Data Gatekeeper

Operational Basics



NAVCRE DEVELOPMENT

Hello, welcome to the Data Gatekeeper classroom. In today's presentation, we will learn the operational basics.

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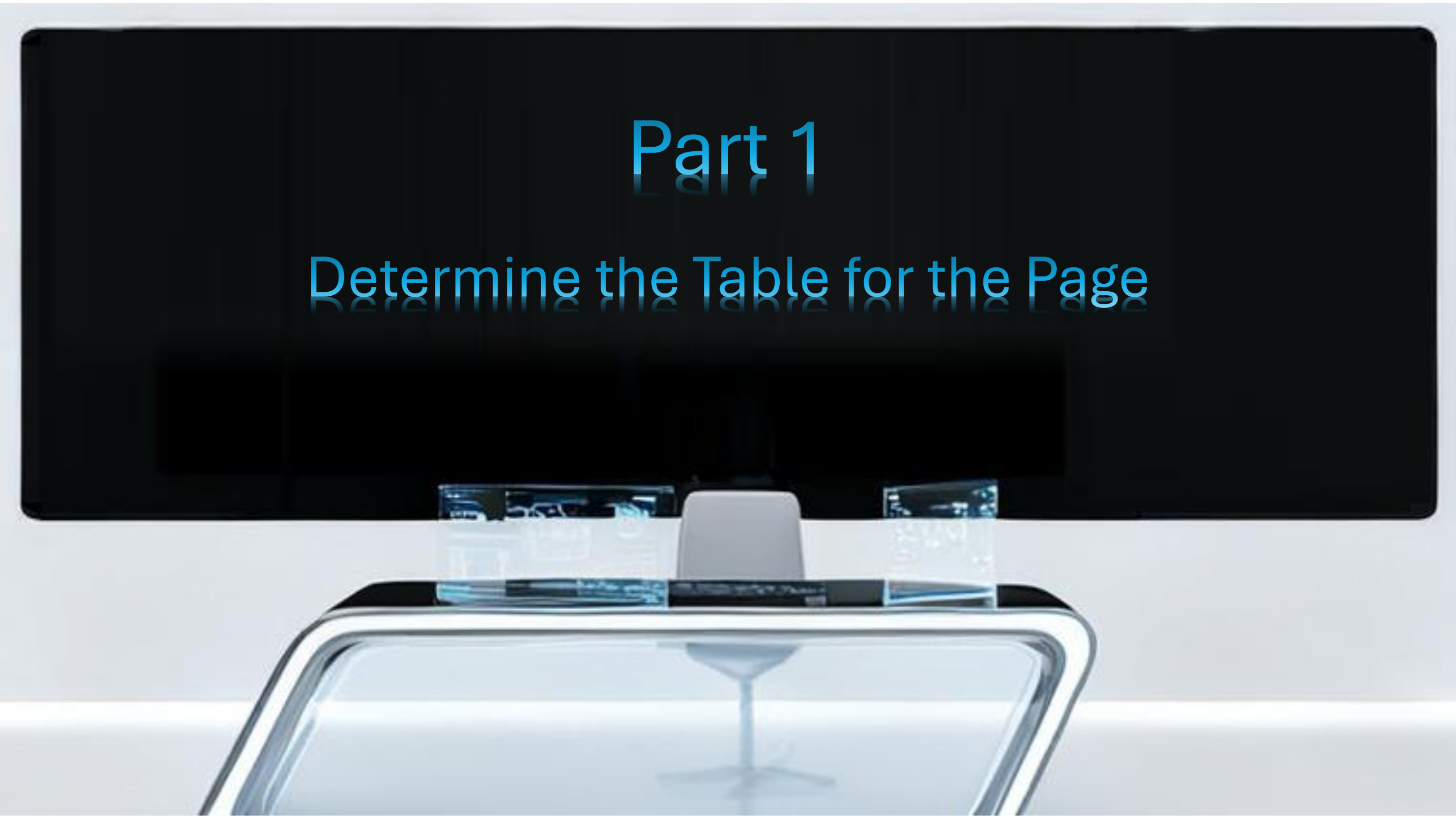
See Data Gatekeeper in Action

Part 1 – The Data Gatekeeper FactBox and Record Restriction

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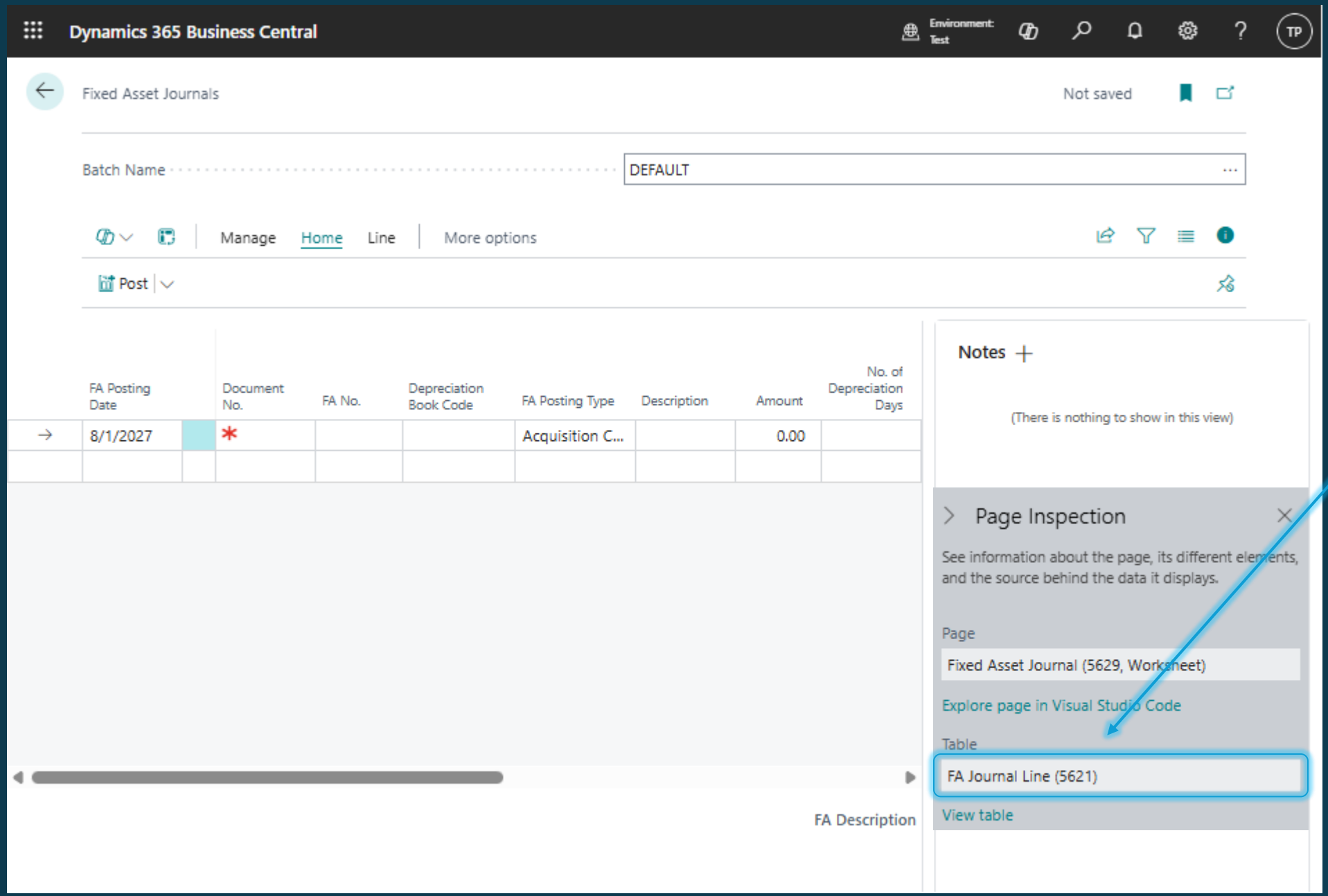
Part 4 – Data and Approval Trail



Part 1

Determine the Table for the Page

We will use the Fixed Asset Journals page as the basis for this lesson.



Here we see the standard interface without the Data Gatekeeper FactBox.

Suppose we want every line to require approval before posting.

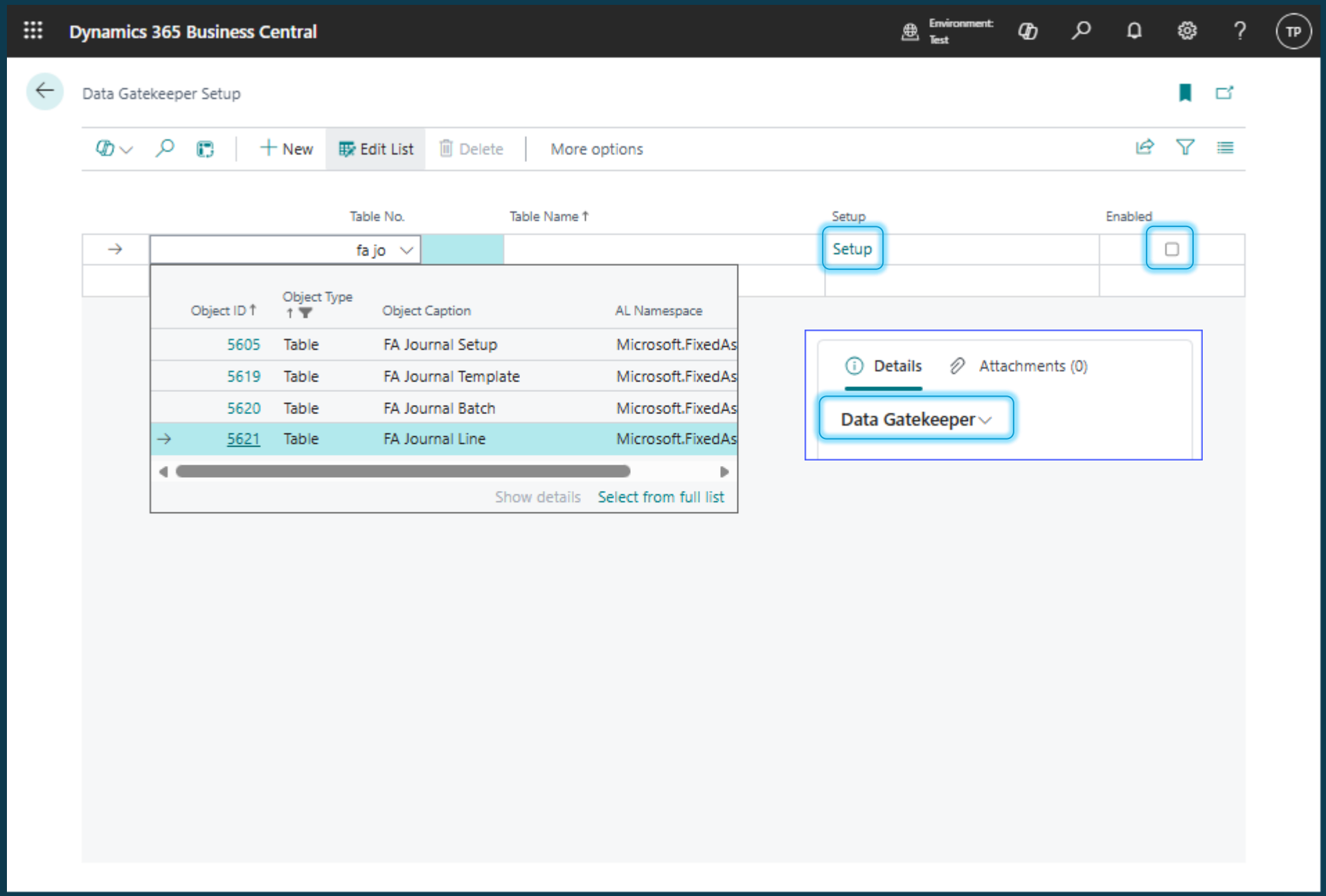
Using Page Inspection, we can see that the lines belong to the FA Journal Line table.



Part 2

Adding the Data Gatekeeper FactBox

Adding the Data Gatekeeper FactBox



To add the FactBox to the Fixed Asset Journals page, we only need to add the FA Journal Line to the Data Gatekeeper Setup list and mark it as Enabled.

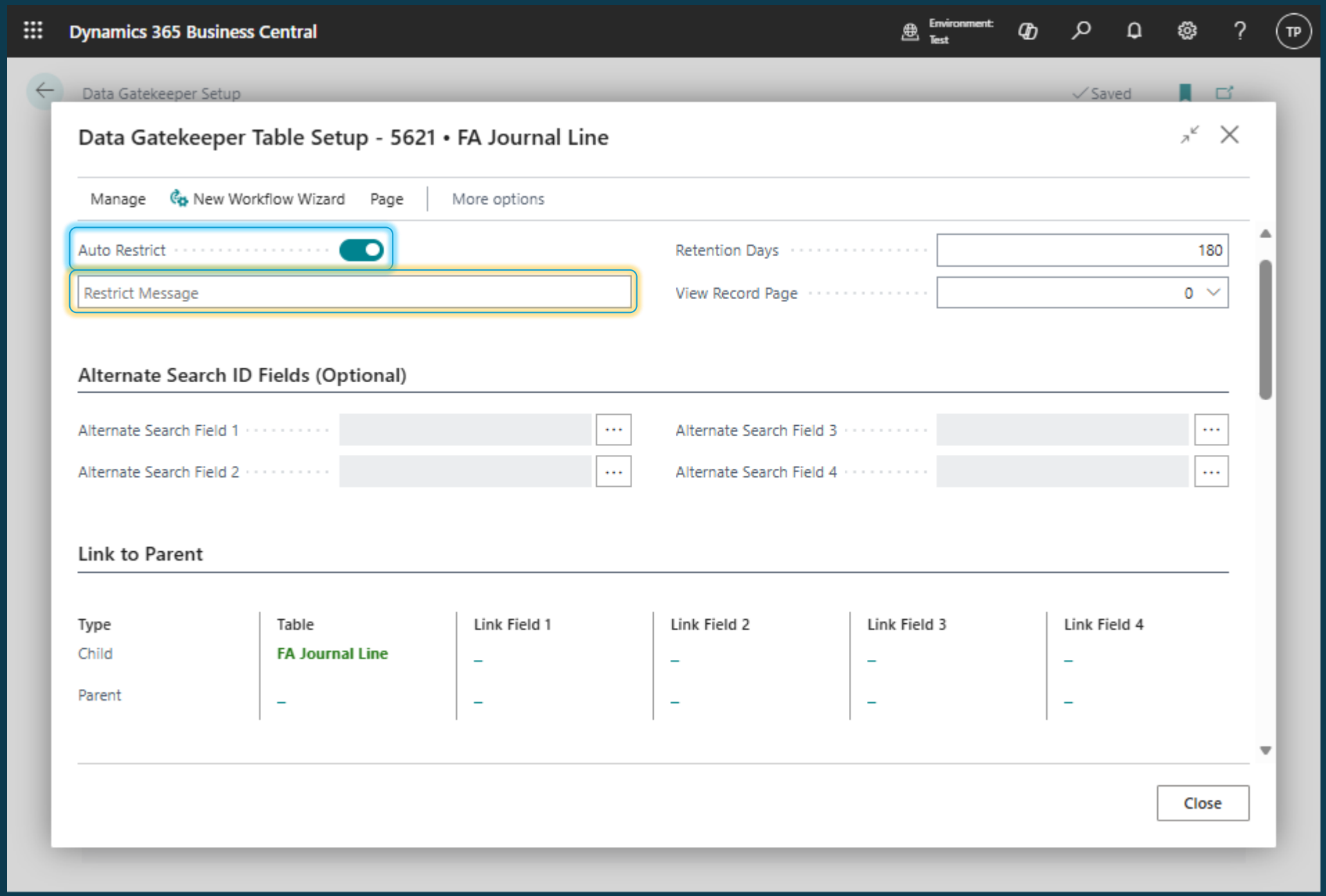
However, since we want the line to be approved before it can be posted, we must set it up by entering the Setup page for this table.



Part 3

Restricting and Requiring Approvals

Auto Restriction



The easiest way to require every line to be approved before it can be posted is to enable Auto Restrict.

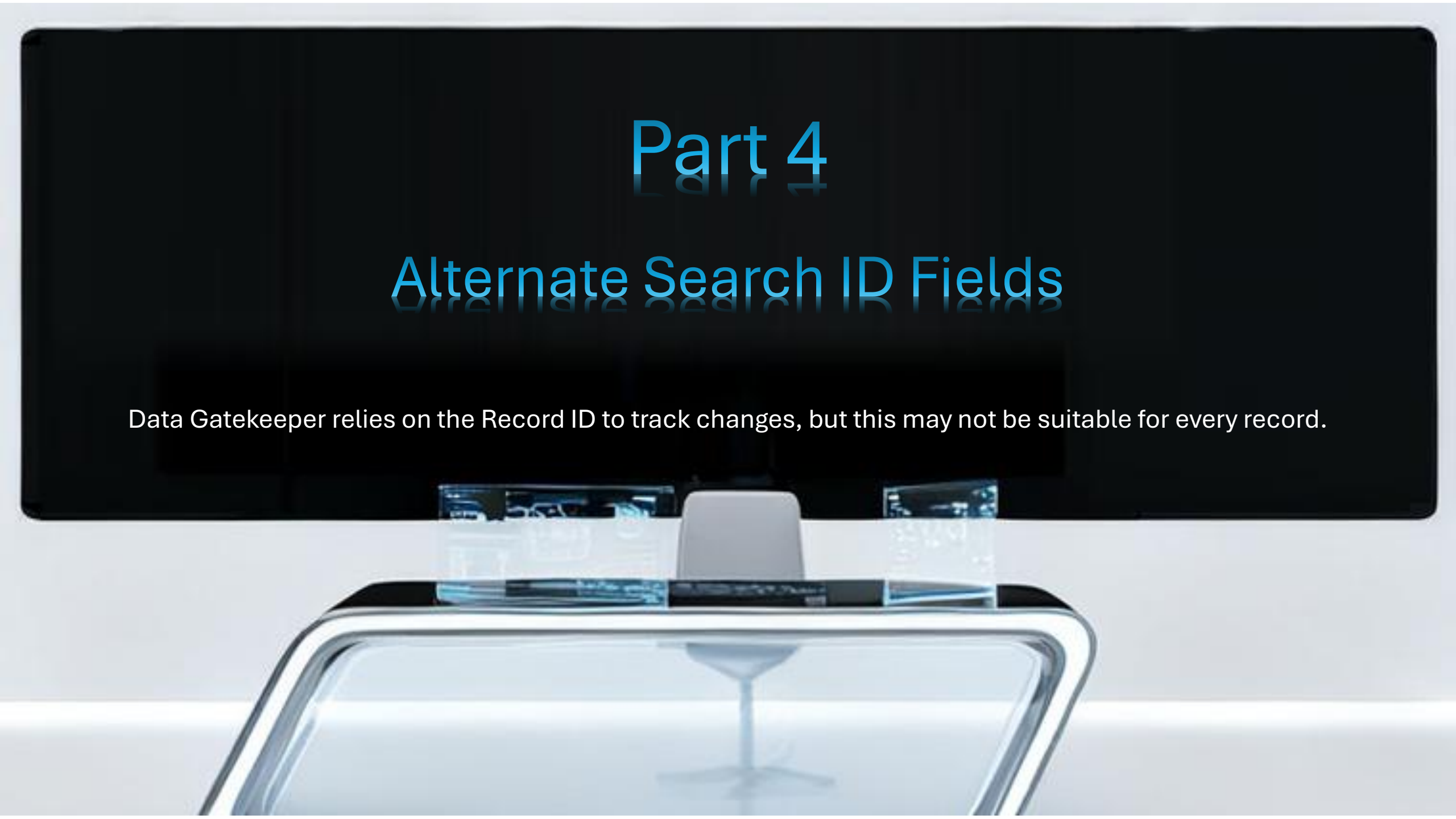
You can customize the Restrict Message with something that's more meaningful to your users, such as "All lines must be approved before the journal can be posted."

Or leave it blank for a generic message "This record is restricted because of unapproved changes."

