# About Quick Base sandbox

You can use a Quick Base sandbox as part of your organization's application lifecycle management (ALM) strategy to collaborate, plan, build, test, and release Quick Base apps.

**Note**: This feature is available for specific plans. Check the Quick Base Pricing page for a comparison.

## ALM and Quick Base

ALM is the continuous process of managing the life of an app. A Quick Base app's lifecycle begins with its planning and creation, proceeds to building and testing, and ends with its release for general use.
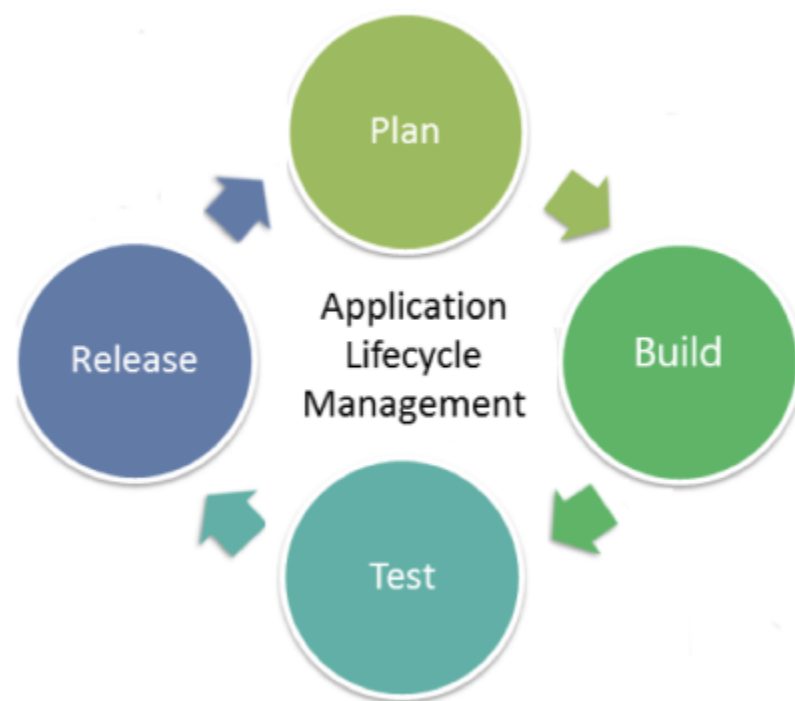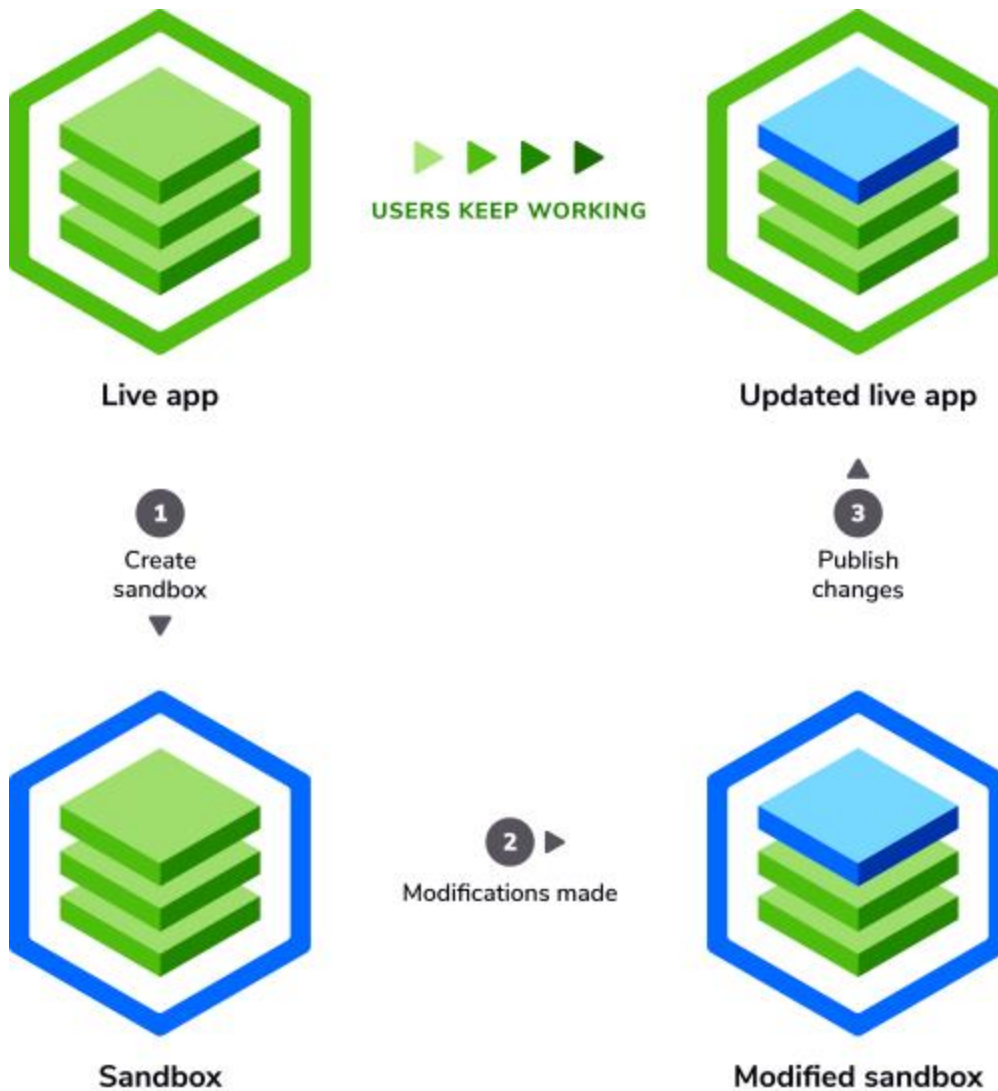


