

Quathera

AI Form Discovery Guide

How AI automatically discovers every form in your web application.

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1. What Is Form Discovery?

Form Discovery is the first step in using Quathera. It's the process where AI automatically explores your web application and finds every form page.

What Gets Discovered:

- Login and registration forms
- Data entry forms (create new records)
- Edit forms (modify existing records)
- Multi-step wizards
- Search and filter forms
- Settings and configuration forms
- Any page with input fields

Why It Matters:

Without discovery, you would have to manually identify and document every form in your application. For large applications with hundreds of forms, this could take weeks. AI Discovery does it in minutes to hours, depending on application size.

2. How AI Discovery Works

The AI discovery process is fully automatic. Here's what happens behind the scenes:

Step 1: Login

AI navigates to the login page and authenticates using the credentials you configured in the Test Site.

Step 2: Smart Navigation

AI explores your application like a real user would:

- Clicks on menu items and navigation links
- Opens dropdowns and submenus
- Clicks on buttons that might open forms
- Handles modals and popups
- Navigates through tabs and panels

Step 3: Form Detection

On each page, AI analyzes the DOM and visual layout to identify:

- Input fields (text, number, email, etc.)
- Dropdowns and select boxes
- Checkboxes and radio buttons
- Date pickers
- File upload fields
- Submit/Save buttons

Step 4: Path Recording

For each discovered form, AI records the exact navigation path to reach it. This path is used later for testing.

3. Starting a Discovery

Prerequisites:

Before starting discovery, ensure:

- Desktop Agent is installed and running
- Agent is connected (shows 'Online' in web app)
- At least one Test Site is configured (QA environment)

Steps to Start Discovery:

1. Go to 'Form Pages Discovery' in the sidebar
2. You'll see a list of your configured Test Sites
3. Check the box next to each Test Site you want to scan
4. Click 'Start Discovery' button
5. A browser window will open on your Desktop Agent machine
6. Watch as AI navigates and discovers forms
7. Discovery completes automatically when all pages are explored

Discovery Time:

- Small applications (10-20 forms): 5-15 minutes
- Medium applications (50-100 forms): 30-60 minutes
- Large applications (200+ forms): 1-3 hours

4. What AI Finds

During discovery, AI identifies and catalogs:

Form Pages:

Any page that contains form elements for user input.

Navigation Paths:

The exact sequence of clicks/actions to reach each form from the starting page.

Form Relationships:

Which forms are related (parent-child relationships). For example, you must create a Customer before creating an Order for that Customer.

User Access:

Which user types can access each form. A form discovered when logged in as Admin may not be visible to Regular Users.

Entry Points:

Buttons or links that open forms (e.g., 'Add New', 'Create', 'Edit').

5. Discovery Results

After discovery completes, you'll see a list of discovered forms with:

Form Name:

AI generates a descriptive name based on the page title, URL, and form purpose. Examples: 'Employee', 'Create Order', 'User Settings'.

Path Steps:

The number of navigation steps to reach the form. Example: '4 steps' means 4 clicks from the home page.

Type:

- Root: A standalone form that doesn't depend on other forms
- Child: A form that requires a parent record to exist first

Discovered Date:

When the form was first discovered.

Actions:

- Map: Start AI mapping for this form
- View Path: See the navigation steps to reach this form
- Delete: Remove this form from the discovered list

6. Root vs Child Forms

Understanding form relationships is crucial for testing:

Root Forms:

- Independent forms that don't require other records
- Can be tested in isolation
- Examples: Department, Category, User Registration

Child Forms:

- Depend on a parent record existing first
- AI automatically identifies the parent relationship
- Examples: Employee (child of Department), Order (child of Customer)

How AI Handles This:

When generating test scenarios, AI automatically:

1. Creates parent records first
2. Then creates child records linked to the parent
3. Handles the full hierarchy (grandparent → parent → child)

7. Visual Verification During Discovery

While discovering forms, AI also performs visual verification:

What AI Checks:

- Layout issues (overlapping elements, misaligned content)
- Styling problems (missing CSS, broken layouts)
- Responsive design issues
- Missing or broken images
- Text overflow or truncation

Visual Issues Found:

Any visual issues detected are flagged and reported. You can review these in the discovery results.

8. Handling Edge Cases

AI handles various complex scenarios:

Single Page Applications (SPAs):

AI detects when content changes dynamically without page reload and continues exploration.

Iframes:

AI can enter and explore content inside iframes, then exit back to the main page.

Shadow DOM:

AI handles web components with Shadow DOM encapsulation.

Modals and Popups:

AI clicks buttons that open modals and discovers forms within them.

Dynamic Content:

AI waits for AJAX content to load before analyzing the page.

9. Re-Running Discovery

You may need to re-run discovery when:

- New forms are added to your application
- Navigation structure changes
- You add new user types
- Significant UI changes are made

What Happens on Re-Discovery:

- AI finds new forms and adds them to the list
- Existing forms are updated with new navigation paths if changed
- Forms that no longer exist can be removed
- Mappings for existing forms are preserved

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