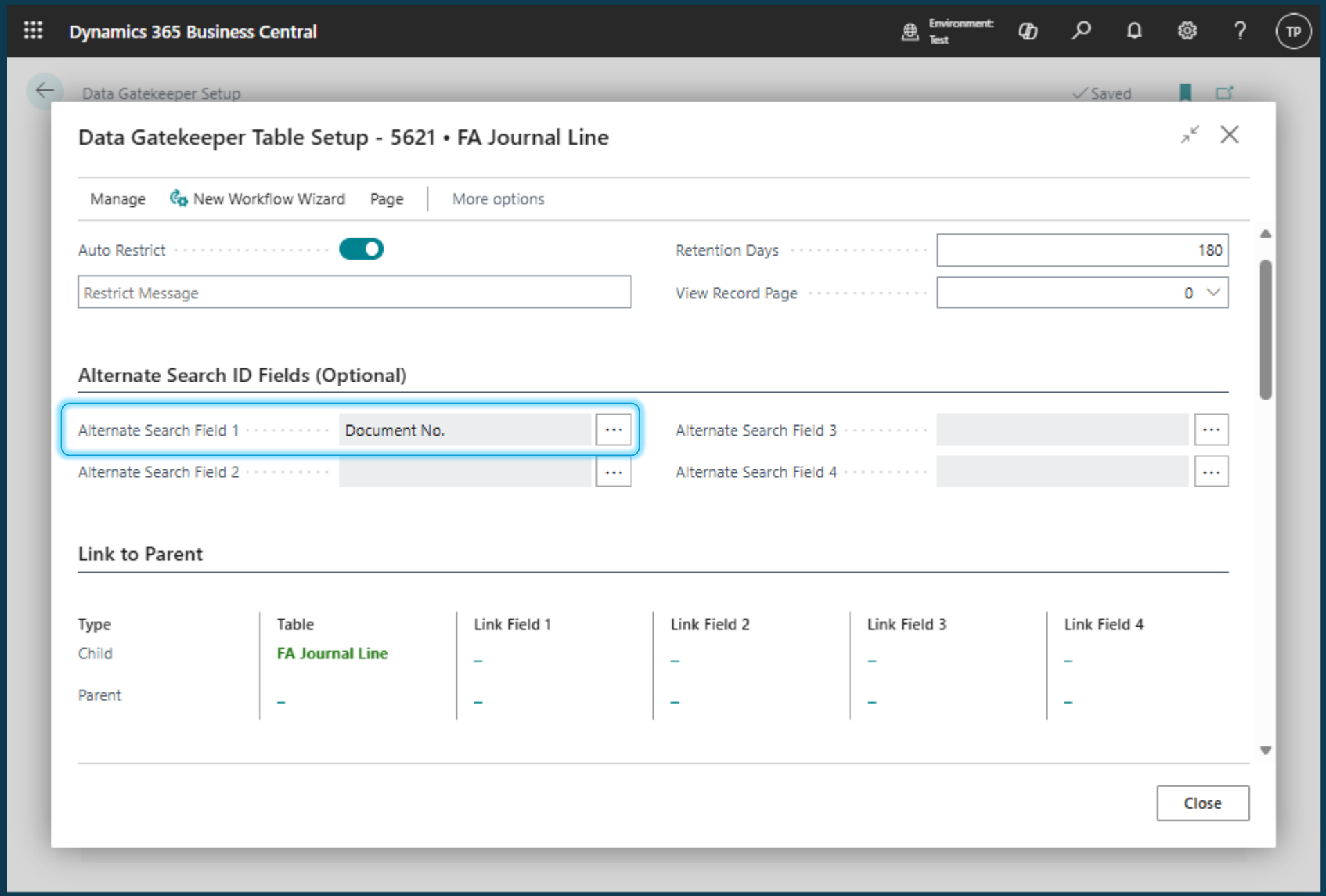
Part 4

Alternate Search ID Fields

Data Gatekeeper relies on the Record ID to track changes, but this may not be suitable for every record.



Setting the Alternate Search ID fields



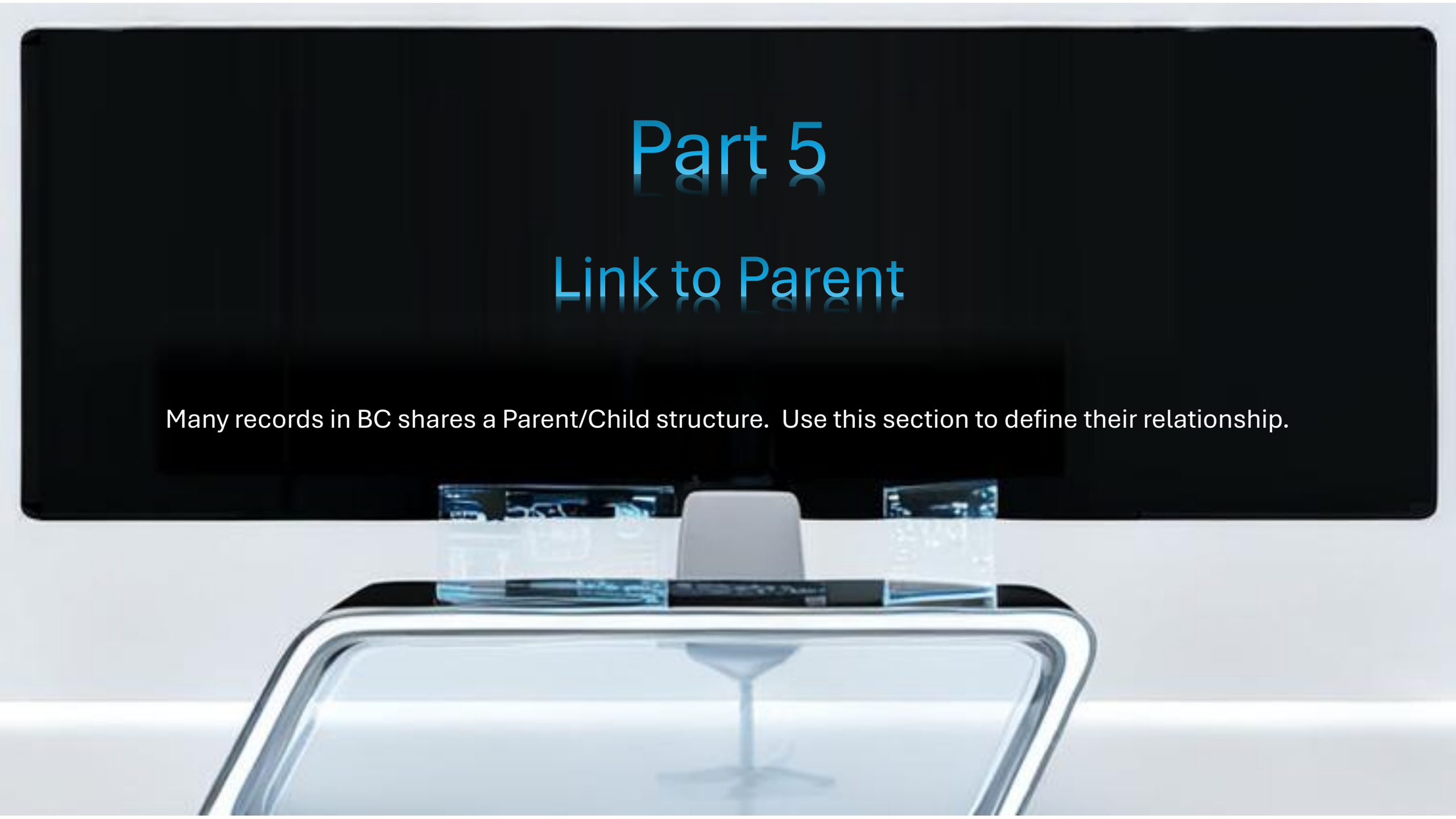
For tables where data remains in place, such as the Customer table, an Alternate Search ID Field is not required.

However, for tables like Journals, the data is moved to a different table when posted. Because the Record ID changes during this move, Data Gatekeeper must use an alternate identifier to locate the log entry. The Alternate Search ID field(s) help Data Gatekeeper find the log entry in the corresponding table.

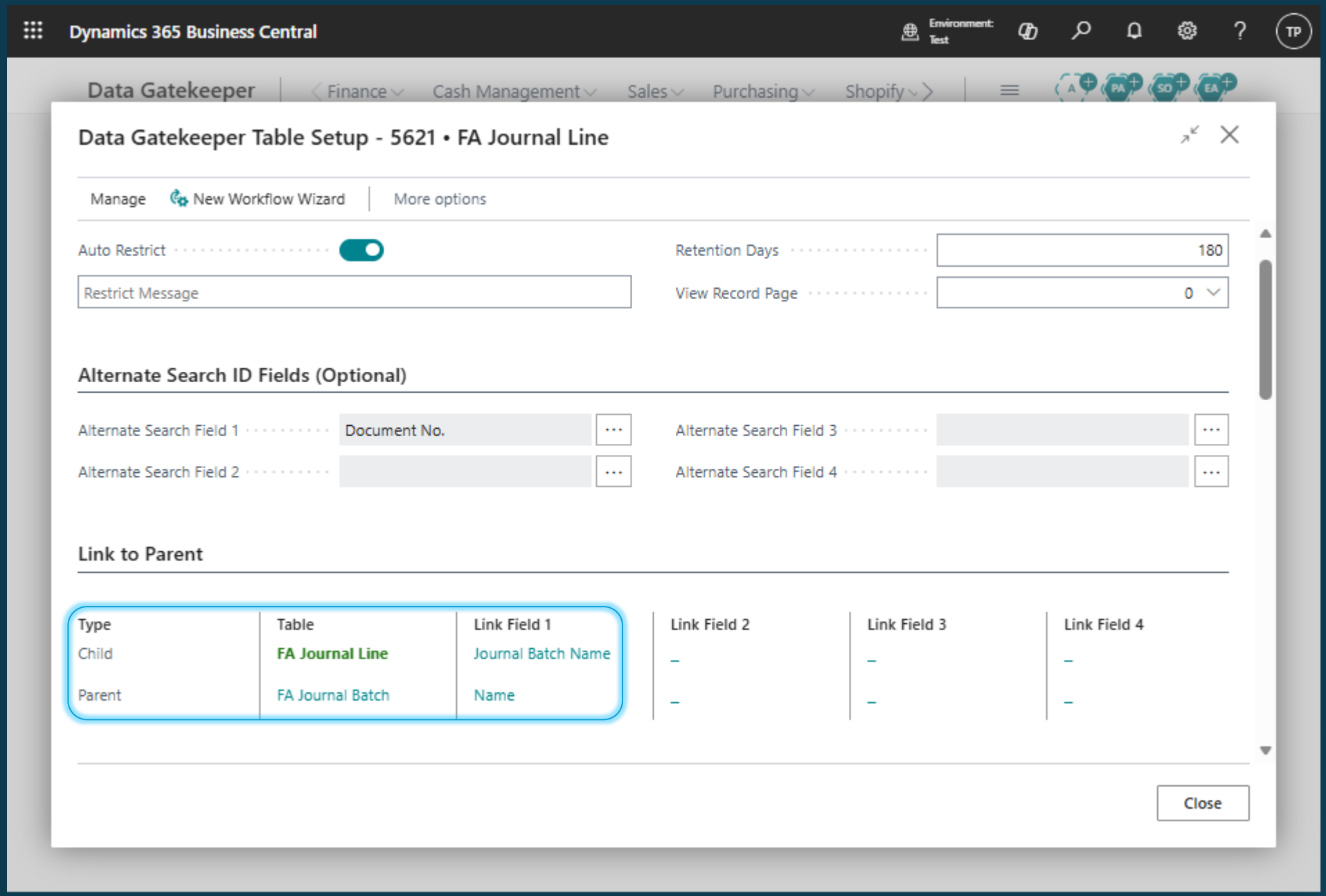
Part 5

Link to Parent

Many records in BC shares a Parent/Child structure. Use this section to define their relationship.



Link to Parent



This setting is required for relational operations such as automatically restricting a parent when a child record changes, or auto committing and linking child-record changes to the parent when it is approved.

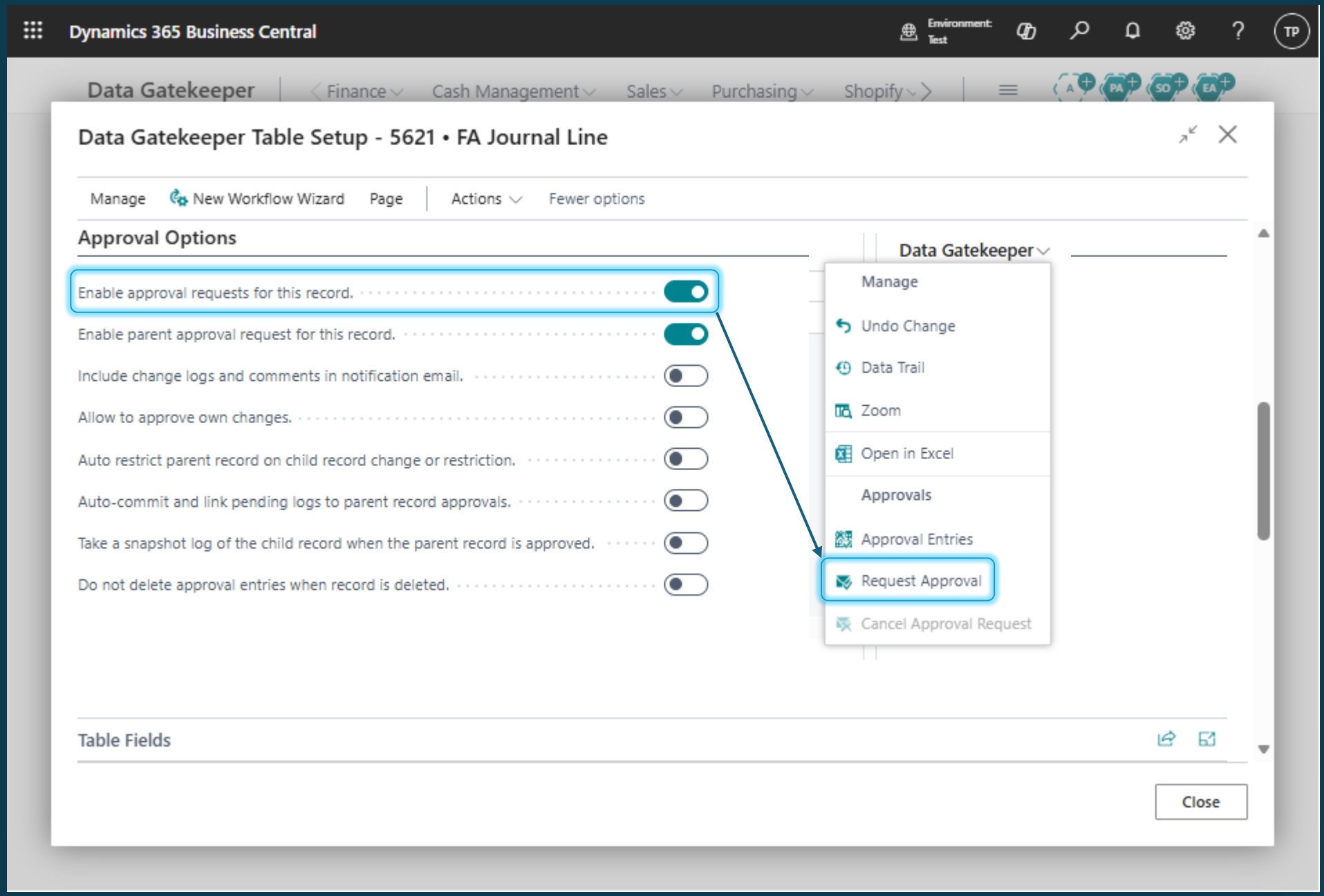
The Child table is the table being set up and cannot be changed. When applicable, choose the respective Parent and set their relational fields.



Part 6

Approval Options

Enable approval requests for this record.

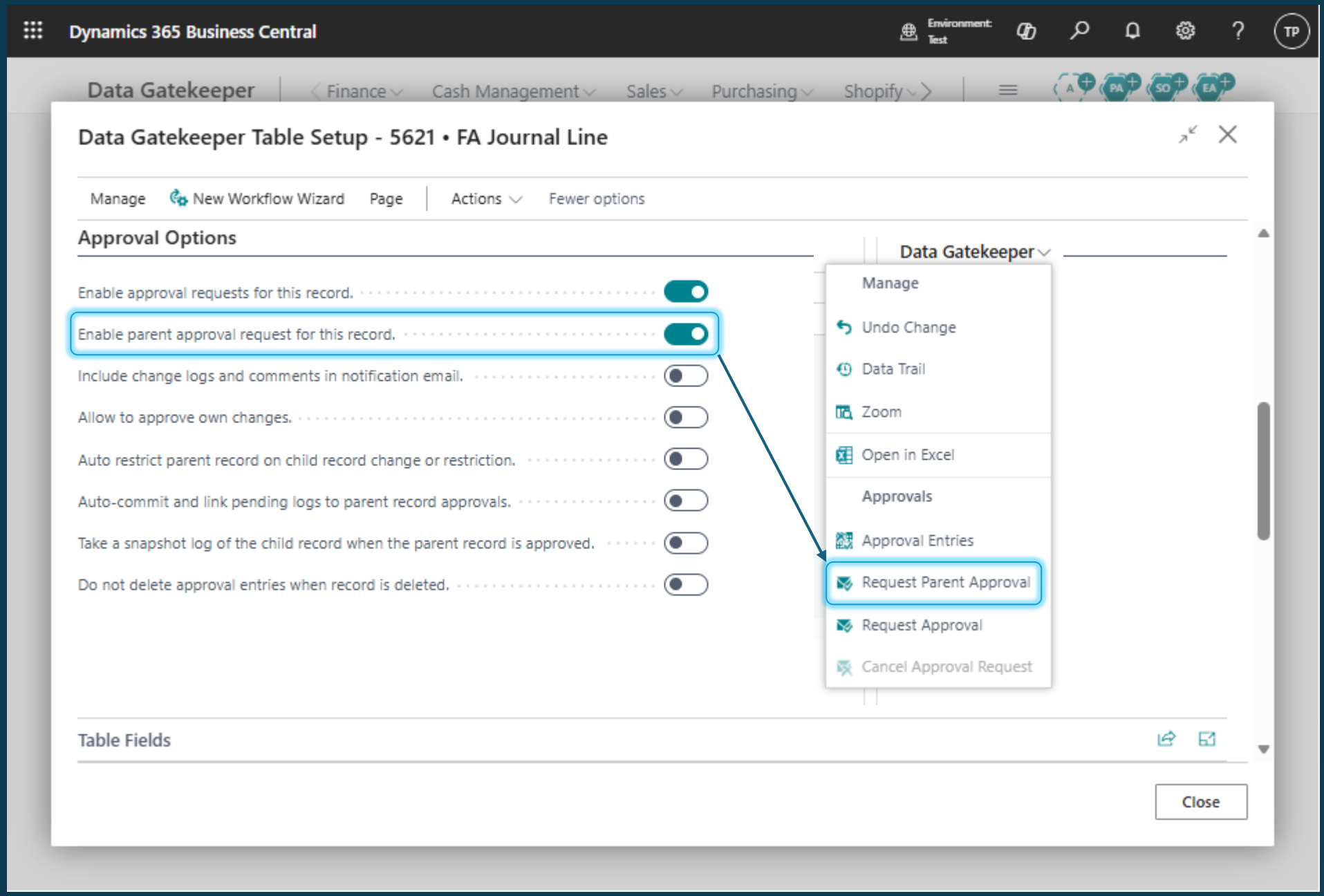


When enabled, the Request Approval action appears in the Data Gatekeeper menu for the record.

Selecting Request Approval initiates the approval workflow.

You can easily create this workflow by using the New Workflow Wizard.

