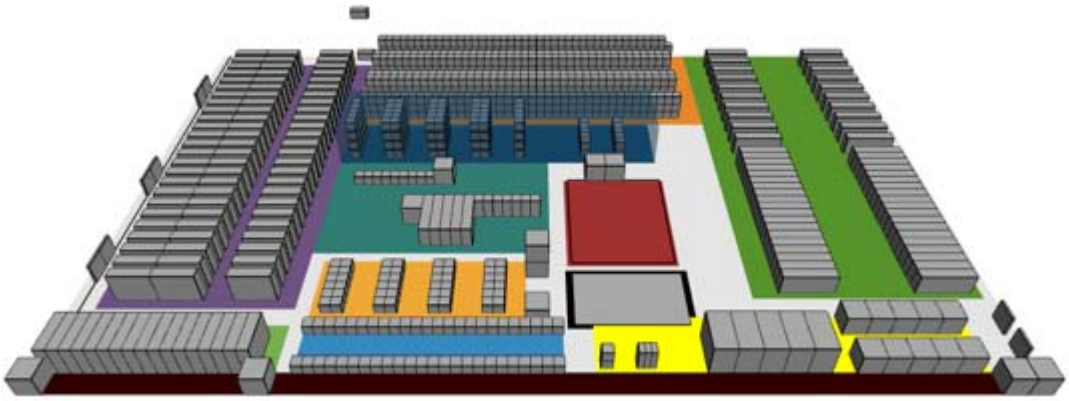
The travel menu contains four items: Sections, Restrictions, Directed Graph and Walk Path. These options provide for further details into the labor configuration of the facility to verify the data setup.

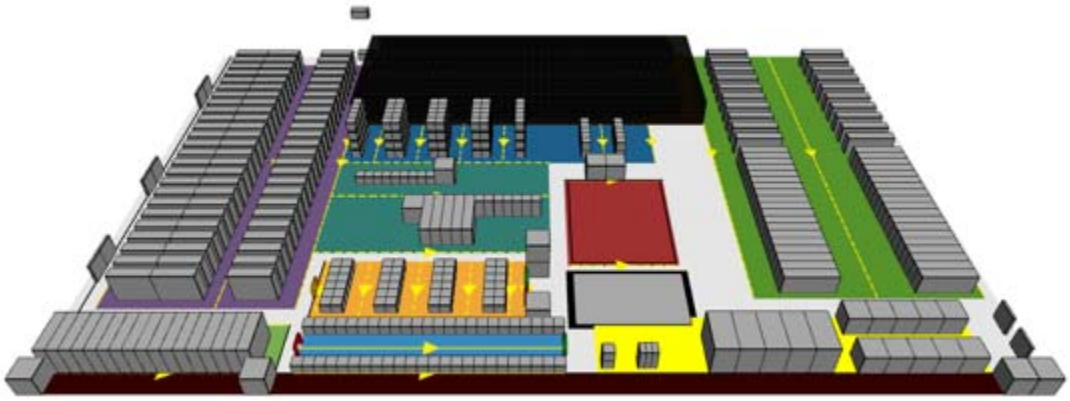
Travel > Sections

Using this option, the list of the configured travel sections in the facility are displayed in the left window, showing the count of locations that are within the travel section with the hold or damaged attribute. If you hover over the travel section with the mouse, the travel section is outlined in the color defined for the travel section to improve viewing the locations that are contained within the travel section. If you click a travel section, the travel section box remains displayed allowing you to select other menu options, or hover over and highlight other travel sections. Only one travel section can remain displayed at the same time. If you click on a travel section, the previously selected travel section box is cleared.

