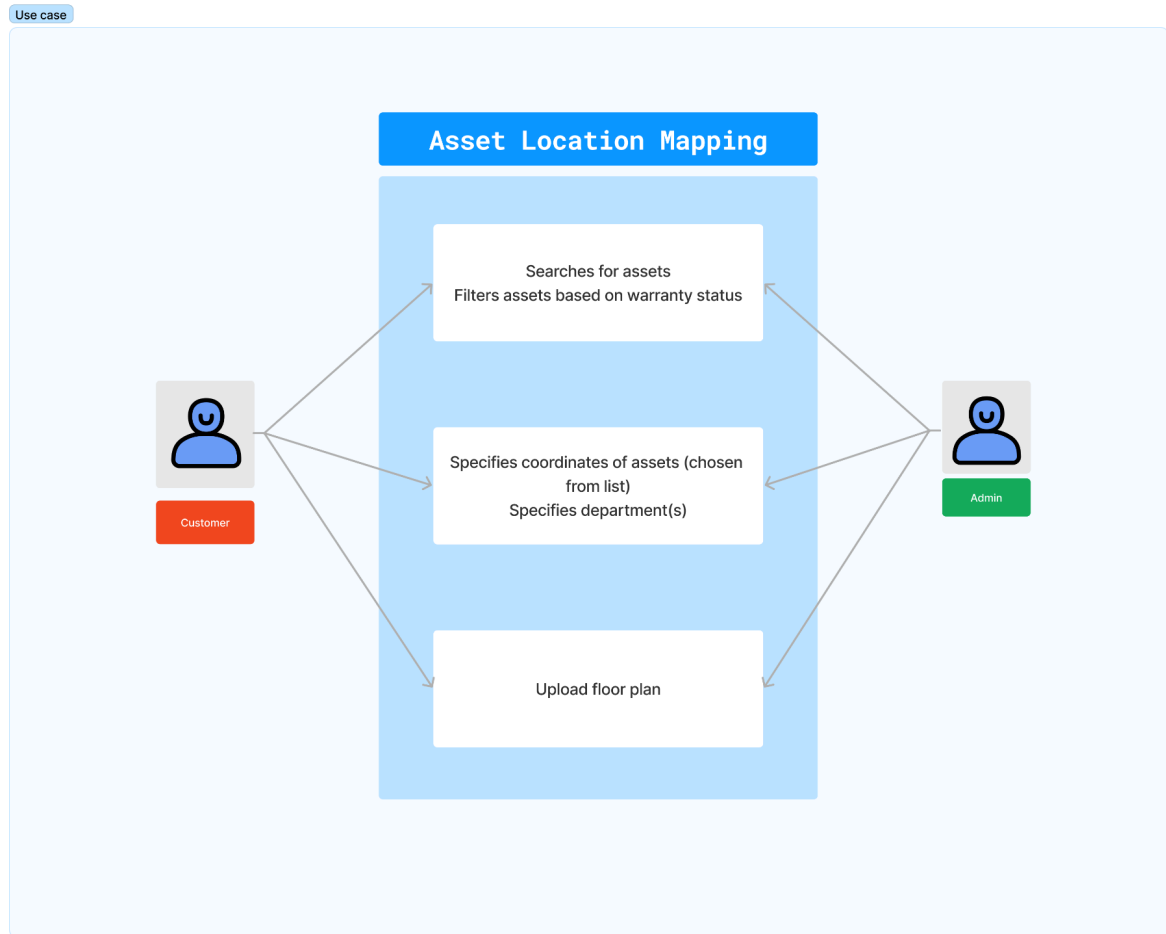


Use Cases for Asset Location Mapping



Use Case 1: Upload Floor Plan

Actor	Customer, Admin
Description	Trace3 Customer or Admin uploads a floor plan and the system configures it with grid coordinates for asset placement.
Preconditions	<ul style="list-style-type: none">- User is logged into the system- User has administrator privileges- User has a floor plan file ready for upload
Basic Flow	<ol style="list-style-type: none">1. User selects "Upload New Floor Plan" option2. System displays upload interface3. User uploads floor plan file4. System validates file format and dimensions5. System automatically generates grid overlay6. System displays floor plan with grid7. User confirms grid placement8. System saves floor plan with grid configuration
Alternate Flows	<ul style="list-style-type: none">- A1: Invalid File Format<ol style="list-style-type: none">1. System displays error message2. Returns to upload interface3. User selects different file- A2: Grid Adjustment Needed<ol style="list-style-type: none">1. User requests grid adjustment2. System provides grid customization tools3. User adjusts grid spacing/alignment4. System saves adjusted configuration
Postconditions	<ul style="list-style-type: none">- Floor plan is stored in system- Grid overlay is configured and saved- Floor plan is ready for asset placement

Use Case 2: Asset Placement

Actor	Customer, Admin
Description	Customer or Admin places assets on the configured floor plan using grid coordinates.
Preconditions	<ul style="list-style-type: none">- Floor plan is uploaded and configured with grid- User has appropriate access rights

	- Asset information is available, synchronized with database
Basic Flow	<ol style="list-style-type: none"> 1. User selects "Add Asset" option 2. System displays asset placement interface 3. A drop-down displays available selection/User enters asset details (type, model, serial number, warranty info) 4. User selects grid coordinate for placement 5. System validates placement 6. System saves asset location and details
Alternate Flows	<ul style="list-style-type: none"> - A1: Location Already Occupied <ol style="list-style-type: none"> 1. System displays warning 2. User selects different location - A2: Bulk Asset Import <ol style="list-style-type: none"> 1. User selects bulk import option 2. Uploads spreadsheet with asset details and coordinates 3. System validates and places multiple assets
Postconditions	<ul style="list-style-type: none"> - Asset is placed on floor plan - Asset details are saved in system - Asset is searchable

Use Case 3: Department Mapping

Actor	Customer, Admin