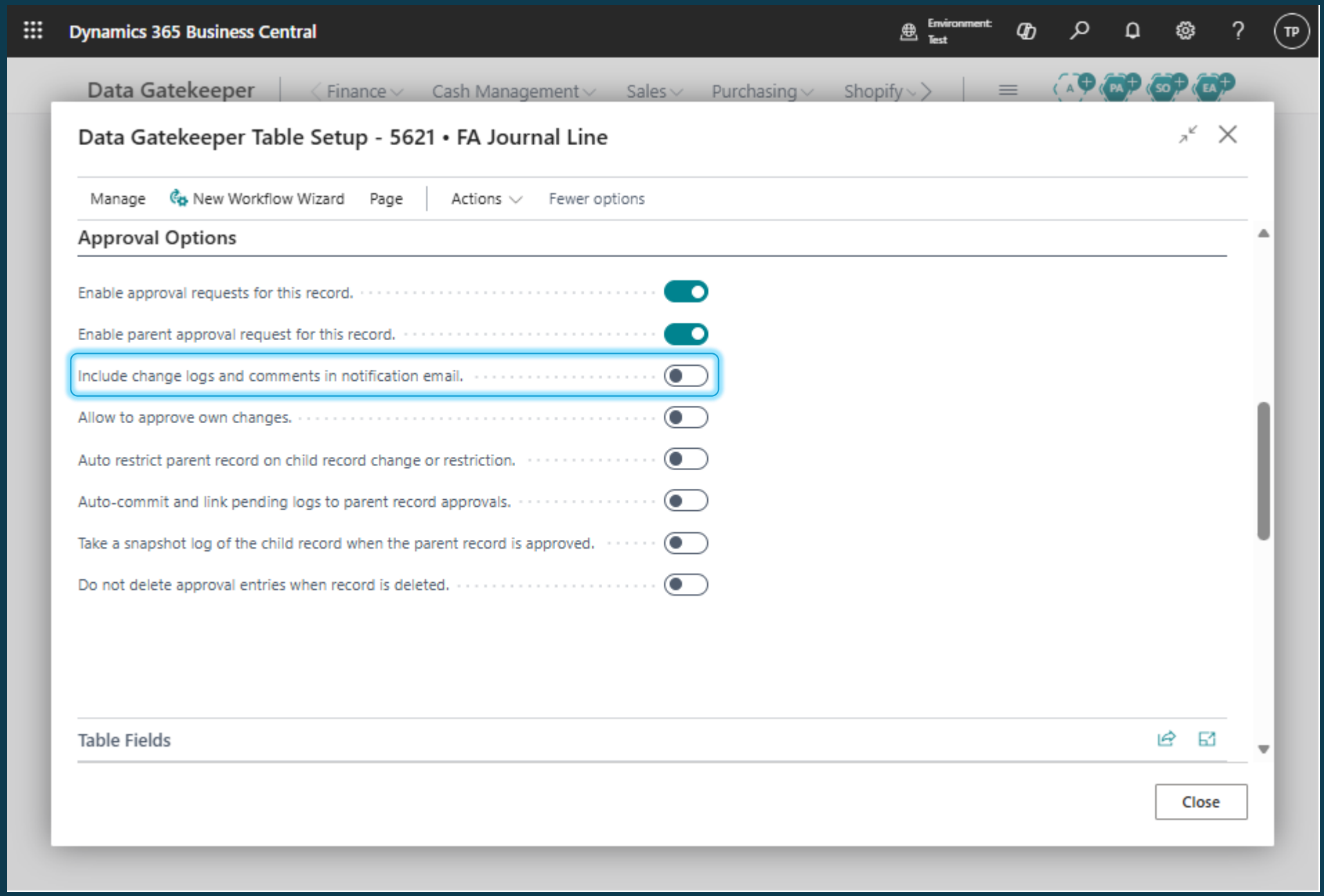
Enable parent approval request for this record.



When enabled, the Request Parent Approval action will appear on the Data Gatekeeper menu for the record.

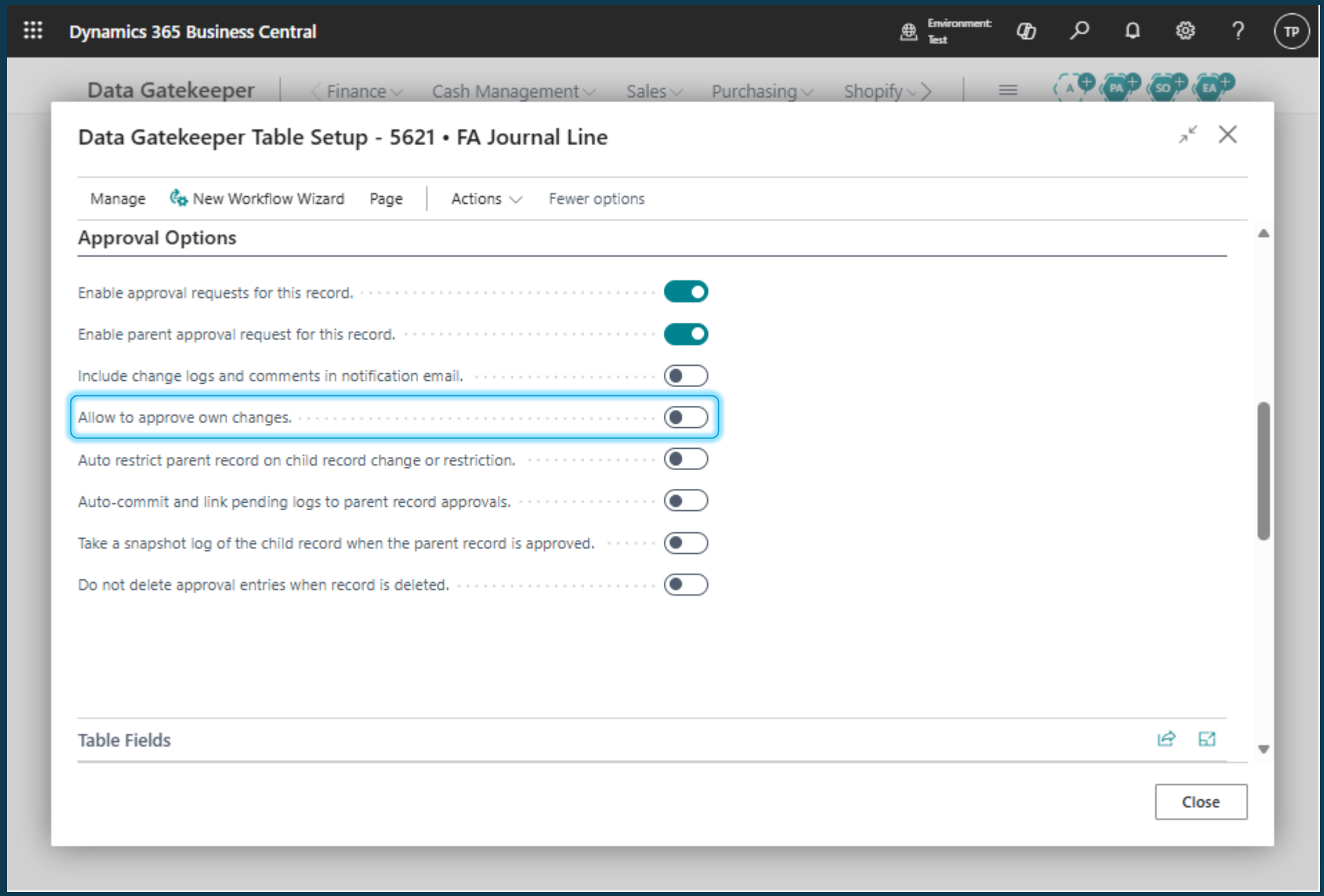
This setting requires the Link to Parent to be set. As the name implies, this will start the workflow for the parent record.

Include change logs and comments in notification email.



When enabled, changes that are pending approval as well as comments associated with the approval will appear in the body of the notification email.

Allow to approve own changes.

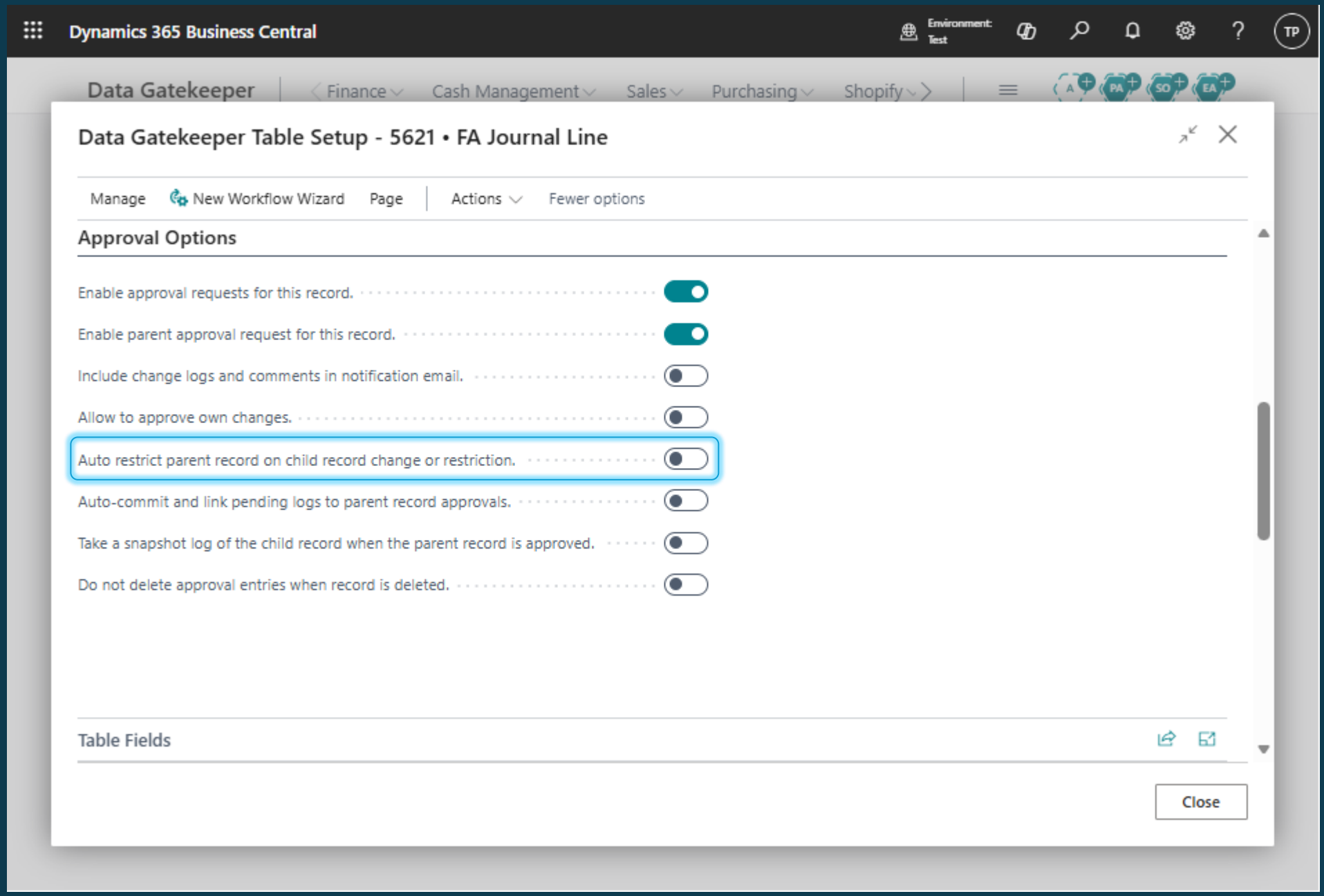


When a requester is also listed as an approver, the standard workflow auto-approves the request—something auditors generally reject.

If this option is NOT enabled, the approval is still captured, but the response is blocked. This prevents users from approving their own changes.

NOTE: Applicable only when more than 1 approver exists for the workflow. Otherwise, approvers can still approve their own changes.

Auto restrict parent record on child record change or restriction.

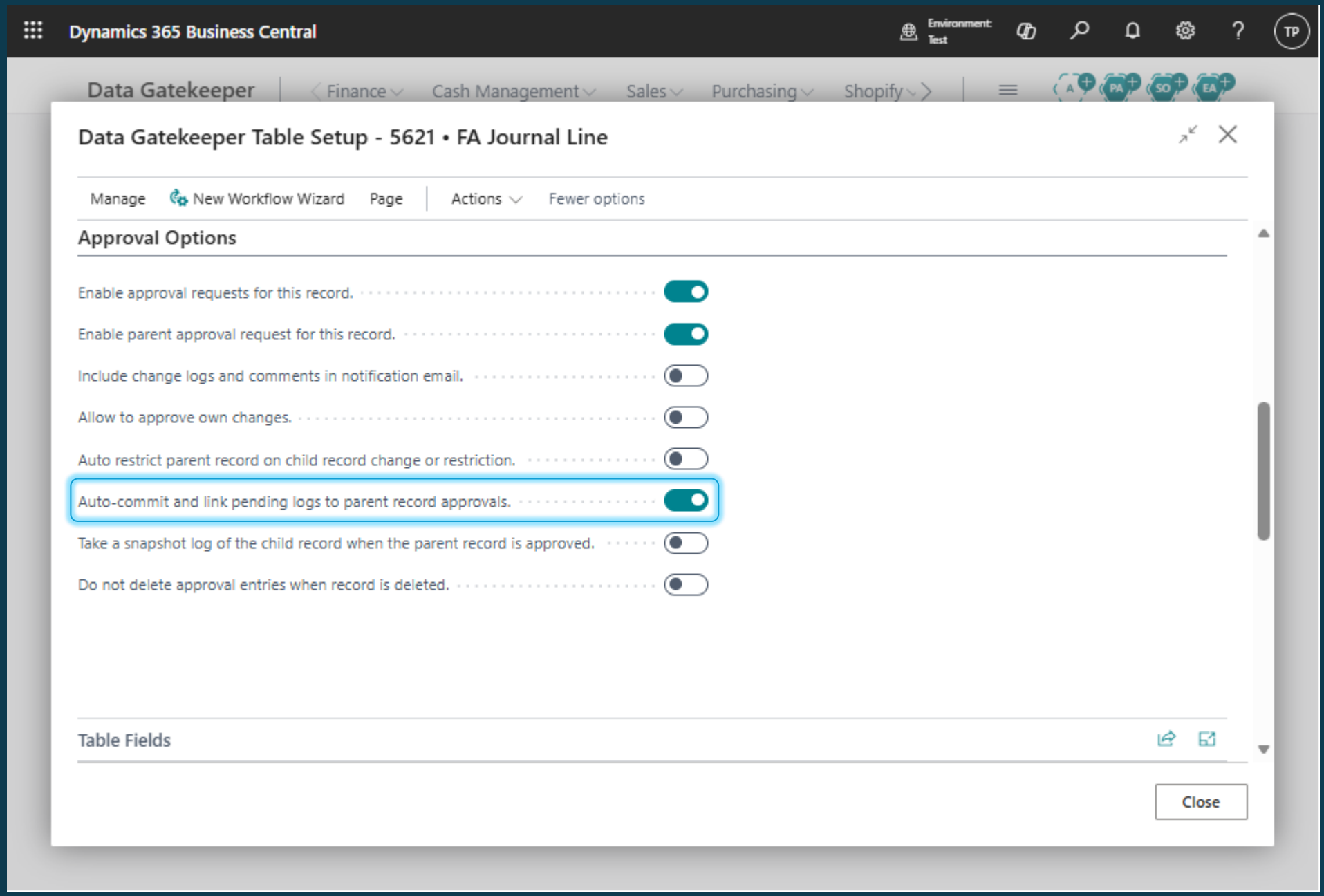


When enabled, any change or restriction in a child record will automatically trigger a restriction on its parent record.

This is useful when you need to restrict related records—such as a Customer or Vendor—when a dependent record, such as a bank account, was modified.

Standard workflows that validate the Customer or Vendor can then take effect naturally.

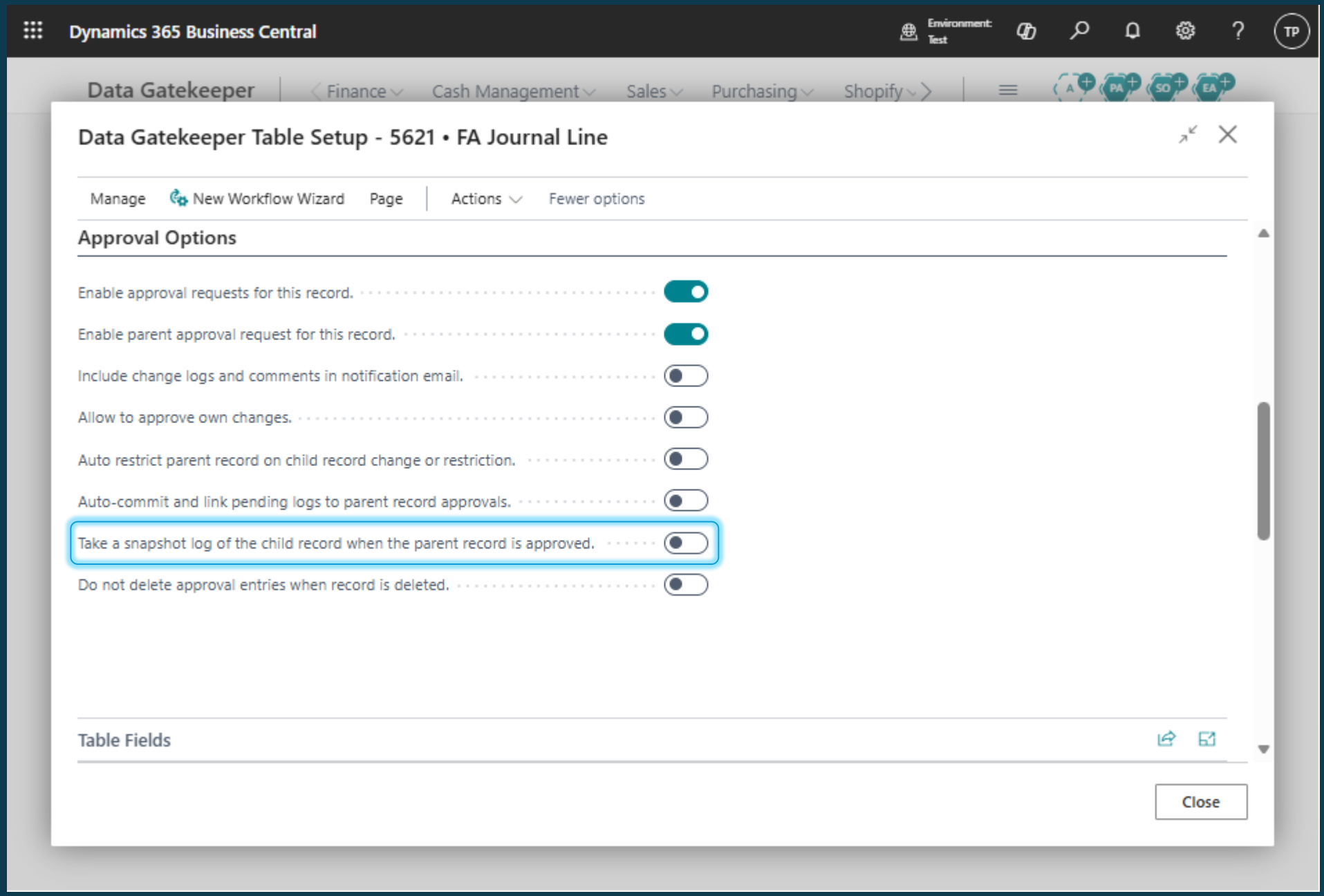
Auto-commit and link pending logs to parent record approvals.



When changes to a record is approved, related log entries are committed.

With this option enabled, child records can use the parent's approval to commit their own pending changes—providing child-level approval for child-level updates.

Take a snapshot log of the child record when the parent record is approved.