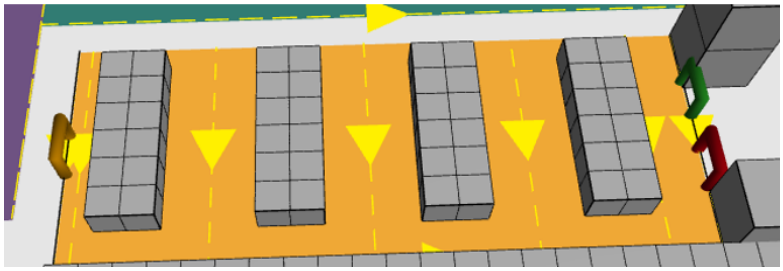


Travel > Restrictions

When you select the restrictions option, results of the restrictions criteria are displayed on the left side panel of the screen. When travel restrictions have been created for a facility, the task type and equipment type drop-down lists are populated with the configured travel restriction values. When you select a task type and equipment type option and click **DISPLAY**, a black box is displayed over the locations that are within the configured travel restricted area.

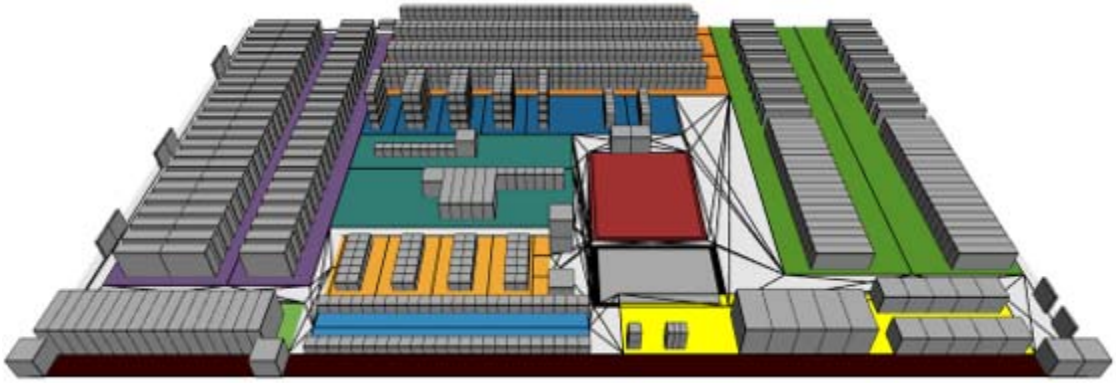


Additionally, the travel paths are shown along the floor of the facility with an arrow indicating the direction of travel. If a travel section is configured with a specific entry, exit or combination entry/exit point, the points are shown as a door frame with the color indicating the type of point it is. Green indicates an entry point, red indicates an exit point and yellow indicates a combination entry and exit point.



Travel > Directed Graph

When you select the directed graph menu option, the travel points between every travel section are displayed. This operation highlights how the operator will be directed when the facility has operations that span multiple travel sections.



Travel > Walk Path

The walk path menu option shows the specifics for travel between two selected locations.

You can determine the first step in the walk path to perform using the mouse to highlight a location in the facility that will be the start location of the walk path. The selected location is highlighted and a push pin points to the indicated location. The menu on the left displays the Beginning location attributes of the walk path. These attributes include the Location name, XYZ Coordinates of the location, Level, Height, Width, Depth, Section, and Zone associated with the location.

You can determine the final step in the walk path to perform by again using the mouse to highlight a second location in the facility that will be the end location of the walk path. The selected location is also highlighted with a push pin that points to the indicated location. The menu on the left displays the Ending location attributes of the walk path. These attributes include the Location name, XYZ Coordinates of the location, Level, Height, Width, Depth, Section, and Zone associated with the location.

Once the beginning and ending locations have been selected, the Path Details of the walk path are displayed in the menu on the left, including the attributes for the Horizontal Distance, Starting Z coordinate value, Ending Z coordinate value, Total Distance in the travel path, and number of Turns necessary for the travel between the two locations.

The travel path is animated to show the actual travel between the two selected locations in the warehouse including a red ball moving along the travel path, starting at the beginning location and terminating at the ending location. The animated travel continues until the user clears the display or selects a new location for the beginning travel location.