ALM contains three areas:

- **Governance:** Ensures that the app always meets the organization's needs, while considering the app's benefits and costs throughout its lifecycle

- **Development:** Iterative process of creating the app and includes defining requirements, designing, developing, testing, and deploying

- **Operations:** Work required to run, manage, and monitor the deployed app

## What is a sandbox?

Quick Base supports ALM by allowing app builders to enable a safe development environment, separate from but contained within an app, in which changes can be built, tested, and reviewed, before those changes are published to all users. Within Quick Base this environment is called a **sandbox**. Changes and development work in a sandbox can be done while users continue to use the **live app**. The live app remains running and unaffected by changes being developed and tested in a sandbox until those changes are published.

As you implement and test changes in the sandbox, Quick Base keeps track of the changes that have been made. As you work, you can review, publish, or discard the changes.

This diagram illustrates the process:

Live app    USERS KEEP WORKING    Updated live app

1 Create sandbox    3 Publish changes

Sandbox    2 ▶ Modifications made    Modified sandbox

Tracked changes include those made to the **schema** of the app. The schema is all the non-data elements of your app. Here are examples of things that make up a schema:

- Tables and fields

- Properties or settings for the app, tables, or fields

- Home pages, code pages, and rich text pages

- Forms

- Notifications

- Widgets, buttons, links, and similar elements

- Common (shared) reports

- Role creation and properties

- Custom data rules for tables

There are some things you can do in a sandbox that won't be tracked as changes. If you need these changes to be available, you would continue to make these updates in the live app:

- Adding, deleting, or modifying data in records

- Assigning user and group roles and permissions

- Personal reports

- Actions, webhooks, and automations

**Related topics:**

- Enabling and disabling a sandbox
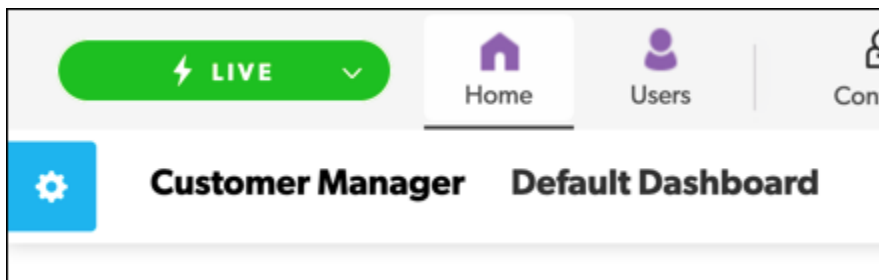
- Using a sandbox

- Sandbox limitations and details

# Enabling and disabling a sandbox

In order to create and use a sandbox, first an app admin must enable the feature in App Properties.