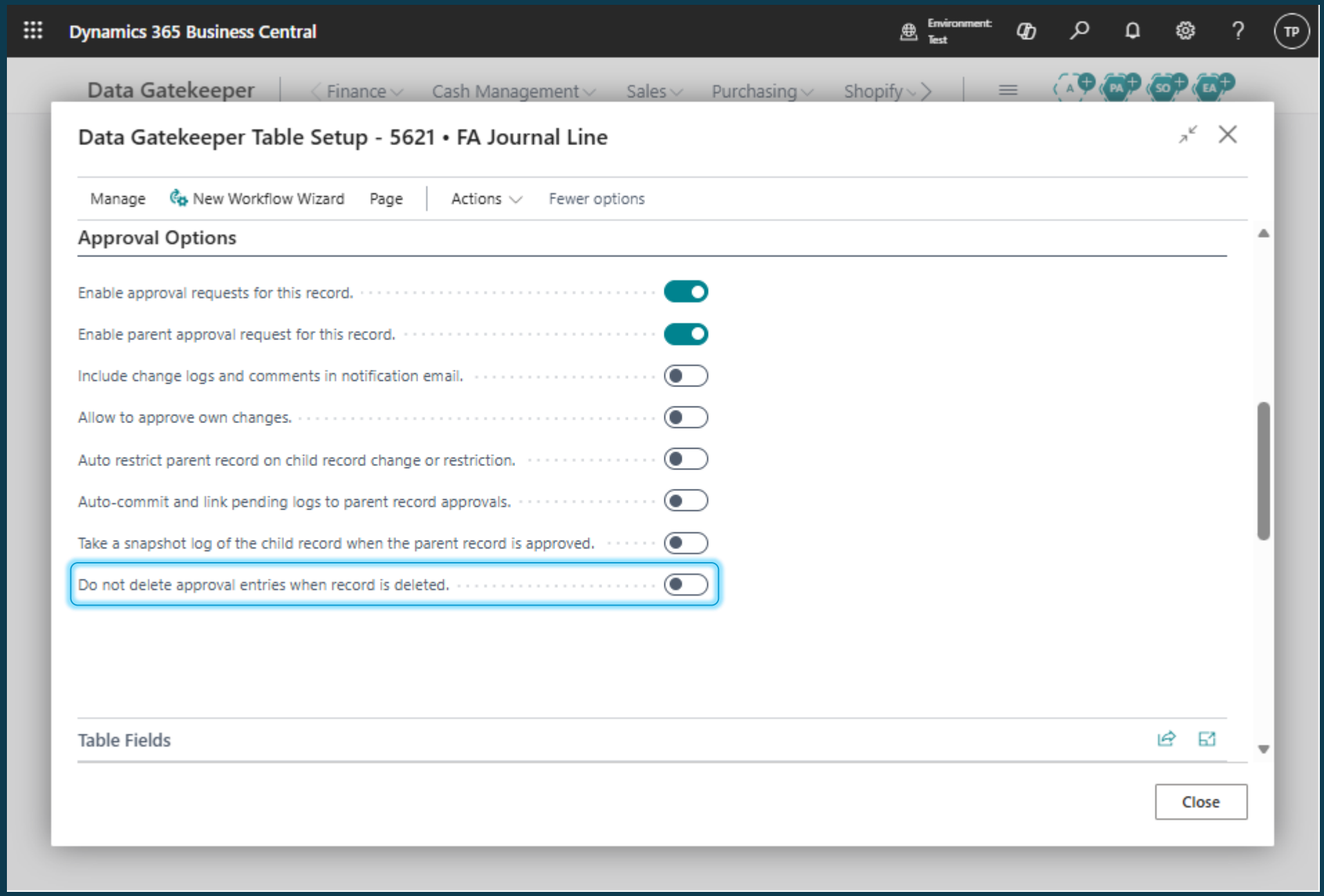


Getting a log of every change can be overwhelming, so Data Gatekeeper introduces a snapshot option.

When this is enabled, the system will capture a snapshot of the child record when the parent record is approved.

NOTE: Child records must have fields with Snapshot checked for snapshot logs to take effect.

Do not delete approval entries when record is deleted.



By default, Business Central will delete approval entries that are linked to a record that's deleted.

When this is enabled, approval entries for a deleted record will remain which may be necessary for audit compliance.

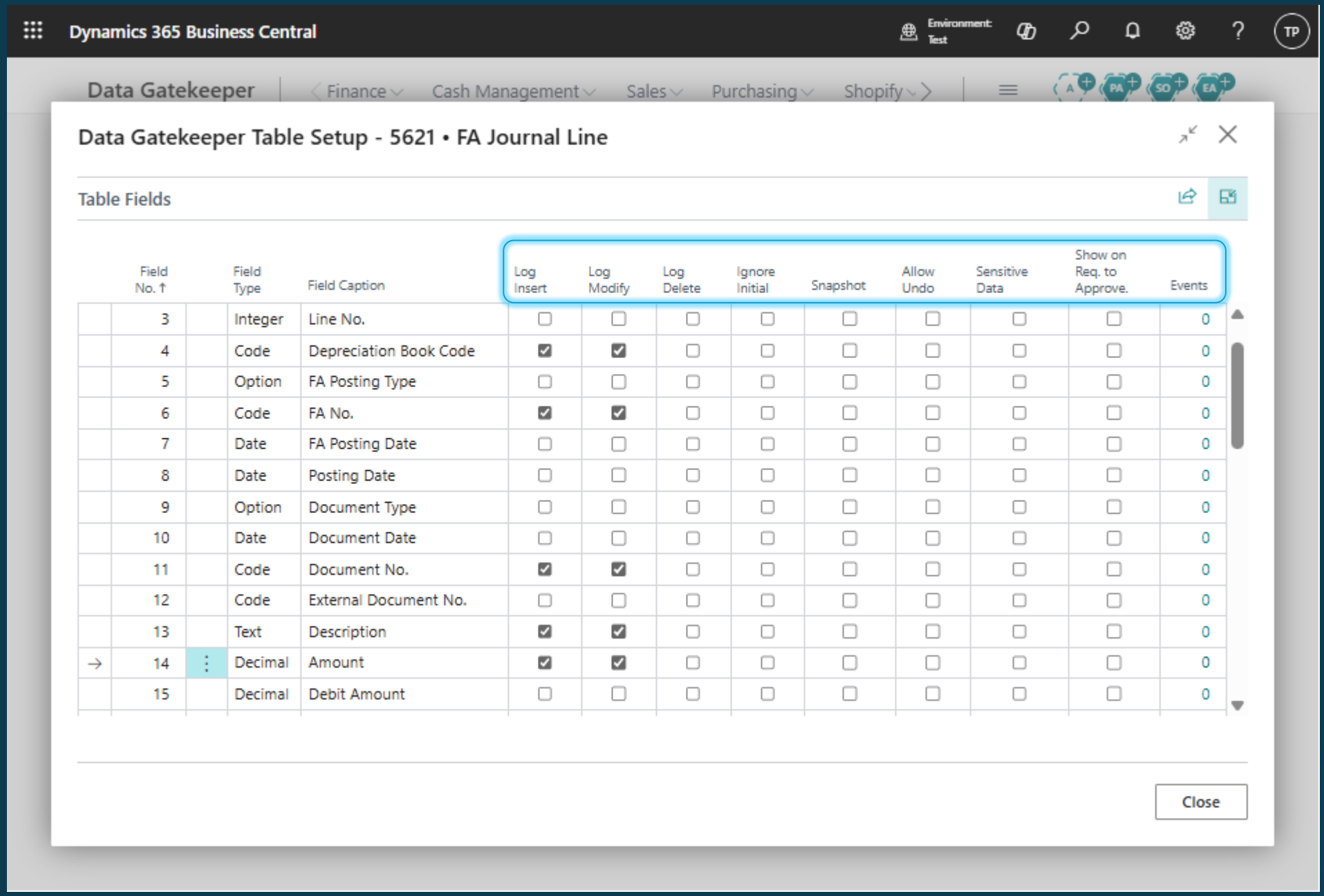
Since the record has been deleted, the only way to see the approval entries is through the Data Trail report.



Part 7

Table Field Logging Options

Table Field Logging Options



Field No.	Field Type	Field Caption	Log Insert	Log Modify	Log Delete	Ignore Initial	Snapshot	Allow Undo	Sensitive Data	Show on Req. to Approve.	Events
3	Integer	Line No.	☐	☐	☐	☐	☐	☐	☐	☐	0
4	Code	Depreciation Book Code	☑	☑	☐	☐	☐	☐	☐	☐	0
5	Option	FA Posting Type	☐	☐	☐	☐	☐	☐	☐	☐	0
6	Code	FA No.	☑	☑	☐	☐	☐	☐	☐	☐	0
7	Date	FA Posting Date	☐	☐	☐	☐	☐	☐	☐	☐	0
8	Date	Posting Date	☐	☐	☐	☐	☐	☐	☐	☐	0
9	Option	Document Type	☐	☐	☐	☐	☐	☐	☐	☐	0
10	Date	Document Date	☐	☐	☐	☐	☐	☐	☐	☐	0
11	Code	Document No.	☑	☑	☐	☐	☐	☐	☐	☐	0
12	Code	External Document No.	☐	☐	☐	☐	☐	☐	☐	☐	0
13	Text	Description	☑	☑	☐	☐	☐	☐	☐	☐	0
→ 14	Decimal	Amount	☑	☑	☐	☐	☐	☐	☐	☐	0
15	Decimal	Debit Amount	☐	☐	☐	☐	☐	☐	☐	☐	0

In addition to the standard log on Insert, Modify, and Delete.

Data Gatekeeper introduces:

- ❑ Ignore Initial
- ❑ Snapshot
- ❑ Allow Undo
- ❑ Sensitive Data
- ❑ Show on Req. to Approve
- ❑ Events

Table field logging options.

- ❑ Ignore Initial
  Ignore the change if it is the first or initial value for the field. Even if the field was changed multiple times, it will be ignored as an initial value until Data Gatekeeper flushes or commits the change. NOTE: Ignored values can still appear in the Data Gatekeeper FactBox, but it will be discarded before changes are committed.

- ❑ Snapshot
  Use this option if you want to reduce stress on the system by not monitoring for every modification but rather, take a snapshot of field values when an event occurs, such as when an approval request is approved or a field value meets certain conditions. NOTE: Snapshots will not be taken of fields that have an initial value, and the Ignore Initial is checked.

- ❑ Allow Undo
  Allow users to undo the change/restore the value to what it was before. WARNING: This should only be set for fields that users can edit, not for fields that can only be programmatically set since it can potentially allow users to undo changes that were programmatically set.

- ❑ Sensitive Data
  Mark the field as containing sensitive data. This will cause the field to be masked under the Data Gatekeeper FactBox, Data Trail report, and in the notification email. This is useful for fields that contain sensitive information such as Tax ID and Bank Account Numbers.

- ❑ Show on Req. to Approve
  If checked, the field will be loaded into the Data Gatekeeper • Record Preview FactBox when the record is viewed in the Request to Approve page. This helps approvers quickly see the relevant data without having to open the record.

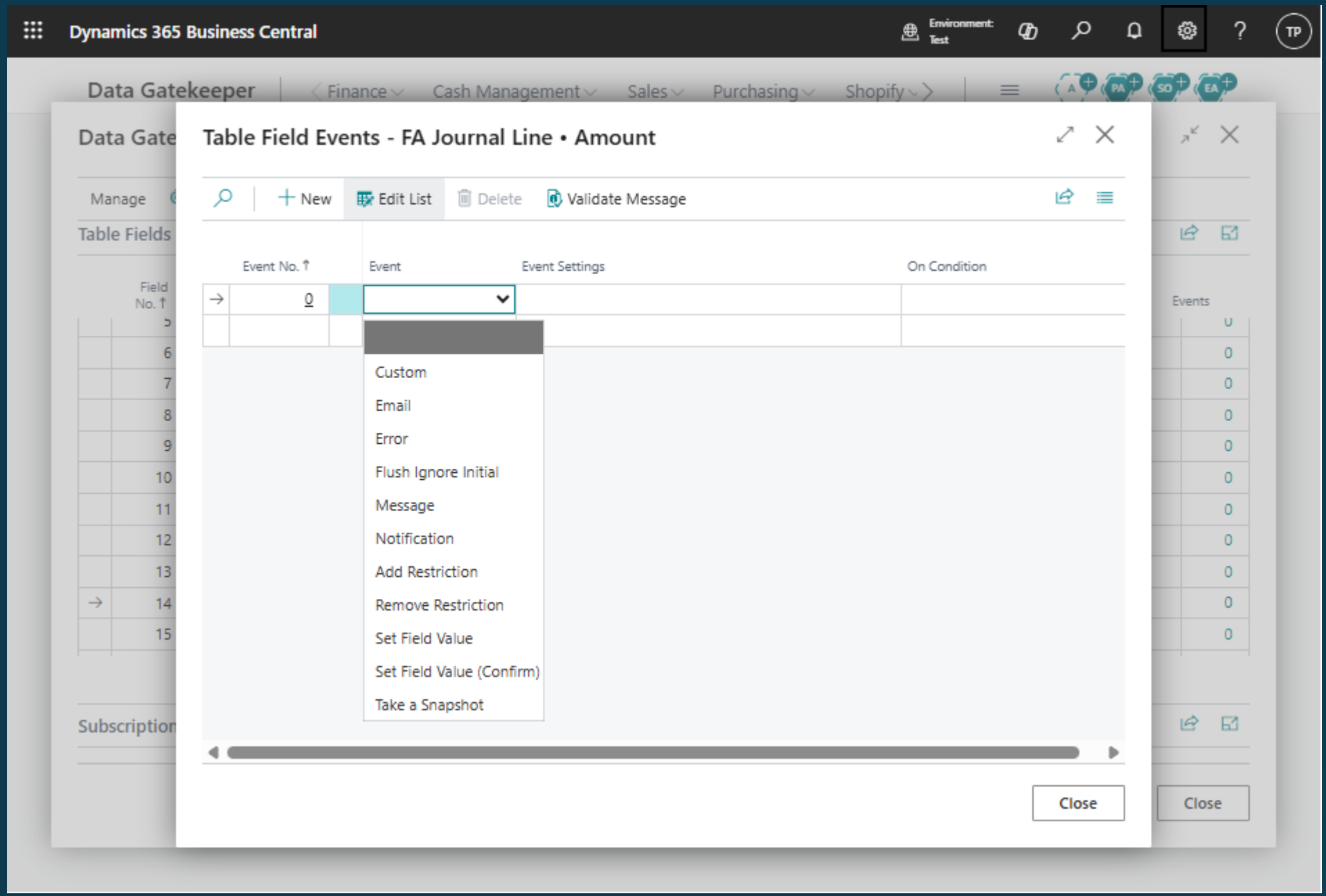
- ❑ Events
  Allows you to conditionally run events when the field's value changes. The number indicates how many events were setup for the field. Click on the field value to bring up the Field Events setup screen.



Part 8

Table Field Events

Table Field Events



This isn't the typical field monitor and notify like the built-in Business Central field monitor.

Data Gatekeeper field event allows for advance, conditional responses to field level changes.

This is an extremely powerful feature that will give you more control over your data.

Table Field Events

Custom
This is only applicable if you need more power and have custom code that you've developed. By subscribing to our custom event, this will execute your custom code.

Email
Send an email.

Error
Display an error message which will prevent the user from updating the field's value.

Flush Ignore Initial
This tells Data Gatekeeper to immediately discard all changes where data in the field was marked as initial value. Any subsequent change will then be marked as a modification.

Message
Display a message but doesn't prevent the user from updating the field's value.

Notification
Display a message in the form of an unobtrusive notification as opposed to a popup message.

Add Restriction
Add a record restriction with a specific message such as, "Amounts over 10K requires approval.". Conditionally set the event to occur only if the Amount field is over 10K, for example. NOTE: This applies only if another restriction doesn't already exist for the record.

Remove Restriction
Remove a record restriction if it has the specific message such as, "Amounts over 10K requires approval.". Conditionally set the event to occur only if the Amount field is less than 10K, for example.

Table Field Events

Set Field Value

Set the value of a field to a specific value when the event occurs. For example, if the Unit Price field is over 1000, set Blocked to True.

Set Field Value (Confirm)

Prompt user to confirm before performing the Set Field Value action. If user cancels, pending changes will be rolled back.

Take a Snapshot

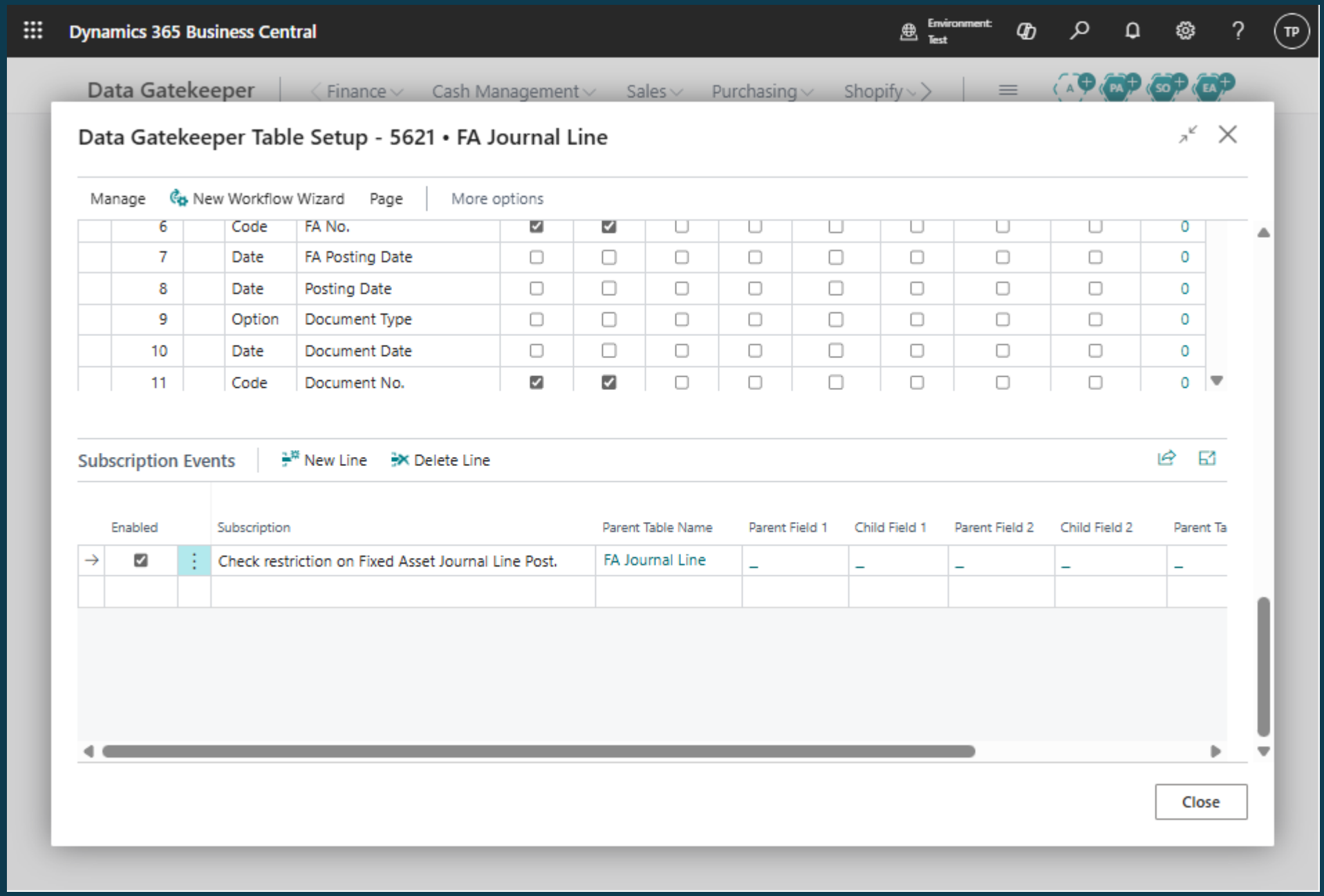
This tells the system to take an immediate snapshot of all fields that have snapshot enabled and immediately commits the log. NOTE: The system relies on pending change logs to automatically restrict/unrestrict the record. If auto restriction is turned on for this record, this will effectively un-restrict the record.



Part 9

Subscription Events

Subscription Events



Record restrictions, alone, will not prevent the record from being used. The system must check if the record is restricted prior to performing an action.

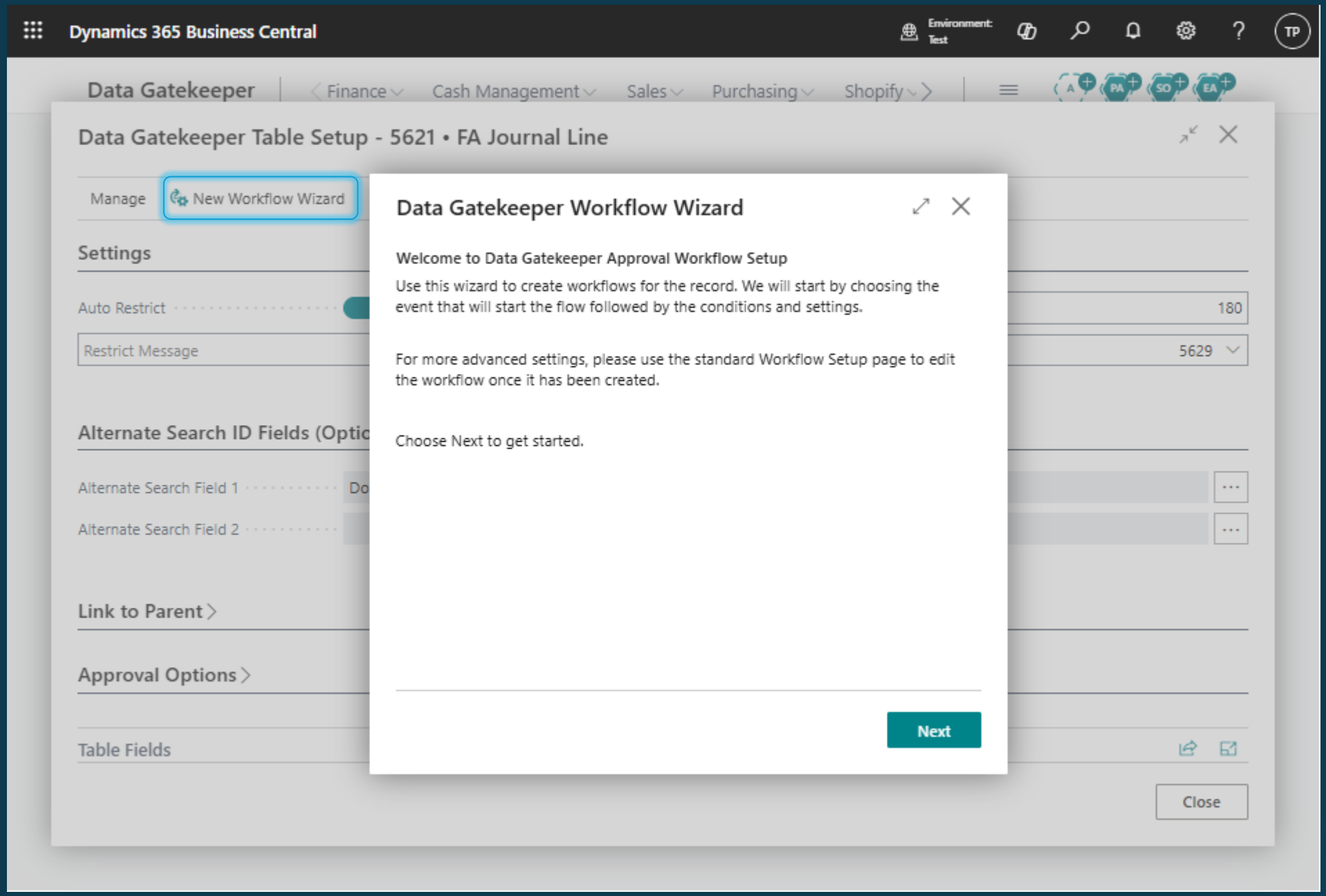
Subscription Events is where we can set this up. The system will perform the check when the selected event occurs.