Description	Customer or Admin defines and maps department areas on the floor plan.
Preconditions	<ul style="list-style-type: none"> - Floor plan is uploaded and configured - User has administrator privileges
Basic Flow	<ol style="list-style-type: none"> 1. User selects "Map Departments" option 2. System displays department mapping interface 3. User draws department boundary on grid 4. User enters department name and details 5. System validates boundary 6. System saves department mapping
Alternate Flows	<ul style="list-style-type: none"> - A1: Overlapping Departments <ol style="list-style-type: none"> 1. System displays warning 2. User adjusts boundaries

	<ul style="list-style-type: none"> - A2: Department Template Import <ol style="list-style-type: none"> 1. User imports predefined department layout 2. System applies template to floor plan
Postconditions	<ul style="list-style-type: none"> - Department areas are defined on floor plan - Department information is saved - Assets can be associated with departments

Use Case 4: Asset Search and Filter

Actor	Customer, Admin
Description	Customer or Admin searches for assets using various criteria including warranty status.
Preconditions	<ul style="list-style-type: none"> - Assets are placed on floor plan - User has appropriate access rights
Basic Flow	<ol style="list-style-type: none"> 1. User accesses search interface 2. User enters search criteria (asset type, warranty status, department, etc.) 3. System displays matching assets on floor plan 4. User selects asset for detailed view 5. System displays asset details
Alternate Flows	<ul style="list-style-type: none"> - A1: No Results Found <ol style="list-style-type: none"> 1. System displays "No matching assets" message 2. Suggests broadening search criteria - A2: Export Results <ol style="list-style-type: none"> 1. User requests export of search results 2. System generates report in specified format
Postconditions	<ul style="list-style-type: none"> - Search results displayed - Assets highlighted on floor plan - Detailed information available for viewing

Business Rules

1. File Format Requirements:

- Accepted formats: PDF, JPG, PNG
- Maximum file size: 10MB
- Minimum resolution: 1200x800 pixels

2. Asset Placement Rules:

- One asset per grid coordinate
- Assets must be within floor plan boundaries
- Critical assets require additional validation

3. Warranty Status Rules:

- Warning notification 90 days before expiration
- Expired warranty status clearly marked
- Warranty information must be kept current

4. Access Control:

- Only administrators can upload floor plans
- Department managers can place assets within their departments
- Read-only users can search and view assets