## Enabling a sandbox

1. Open the app for which you want to enable a sandbox.

2. Select **Settings**, and then select **App Properties**.

3. In the **Advanced Settings** section, select the **Enable change management through a dedicated sandbox** check box.

4. Select **Save**. On the app table bar, a button appears labeling the live app. This button includes a drop down menu where you'll manage a sandbox for the app.



**Note**: Sandbox-enabled apps are only listed once on your My apps page. You open the app and switch between the live app and a sandbox, rather than having a sandbox listed separately on My apps.

## Disabling a sandbox

If you decide not to use a sandbox to manage changes, you can disable the feature entirely:

1. Open the live app for which you want to disable (turn off) the sandbox feature.

2. Click the **Live** button, then select **Disable sandbox feature**.

3. In the confirmation dialog, click the **Yes, Disable** button. This will disable the feature and delete any sandbox you have started.

**Related topics:**

- About Quick Base sandbox

- Using a sandbox

- Sandbox limitations and details

# Using a sandbox

You can use a sandbox to collaborate, plan, build, test, and release Quick Base apps.

To learn about enabling the sandbox feature for an app, read Enabling and disabling a sandbox.
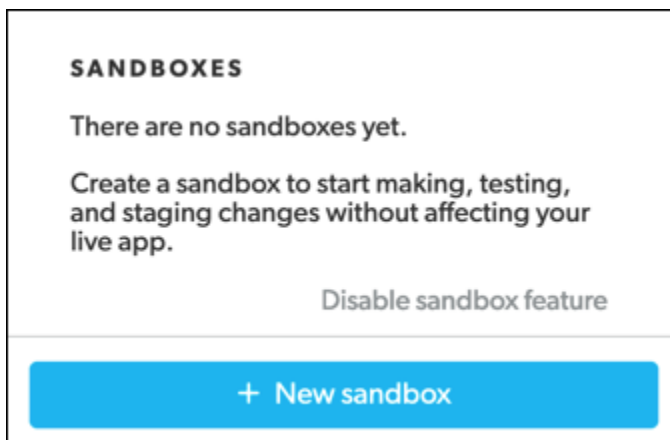
## Creating a sandbox

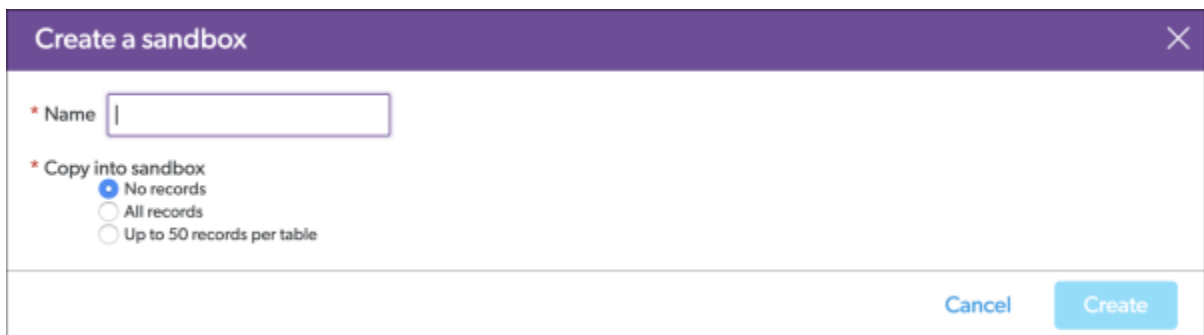Once the sandbox features are enabled for an app, you can create a new sandbox.