Part 10

Data Gatekeeper Workflow Wizard

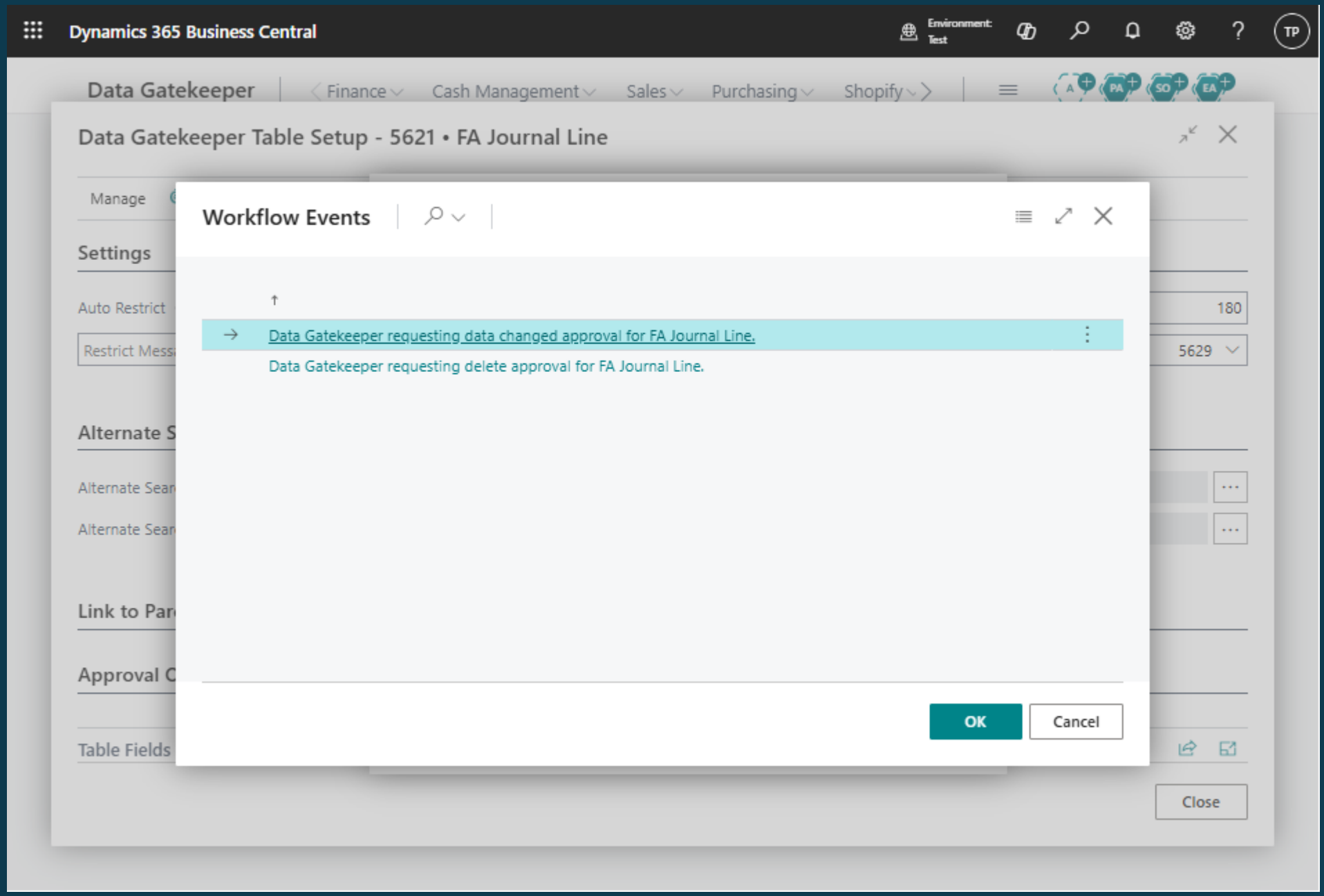
Data Gatekeeper Workflow Wizard



Business Central may not provide a built-in workflow for a given record, but this is not a limitation for Data Gatekeeper.

Use the Workflow Wizard to generate the missing workflow, which can run seamlessly within the standard workflow engine.

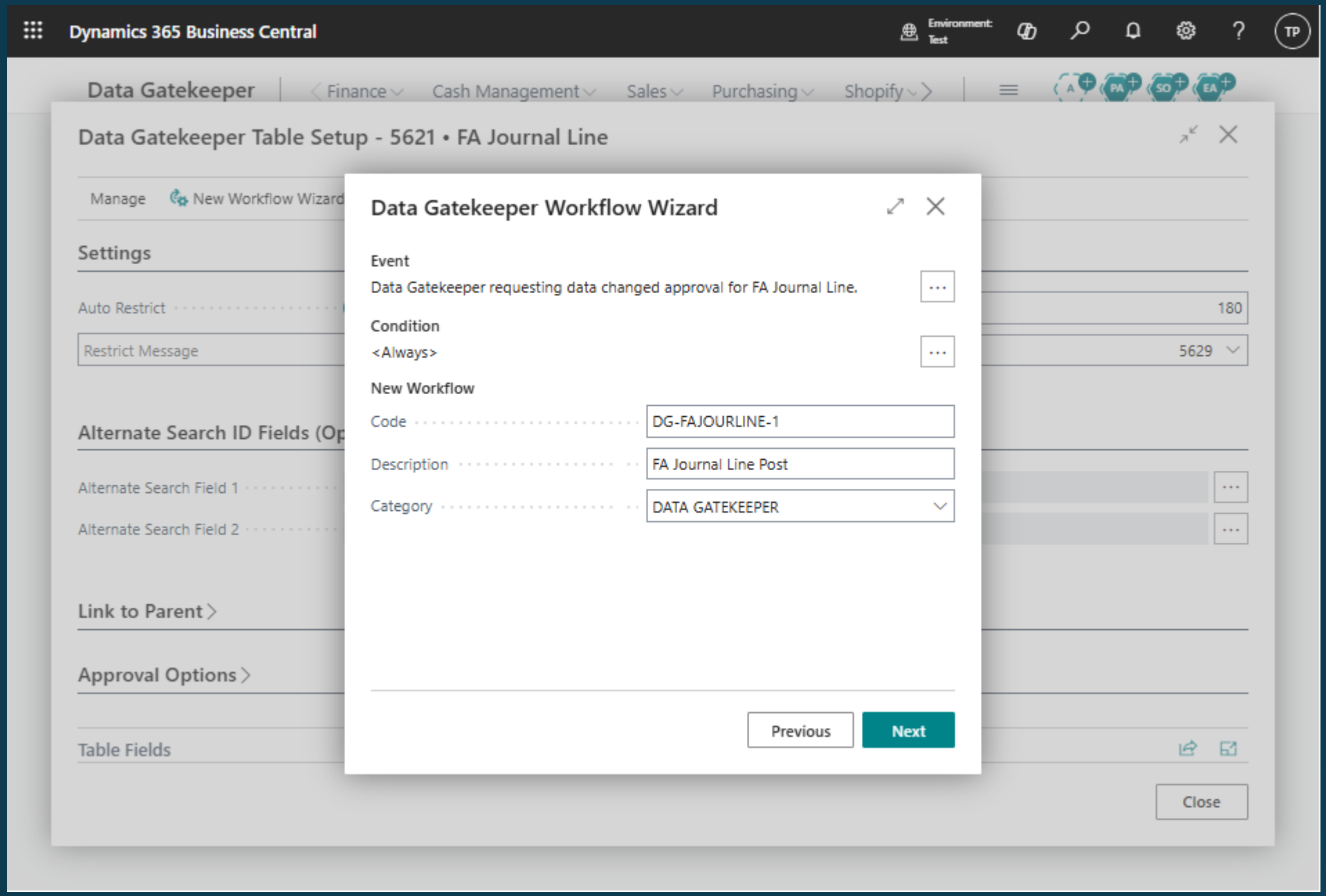
Data Gatekeeper Workflow Wizard



In addition to the standard data changed request, Data Gatekeeper introduces a delete request. But we will save that for another time.

Let's create a request for data changed approval.

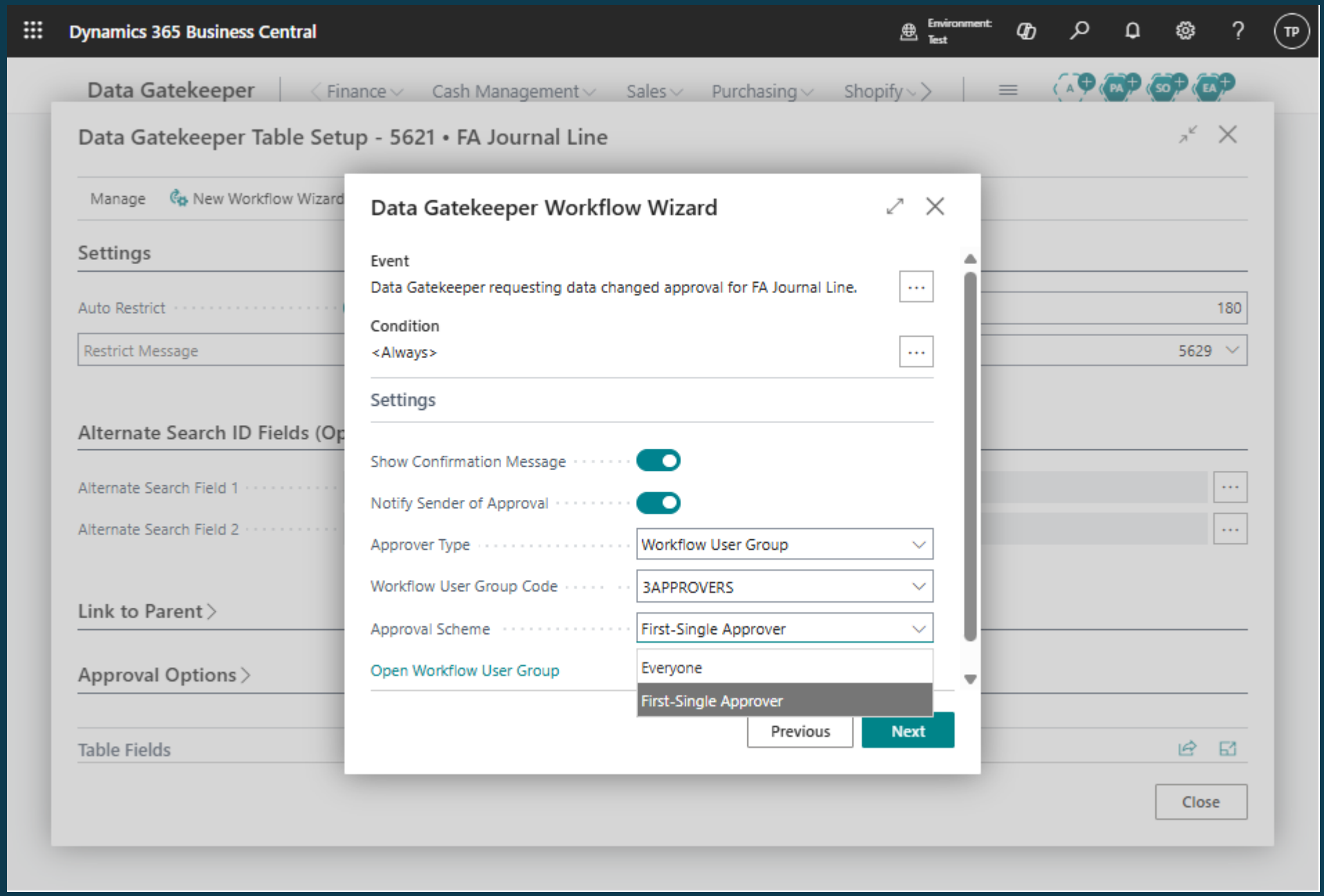
Data Gatekeeper Workflow Wizard



The next step is to set the conditions.

Give it a description and category, then click Next.

Data Gatekeeper Workflow Wizard



We chose to use the Workflow User Group option for this tutorial because we want to present the option, Approval Scheme, that was introduced by Data Gatekeeper.

Here's what it means if there are 3 approvers in the group.

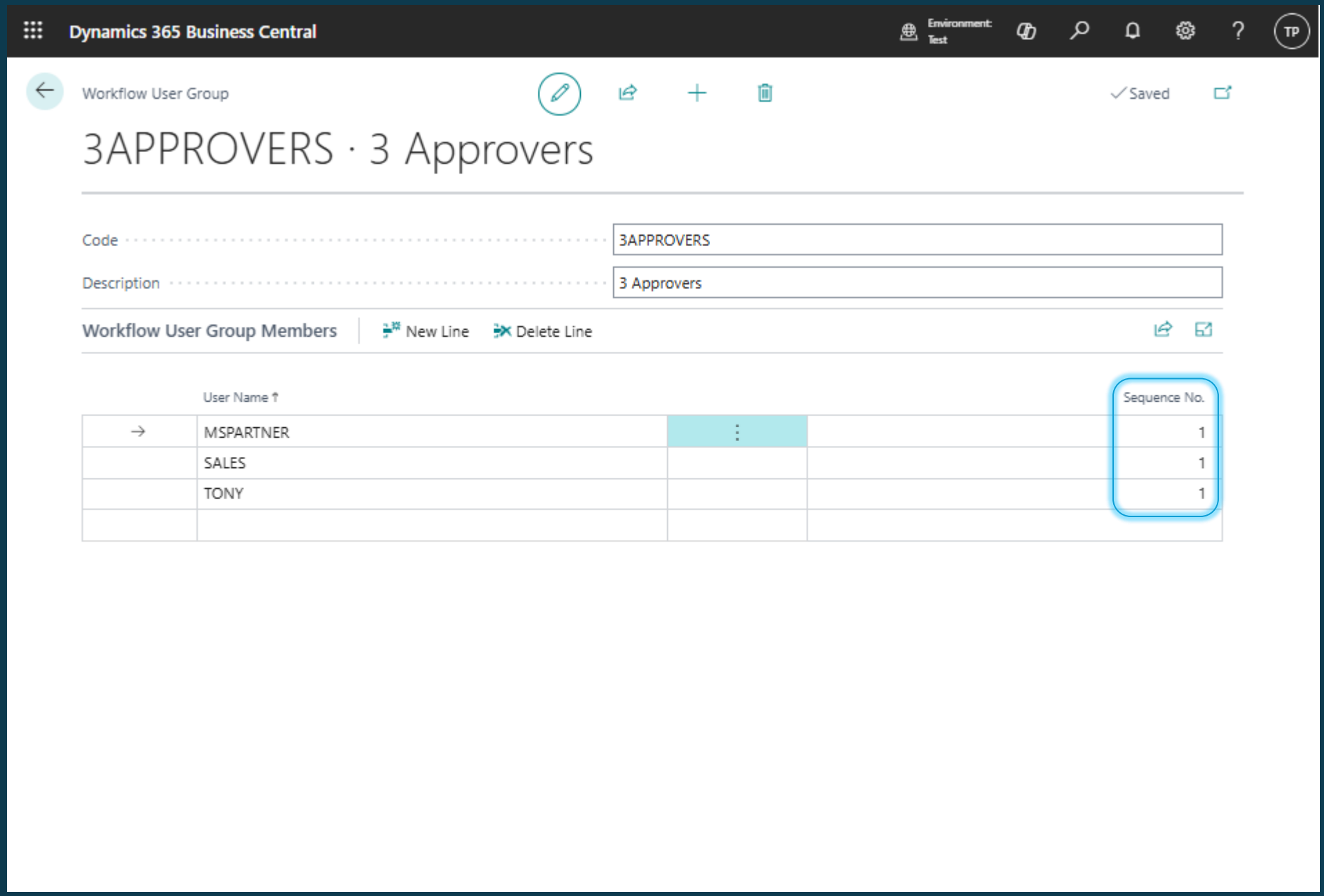
Everyone:

All 3 approvers must separately approve.

First-Single Approver:

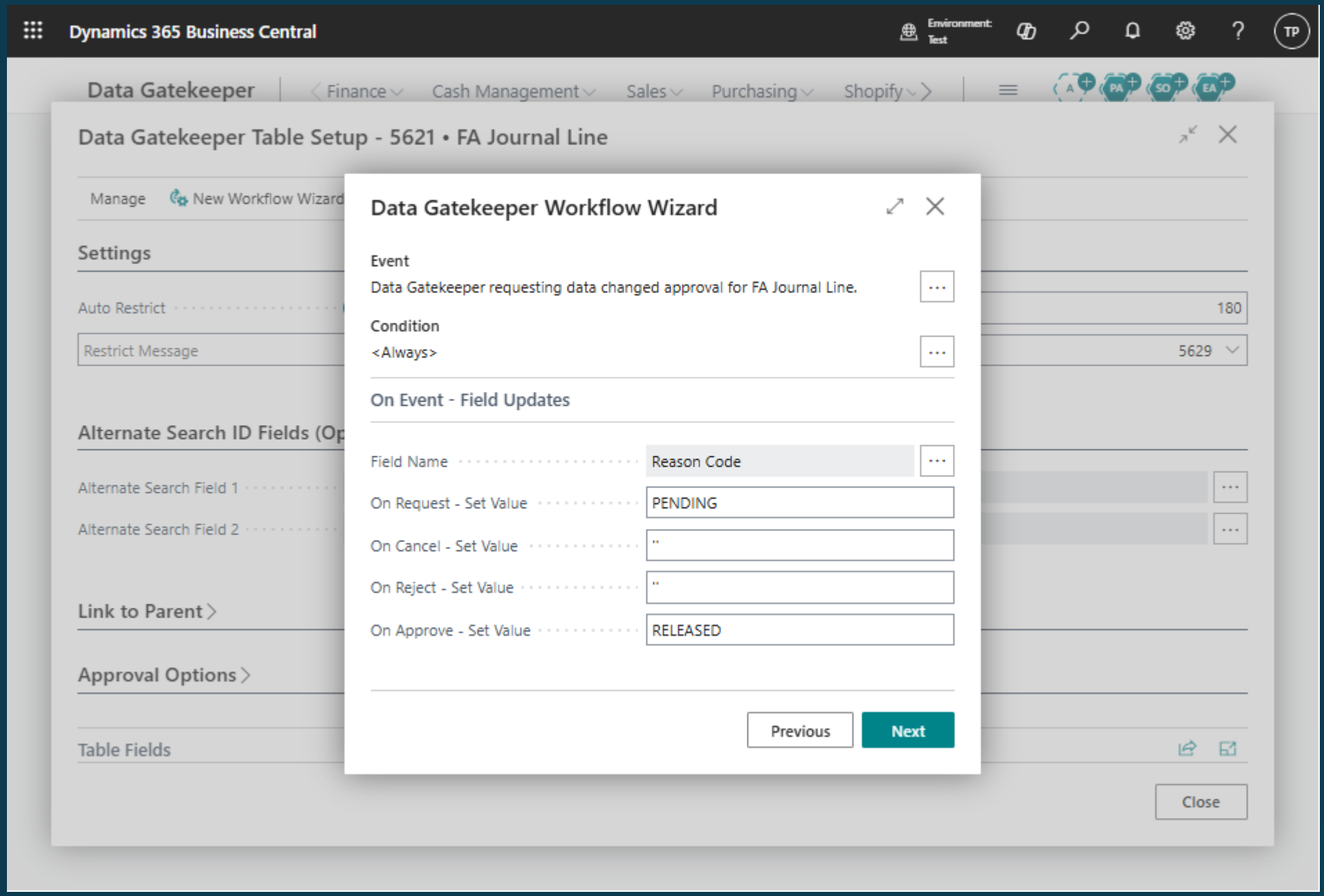
The first person with applicable approval will approve for all.

Data Gatekeeper Workflow Wizard



NOTE: For the First-Single Approver option to work properly, all users in the Workflow User Group must share the same Sequence No. Otherwise, those with a higher sequence will never see an approval request to approve.

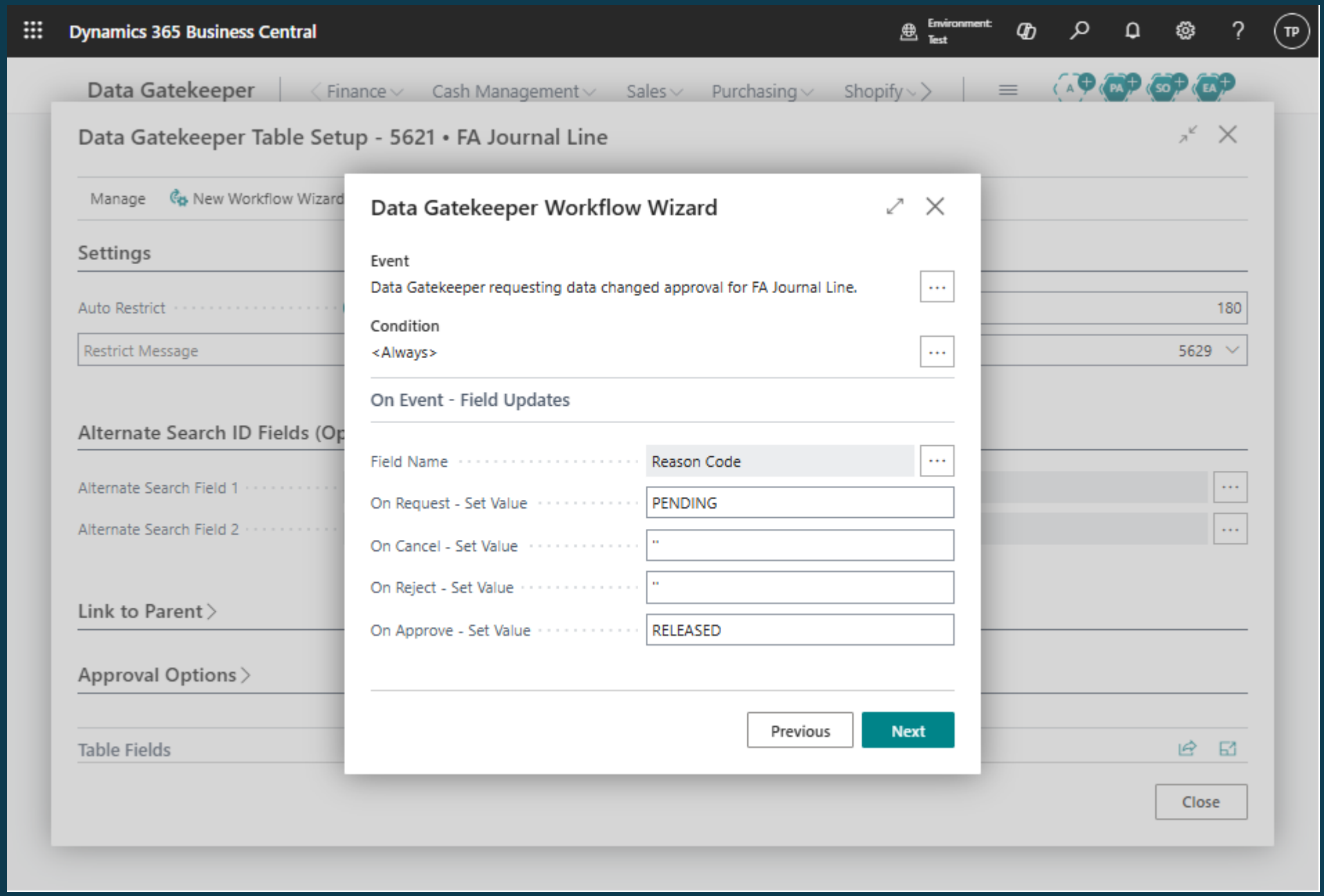
Data Gatekeeper Workflow Wizard



On Event – Field Updates isn't necessary for the FA Journal Line. However, here's an example on how it can be used.

Using a custom field is preferable. Upon an approval request, set this value to indicate approval is Pending, and set it to Released to indicate it's been approved.

Data Gatekeeper Workflow Wizard

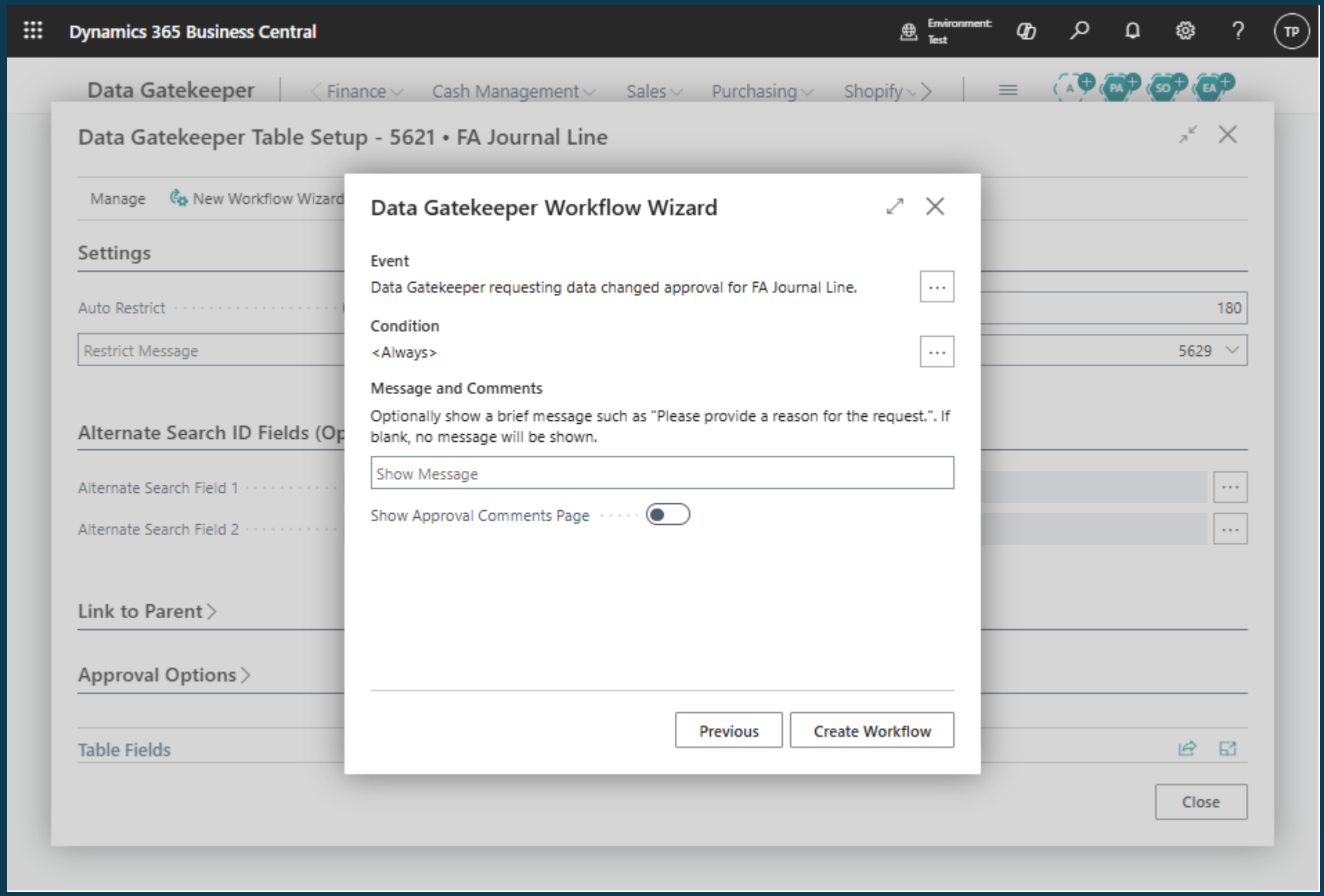


Use this in conjunction with field events to proactively control approvals.

For example, use the “Set Field Value (Confirm)” to monitor when the Amount is changed. If the Reason Code is RELEASED then show a confirmation prompt like “This will reset the approval. Are you sure?”.

If the user chooses to proceed then set this value to blank to force a new approval.

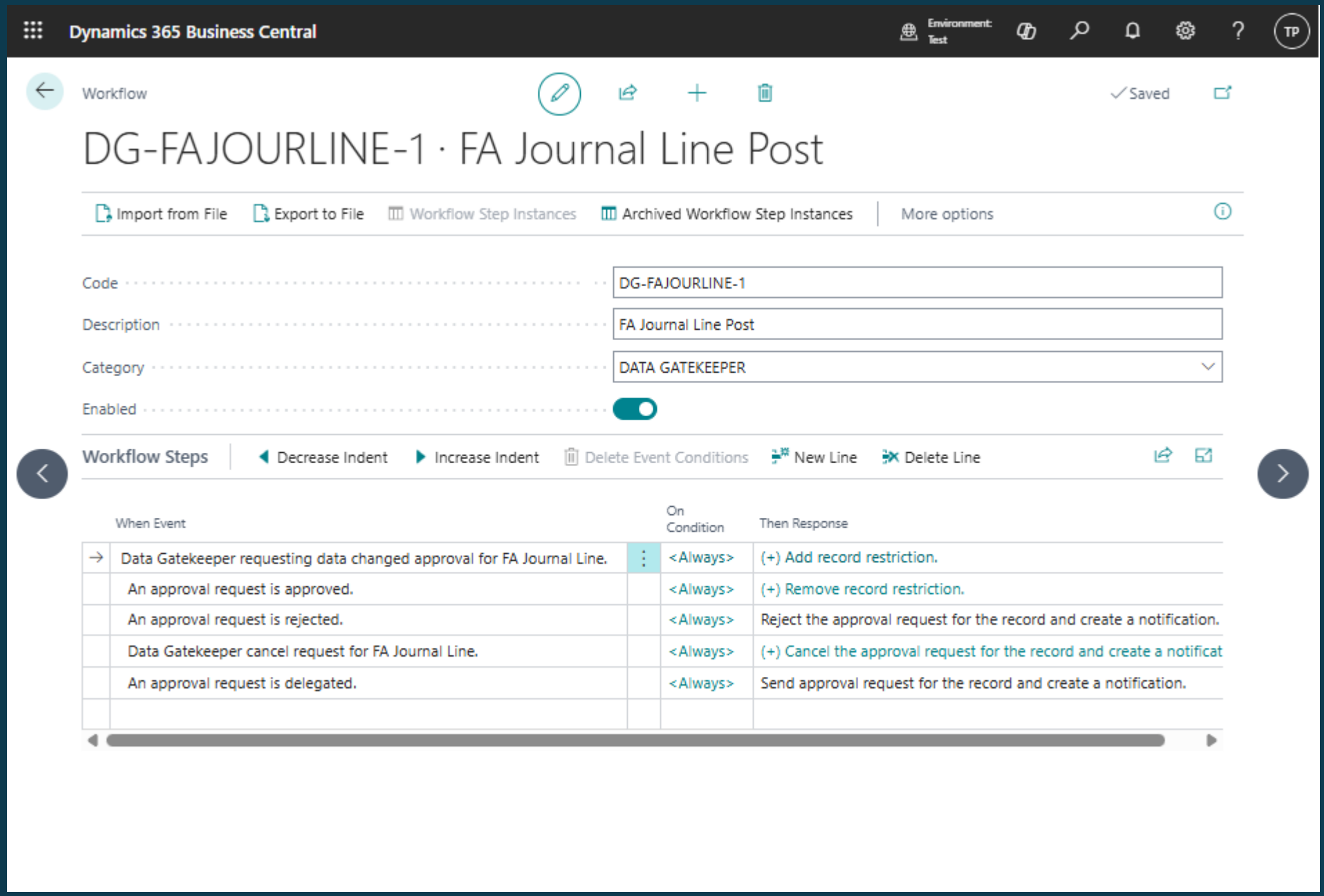
Data Gatekeeper Workflow Wizard



And that's it, the last step is to create the workflow.

The wizard will create the event, and Business Central will be able to handle the event without any code changes or deployments.

Data Gatekeeper Workflow Wizard



All that's left is to enable the workflow.

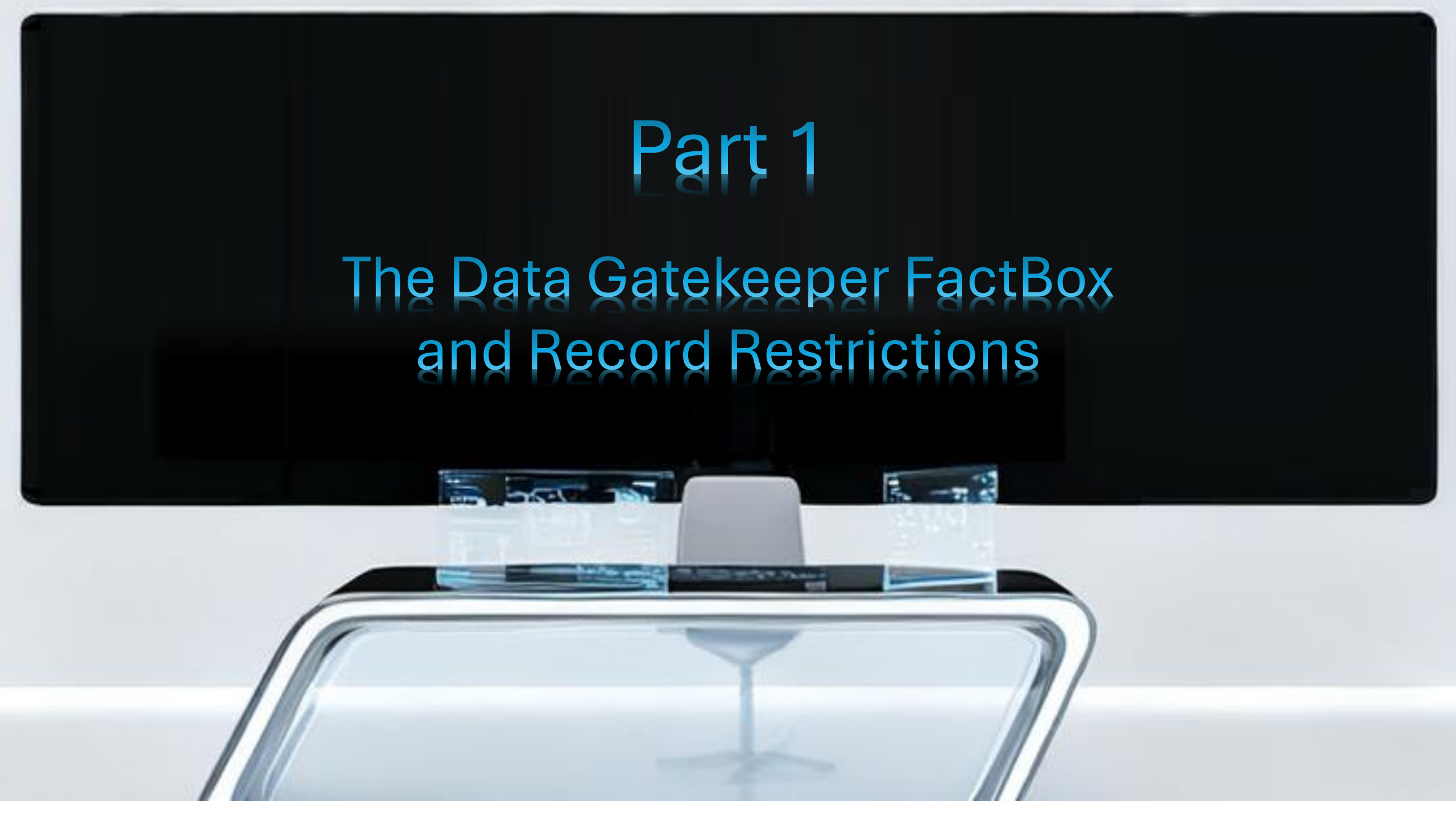
The workflow wizard is meant to get you started on a basic workflow.

Once the workflow has been created, you can edit and customize it just like any standard Business Central workflow.