1. From the My Apps page, open an app that has sandbox enabled. The Live button displays at the top left of the page, indicating you're currently using the live app. Click **Live** to show the sandboxes menu.
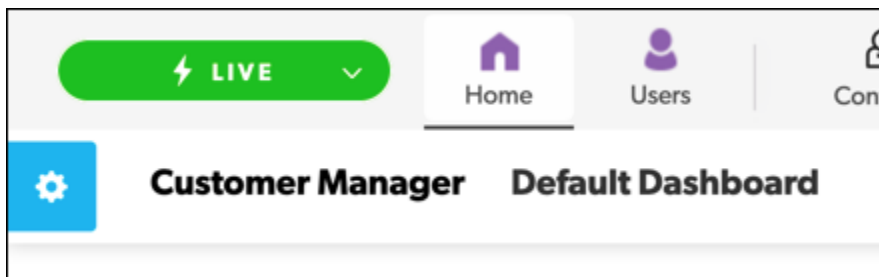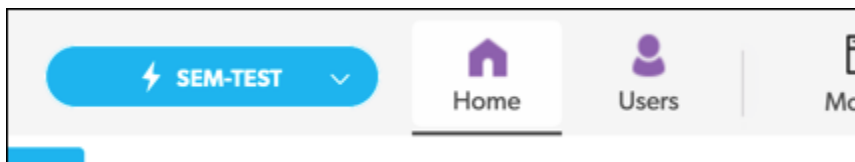


2. Click **+ New sandbox**.

3. Enter the name of the new sandbox and select whether you want to copy any records into the sandbox.



4. Select **Create** to have Quick Base automatically open the new sandbox app. The new sandbox name appears in the button indicating that you are now editing the app in the sandbox instead of making changes to the live app.



You can now safely make and test changes to the sandbox version of the app without affecting the live app.

**Sandbox users and access**

When the sandbox is created, all the users and groups that appear in the live app's Users tab are copied to the sandbox's Users tab. The app manager, and each user and group with administrative privileges, retains their access permissions in the sandbox.

All other users and groups will have their roles set to "none" in the sandbox, but you can change this access to allow others to see changes. You can also invite new users. Changes to user access to the sandbox itself are not tracked and are not published with sandbox updates. In other words, access to the sandbox and access to the live app are treated separately.

# Reviewing and publishing changes from a sandbox

Before publishing the changes you made in a sandbox to the live app, you can review them.

**Reviewing changes**

Click the sandbox button, then click the **Review & publish** button to display a list of changes that were made to the app in the sandbox.



The list displays any schema (app structure) changes you made. Based on your review of the changes made to the app, you can perform any of the following tasks:

- Close the review and continue to make changes

- Export the list of sandbox changes to a spreadsheet

- Revert all changes made in the sandbox

- Publish changes to the live app

- Delete the sandbox

**Note:** You must either accept or reject all of the changes you made in a sandbox. You cannot selectively publish change items.

## Closing the sandbox review

To close the review and continue to make changes in the sandbox, select **Close & keep working** at the top left of the page. You return to the app home page in the sandbox.

## Exporting sandbox changes to a spreadsheet

To export the list of sandbox changes to a spreadsheet, select **Export CSV** at the top right

of the page.

## Reverting all changes made in the sandbox

Before publishing any changes to the live app, you can decide to revert all changes.

1. Select the **Revert all changes** button at the top right of the page. A confirmation dialog appears.

2. In the dialog, select **Revert all changes** to delete any unpublished changes that were made to the app in the sandbox without publishing them to live app. The schema returns to the same schema as the live app. Based on the amount of schema changes, a spinning indicator may display as the system reverts the changes.
**Note:** You cannot undo this action.

## Publishing changes to the live app

Select **Publish changes** at the top right of the page. A publish confirmation dialog displays where you perform the following tasks:

- Select **Publish** to confirm your changes and publish to the live app while retaining the sandbox. Based on the amount of schema changes, a spinning indicator may display as the system publishes the changes to the live app. You are automatically redirected to your live app when your changes are published successfully. The sandbox remains in place and can be used to track the next set of changes to your app.

- Select **Publish & delete sandbox** to publish your changes to the live app and delete the sandbox. You are automatically redirected to your live app when your changes are published successfully.

- Select **Cancel** to return to the sandbox and make additional changes.

## Deleting the sandbox

1. Select **Delete sandbox** at the top of the page. A confirmation dialog displays.

2. Select **Delete** to delete the sandbox, including all of its unpublished changes. Based on the amount of schema changes, a spinning indicator may display as the system deletes the sandbox.

**Note:** You cannot undo this action.

**Related topics:**

- About Quick Base sandbox

- Enabling and disabling a sandbox

- Sandbox limitations and details

# Sandbox limitations and details

This page covers specific limitations and other important details to be aware of regarding a Quick Base sandbox.

## Limitations

This section lists specific limitations of the sandbox feature.

### General limitations

- **One sandbox per app**: There can only be one sandbox at a time per live app. If you create a sandbox, nobody else can create another sandbox for that same app until you delete the existing sandbox.

- **App size**: If your app contains 1GB or more data, your choices for including records in the sandbox may be affected. You may need to create a sandbox with partial or no data. You can examine app size by checking app statistics.

### Unsupported features

A sandbox does not support tracking or publishing changes to:

- Automations

- Actions

- Webhooks

### Admin console reporting

Apps with a sandbox are not included in the results when you use a connected table to

[access data from the Quick Base Admin Console](#).

## Table-to-table imports

Importing data from other tables is disabled in a sandbox. Existing table-to-table import definitions are not visible in a sandbox and you can't create new definitions. You can create, edit, delete, and execute table-to-table imports in the live app.

# Details

This section lists details about how a sandbox works with specific features and other areas within Quick Base.

## API access

When using the Quick Base API with a sandbox:

- The same authentication ticket you use for the live app works with the sandbox.

- The sandbox and its tables have different Dbids than the live app.

- In general, API calls that read data from the sandbox are supported. API calls that write data to the sandbox are not supported.

- Validate all responses to API calls thoroughly; an API call that is denied because it is not possible in a sandbox may give a response not seen in any other situation.

- API_CloneDatabase currently will not clone an app with the sandbox feature enabled, whether or not there is currently an active sandbox. If you need to clone an app with this API, you must disable the sandbox feature.

## Application tokens

If the live app has an application token defined, this same application token works in a sandbox.

Changing an application token in a sandbox isn't supported. To change an application token, you should disable the sandbox, change the application token, and then re-enable a sandbox.

## Connected tables (Quick Base Sync)

- If your app uses connected tables (also known as Quick Base Sync), scheduled refreshes only occur in the live app. Within the sandbox, you can still manually refresh data in by clicking the refresh button.

- You can't create a connected table with the source table originating from a sandbox. The source table needs to exist in the live app.

## Formulas using AppId or Dbid

In a sandbox, note the values returned by the AppID or Dbid formula functions are IDs from the sandbox itself. These values don't appear as tracked changes and don't affect the live app when changes are published.

If your live app uses hard-coded AppID or Dbid values, upon creation the sandbox scans for these values and translates them to values that will work within the sandbox. These values are not tracked changes and don't affect the live app when changes are published. The values are changed back to the live app IDs when sandbox changes are published.

If you create or edit a formula in a sandbox, you may include hard-coded references to the live app or the sandbox. Your hard-coded references to the live app will be published as-is, however, hard-coded references to the sandbox will be translated to the equivalent live app IDs when changes are published.

## Modifying values in shared fields

Text and numeric fields can be set to use values from shared fields. For shared fields in the sandbox, any changes to values are data changes, not schema changes, so these updates are not tracked.

## Reports

### Common (shared) reports

For a sandbox-enabled app, creation or changes to common (shared) reports must be made in the sandbox and are tracked as changes. Common reports can't be created in the live app.

### Personal reports

Changes to personal reports should be made in the live app. Currently, it is possible to create or make changes to personal reports in the sandbox, but these changes are not tracked and won't be published.

**Roles that can save common reports**

You can configure role permissions to allow any individual roles to save common reports in specific tables. Currently, this permission won't work in a live app with the sandbox feature enabled. All common reports must be created or updated in a sandbox.

## Sandbox visibility to other apps

In general, other apps will not be able to access sandboxes. Here are two examples:

- When using the App Management feature **Move a table into this app**, sandboxes don't appear in the list of apps from which you can move a table.

- You can't create a connected table with the source table originating from a sandbox. The source table needs to exist in the live app.

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