See Data Gatekeeper in Action



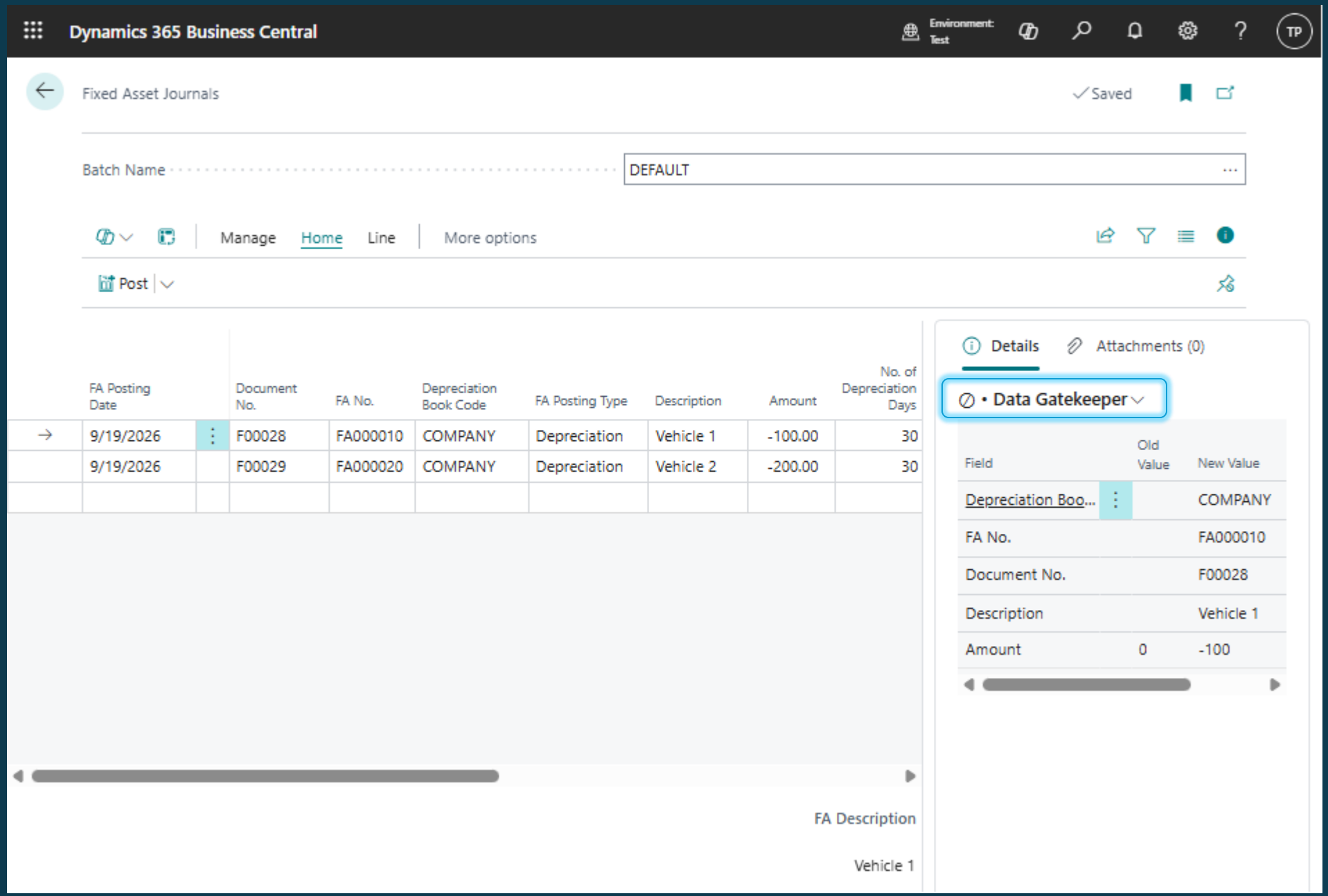
NAVCRE DEVELOPMENT



Part 1

The Data Gatekeeper FactBox and Record Restrictions

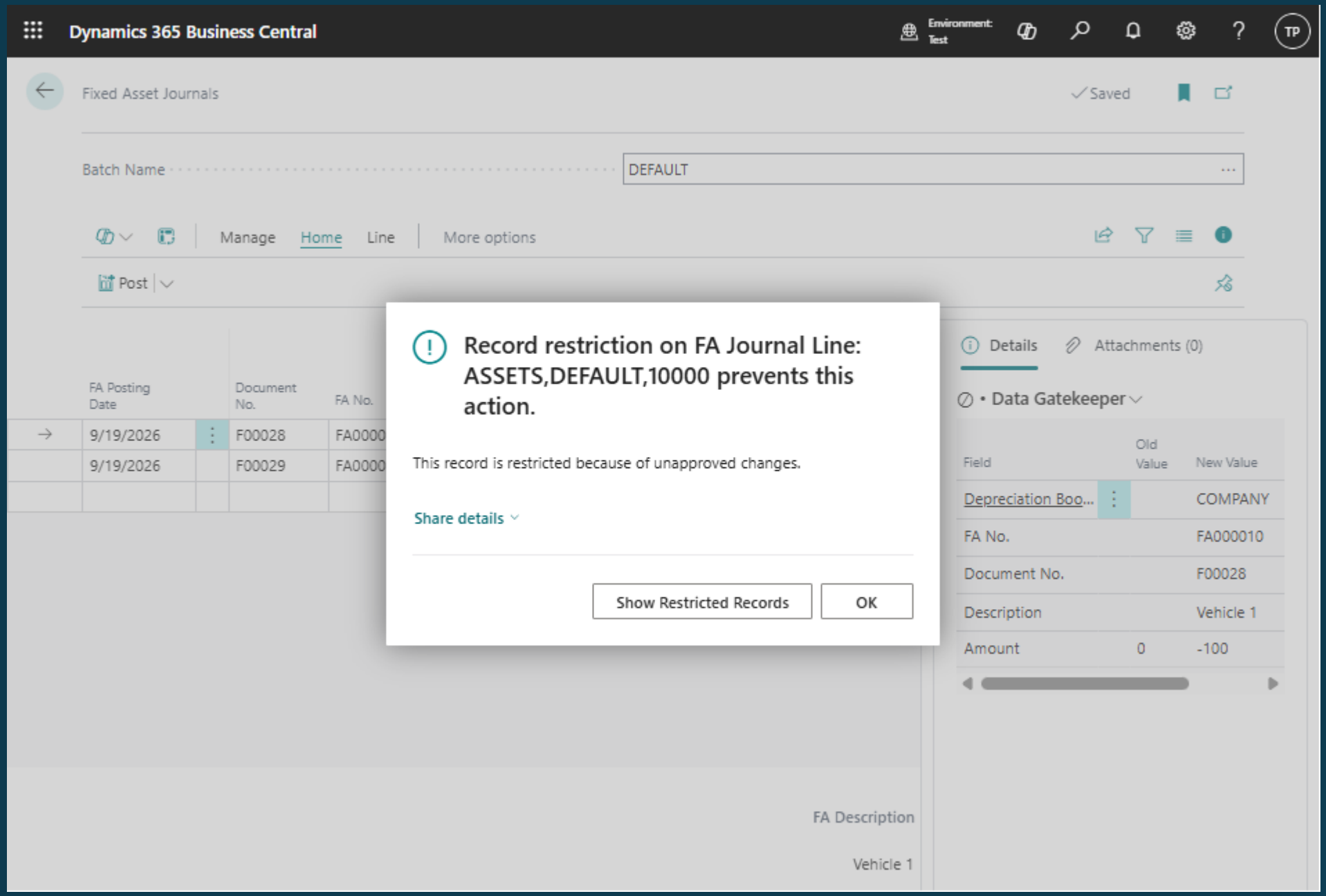
Fixed Asset Journals



Now that we have the setup for the Fixed Asset Journals, and created an approval workflow for it, let's see it in action.

Let's say we created 2 entries. The ⊘ icon indicates that the entry has a record restriction which was auto created because the Auto Restrict option was enabled for the table.

Fixed Asset Journals



When posting, we will get this error because a restriction is in effect for one of the lines.

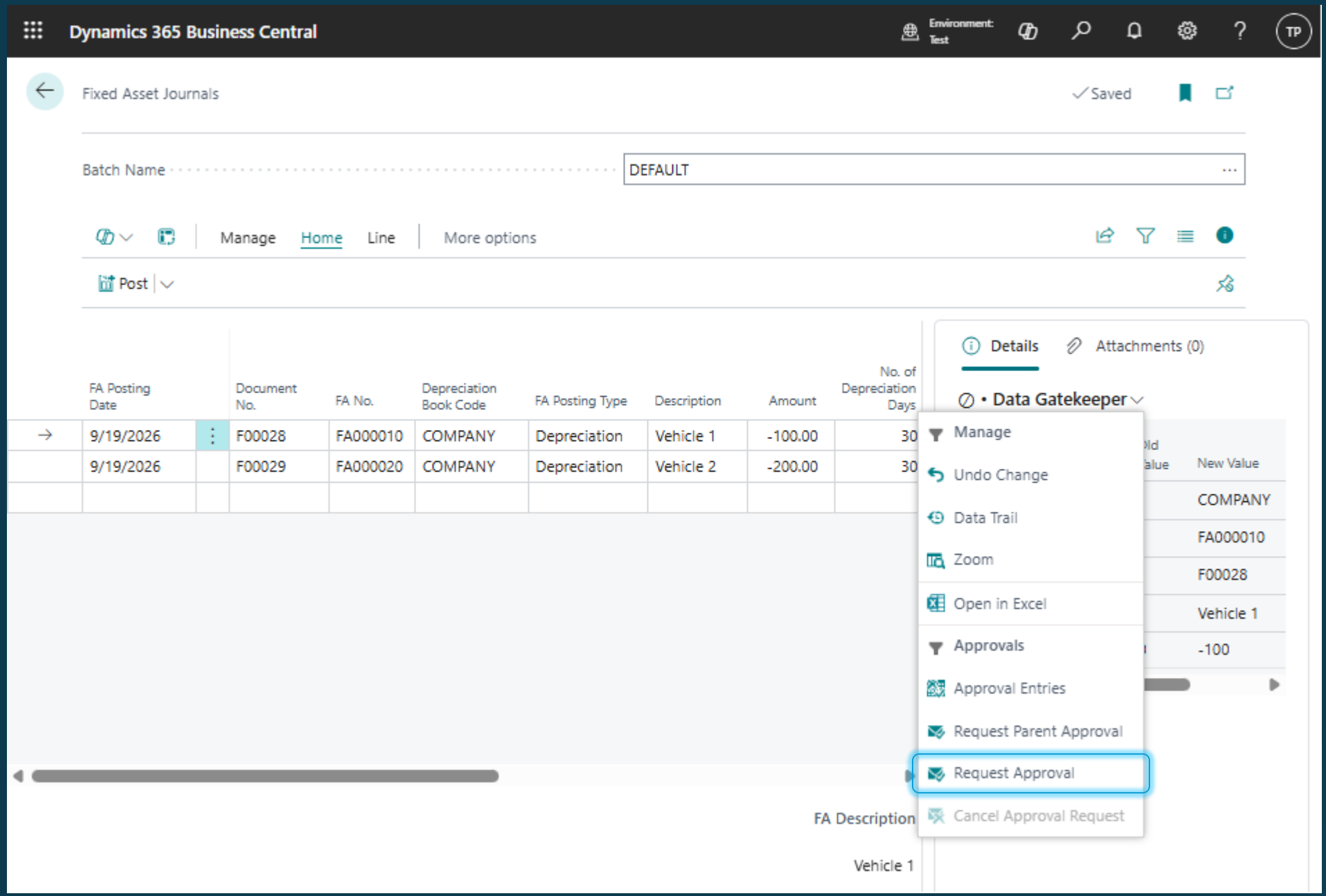
NOTE: This is driven by the Subscription Events setting "Check restriction on Fixed Asset Journal Line Post." If this setting did not exist or is not enabled, the journal will post even though there are record restrictions.



Part 2

Requesting Approval

Fixed Asset Journals

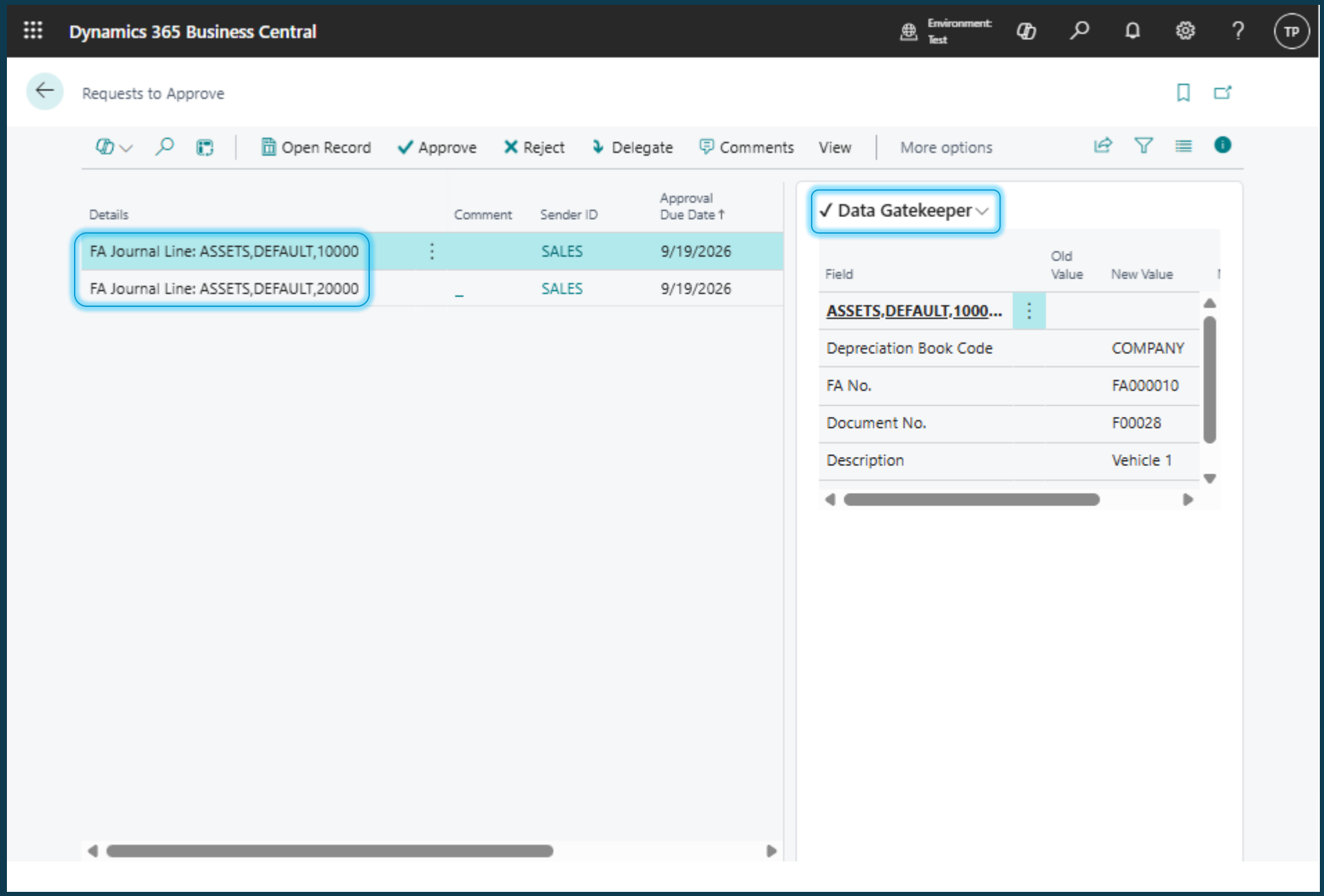


Before we can post, we must request approval.

To see the difference between the child and parent record approvals, we will start by initiating the Request Approval for each line.

Each line is considered a child record only because we defined a parent record. Otherwise, we can think of it as the selected record for the approval request.

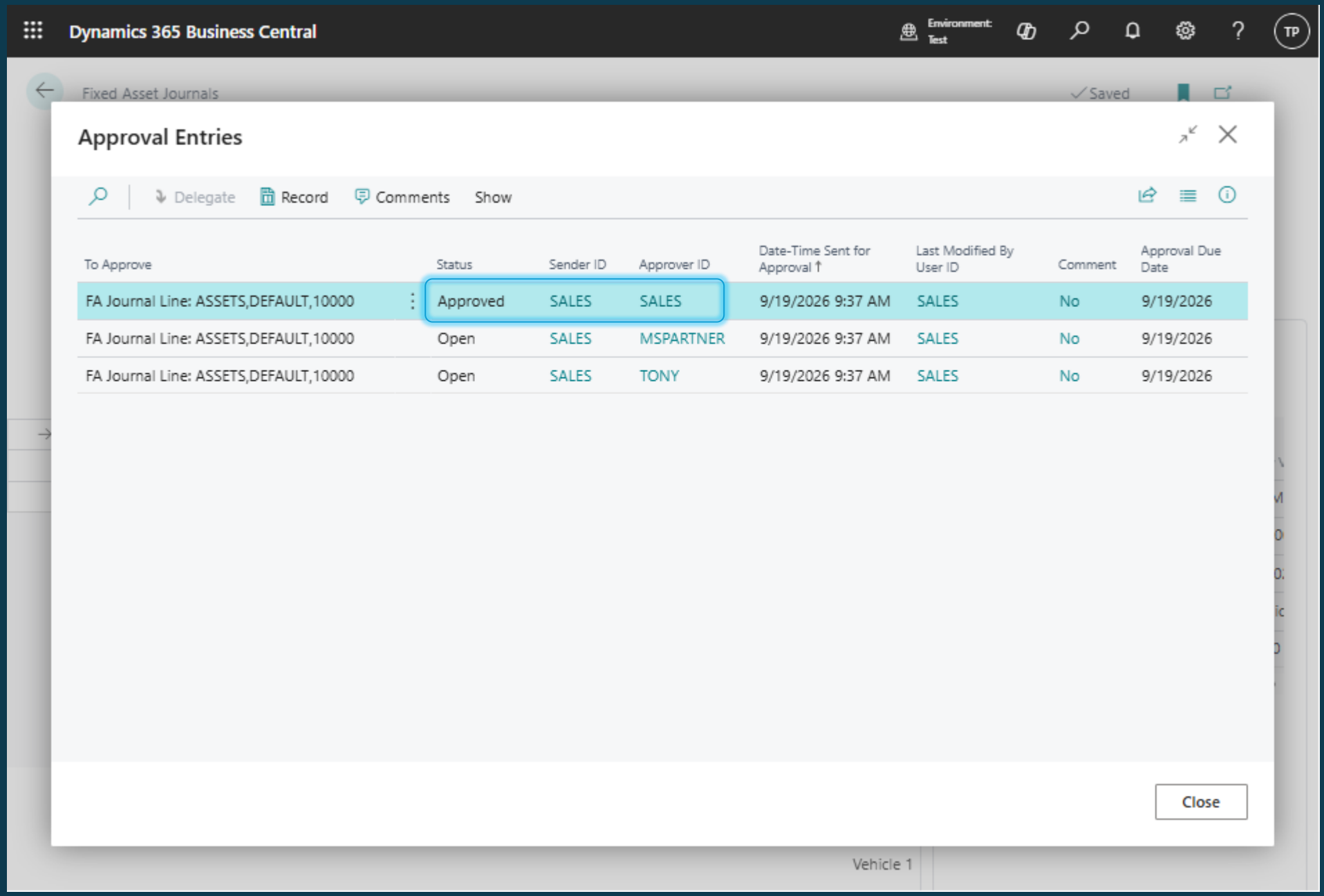
Requests to Approve



Under the Requests to Approve page, we get individual lines to approve. The FactBox will show the relevant data for each line.

The ✓ icon indicates there's an open approval request for the selected record.

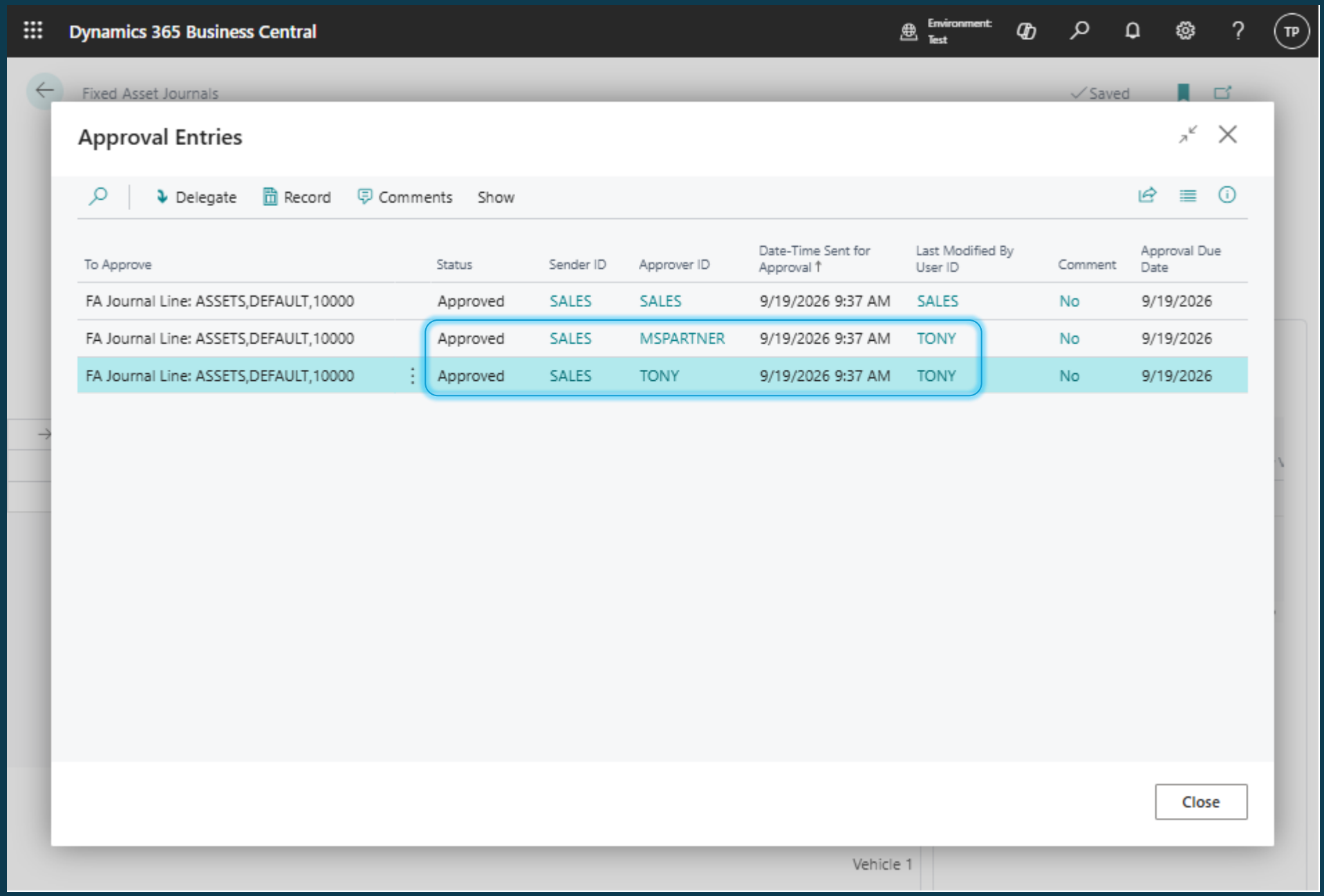
Requests to Approve



The approval request was initiated under the Sales login. Since Sales is also an approver in the Workflow User Group for this request, their request was automatically approved. This is standard BC operations.

Since the "Allow to approve own changes." option was not checked, the request remains open for the remaining approvers to approve.

Requests to Approve



When Tony approves the change, since the "First-Single Approver" option was chosen, the open approval entries were also marked as approved.

We can rely on the Last Modified By User ID to effectively determine who approved the request.

Keeping rather than deleting the open requests is necessary to keep track of who received the request.

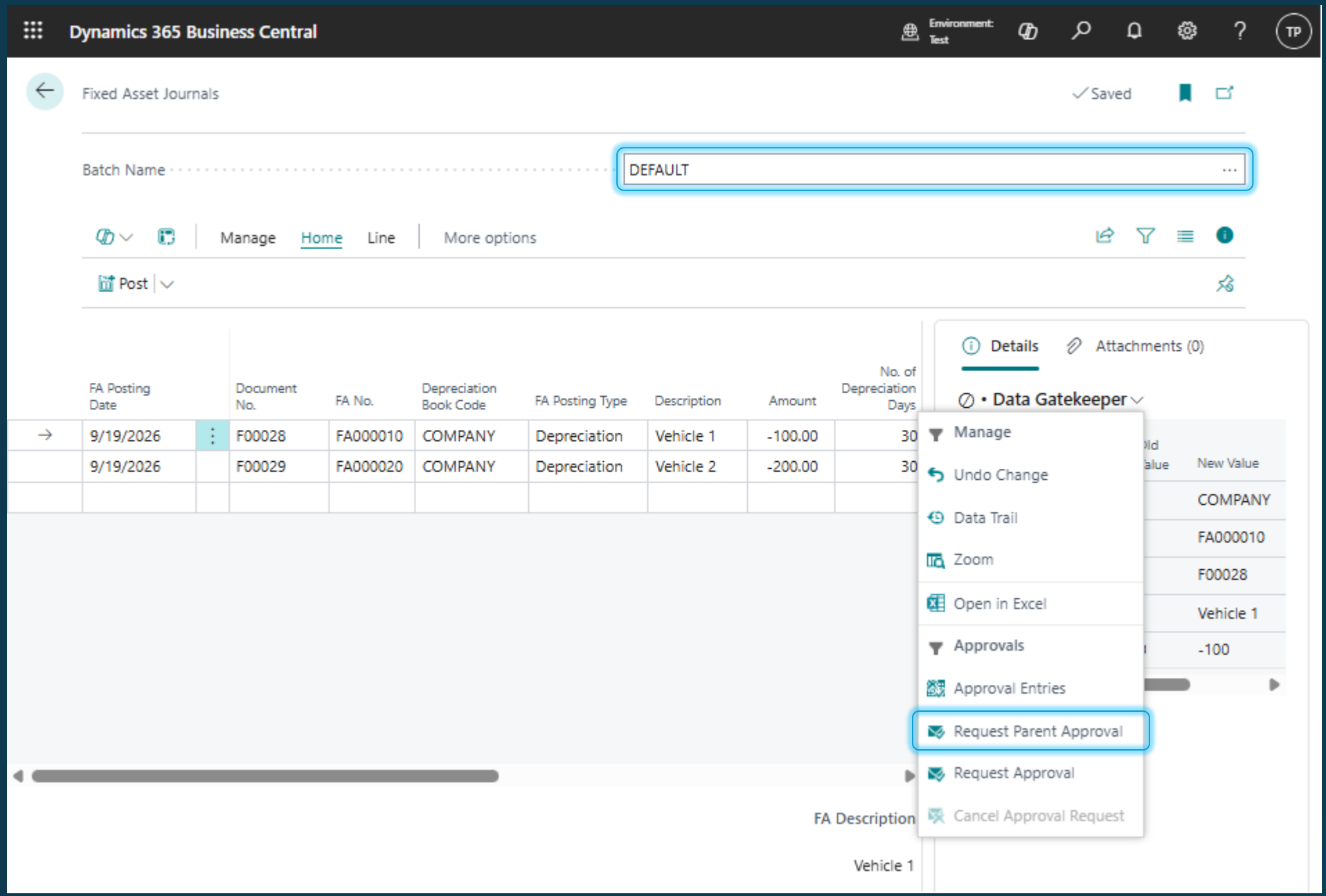
Marking it as approved is necessary to close the request.



Part 3

Requesting Parent Approval

Fixed Asset Journals



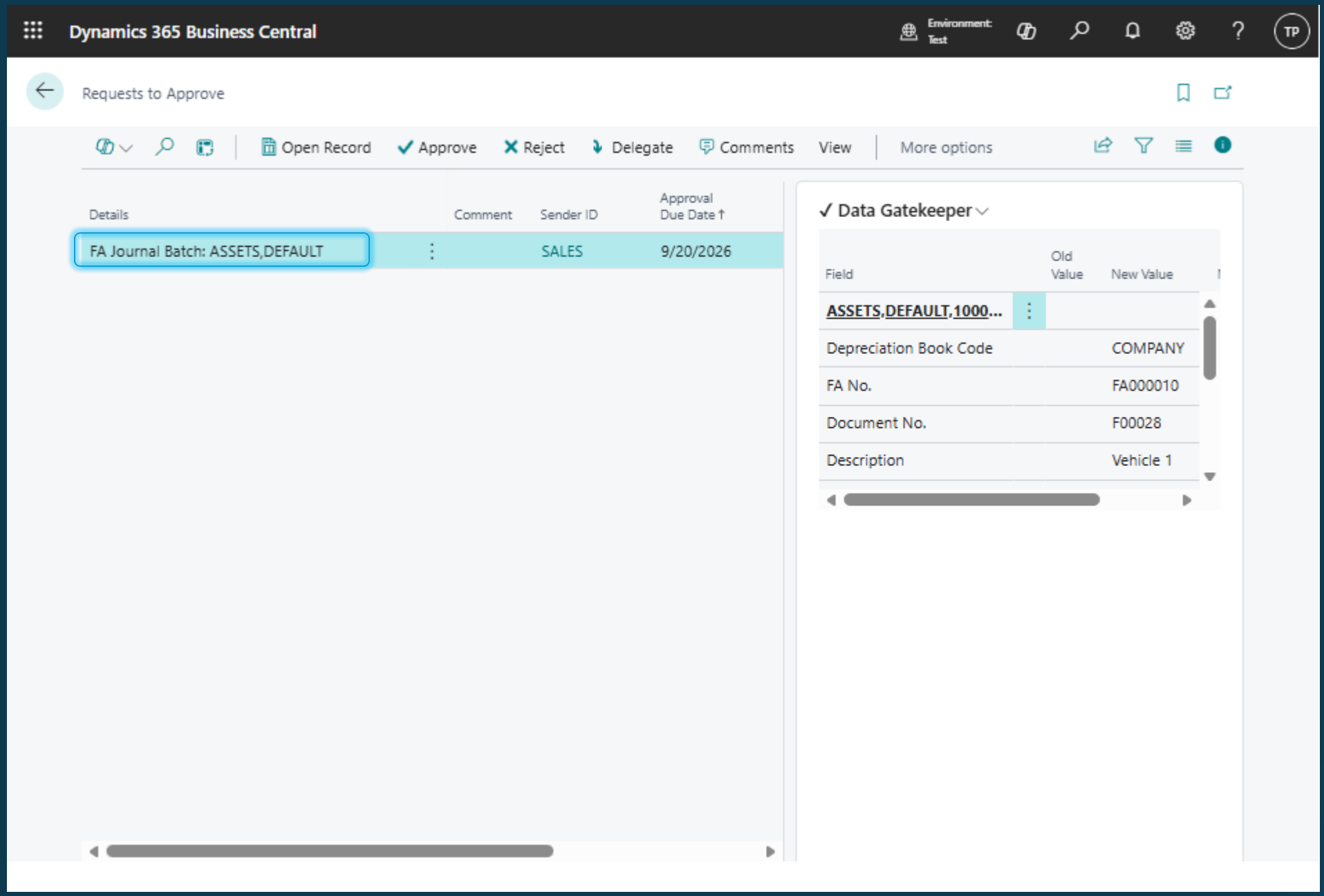
Let's see what happens if we initiate the Request Parent Approval instead.

The FA Journal Batch was set as the parent record for the FA Journal Line, and it's linked by the Batch Name.

When requesting parent approval, we are in effect requesting approval for the batch: DEFAULT.

NOTE: A workflow must be created for the FA Journal Batch table. This was done, but we skipped that for this tutorial.

Requests to Approve



With the parent request, all lines will appear inside the FactBox as a single approval request.

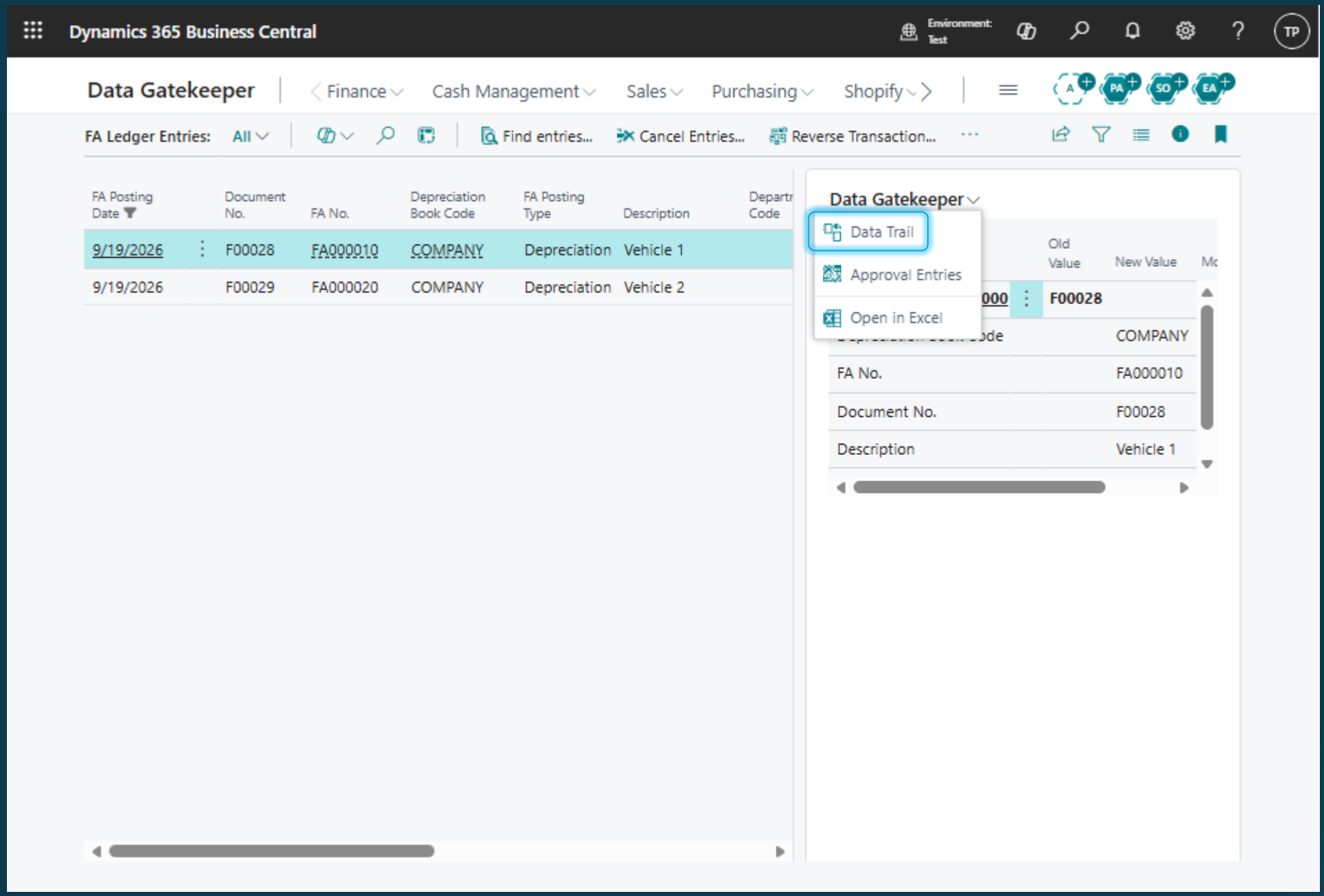
NOTE: For parent approvals, the approval option "Auto-commit and link pending logs to parent record approvals." on the child table must be checked. Otherwise, child record changes still require approval.



Part 4

Data and Approval Trail

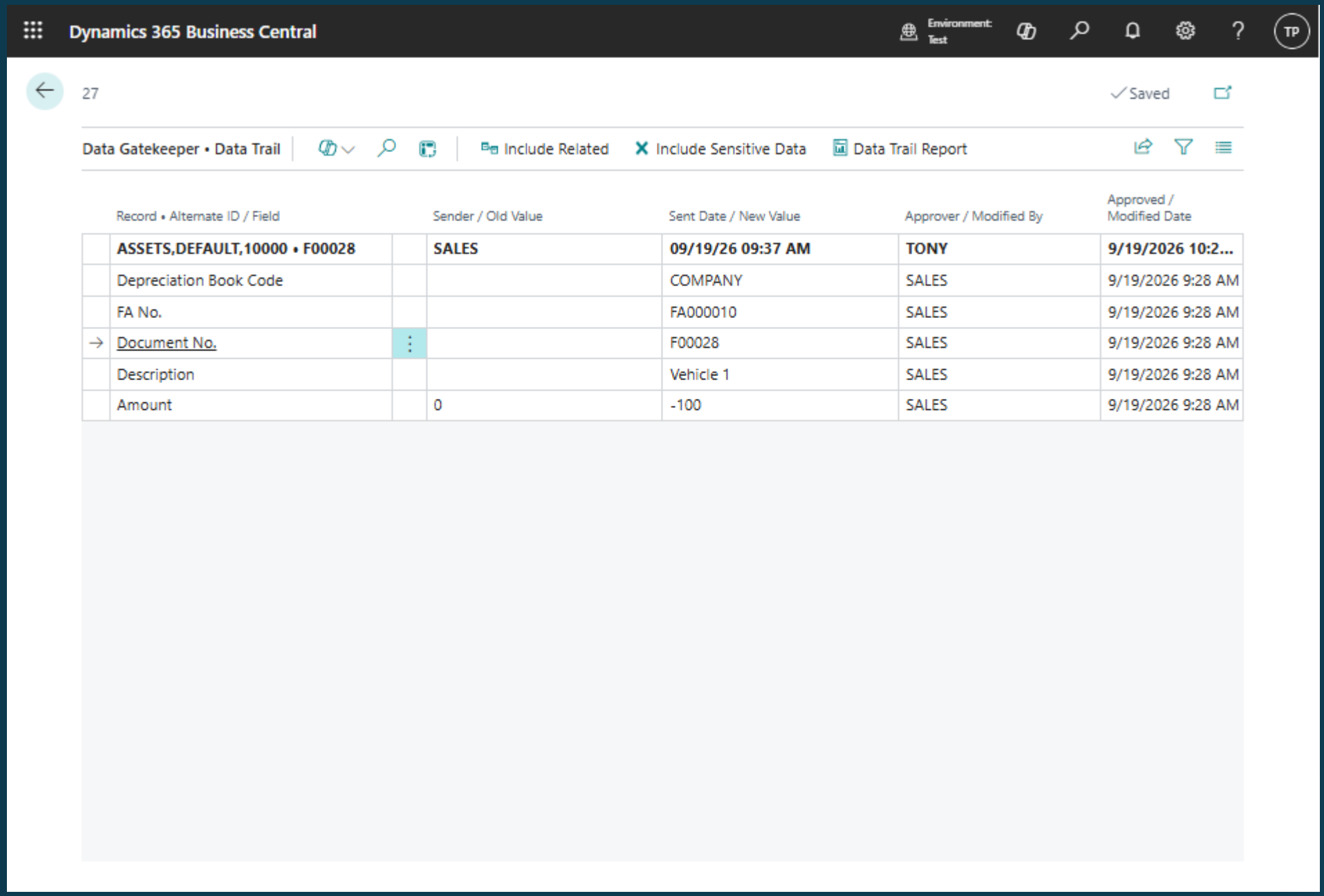
FA Ledger Entries



Committed log entries will appear on the posted entries page once the journal has been posted.

To see a detailed data/audit trail, open the Data Trail page.

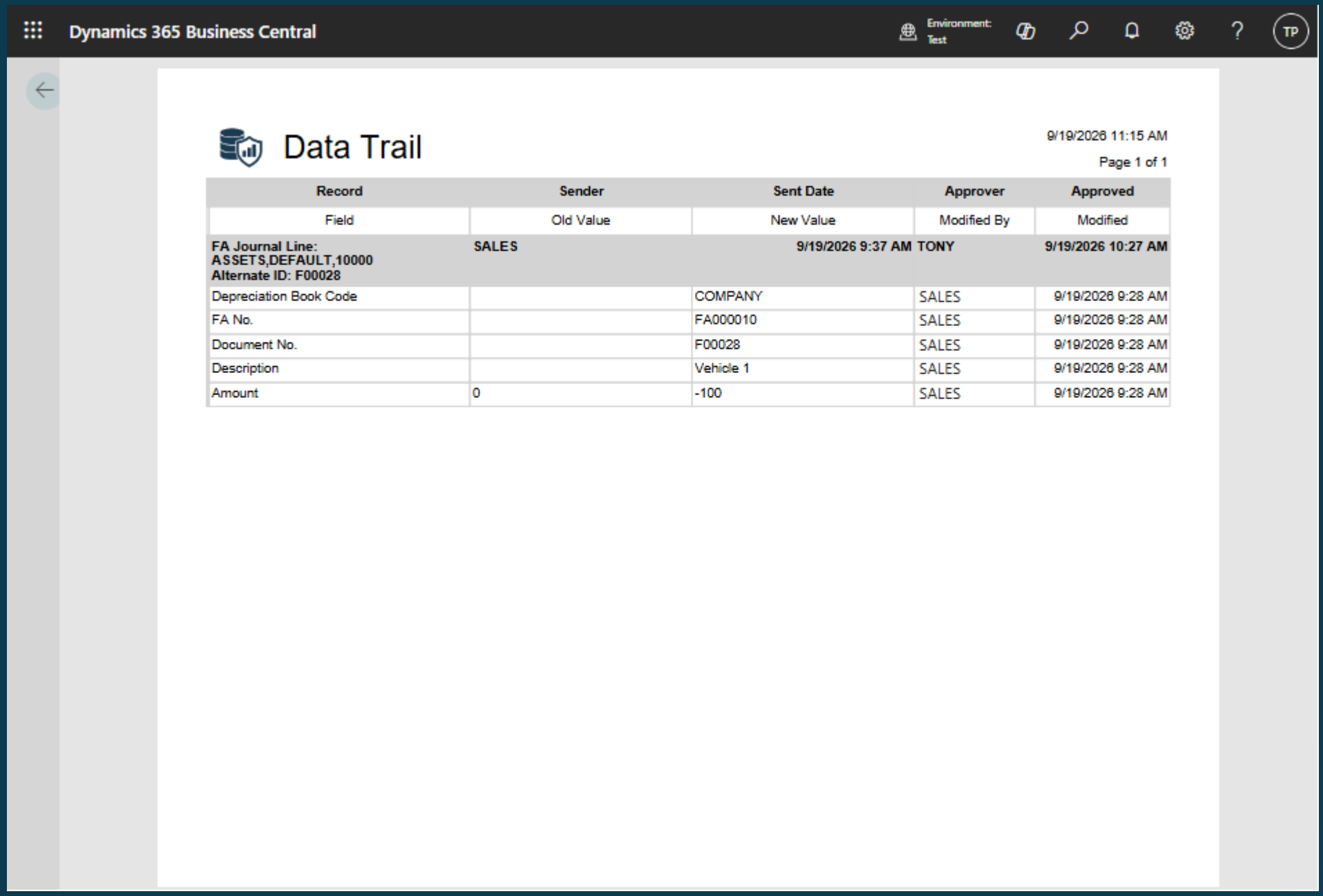
Data Trail



Here's a detailed view of what was changed, who changed it, when it was changed, who requested approval, who approved, and when it was approved.

NOTE: Only the Approved changes or Snapshots will appear in this list. Unapproved changes will remain in the pending state until approved and committed.

Data Trail



Data Trail

9/19/2026 11:15 AM

Page 1 of 1

Record	Sender	Sent Date	Approver	Approved
Field	Old Value	New Value	Modified By	Modified
FA Journal Line: ASSETS,DEFAULT,10000 Alternate ID: F00028	**SALES**	**9/19/2026 9:37 AM**	**TONY**	**9/19/2026 10:27 AM**
Depreciation Book Code		COMPANY	SALES	9/19/2026 9:28 AM
FA No.		FA000010	SALES	9/19/2026 9:28 AM
Document No.		F00028	SALES	9/19/2026 9:28 AM
Description		Vehicle 1	SALES	9/19/2026 9:28 AM
Amount	0	-100	SALES	9/19/2026 9:28 AM

Here’s a report equivalent view of the same changes.

The End



NAVCORE DEVELOPMENT

And that concludes our presentation. Thank you for joining us today!