

Quick Find

Summary

A new form has been created allowing users to quickly access the details page of a record simply by typing the record's key value into one of the multiple input options available.

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Goals

Main Goal

- Reduce the query cost and user wait time of reading multiple records upon opening a list page form only to have a user filter to find a specific record.

Secondary goals

- Reduce the number of clicks and total active user interaction time to navigate to a details form page.
- Group frequently searched forms into one central workspace to help streamline a user's experience.

All small things, but compounded across an organization, we would hopefully see an improvement in application performance and the user experience resulting in increased customer satisfaction.

Design tenants

- No further technical development required.
 - Allow configurations and setups to dynamically drive how the form can be utilized within each organization as well as with each user.
- No security configuration required.
 - The main quick find forms have been added to the common main menu and their security duties have been added to the SysUser role.
 - All the Admin setup forms have been added to new duties.
- Minimal user setup.
 - Although there are a few options each user can configure if they choose, quick find is ready to go once the initial organizational setup is complete.
- Clean and intuitive form design and user interaction.

User interface overview

Find options

There are four options available to find a record within the quick find form:

- Prefix find
- Quick filter find
- Grid find
- Group-string control find

Finance and Operations

Search for a page

SaveOptions

Quick find

INPUT

Prefix find

Find

PREFERENCES

Focus field

Prefix find

Default quick filter selection

CustTable

Prefix separator

-

Prepend text

☒ Yes

Default grid selection

CustFindCustomer...

Grid find

Find customer

Find purchase order

Find sales order

Find vendor

10*

Vendor name	Vendor account	Phone
Acme Office Supplies	1001	773-998-8892
Lande Packaging Supplies	1002	
Ade Supply Company	1003	
Best Supplier - Europe	104	

Accounts payable

Purchase order

Vendor account

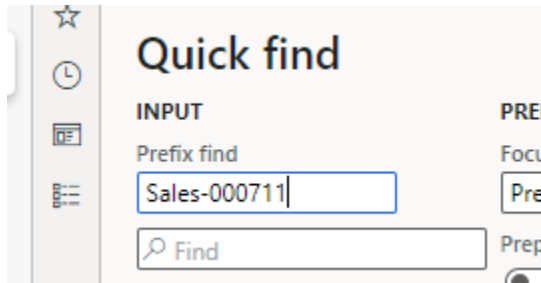
Accounts receivable

Customer account

Sales order

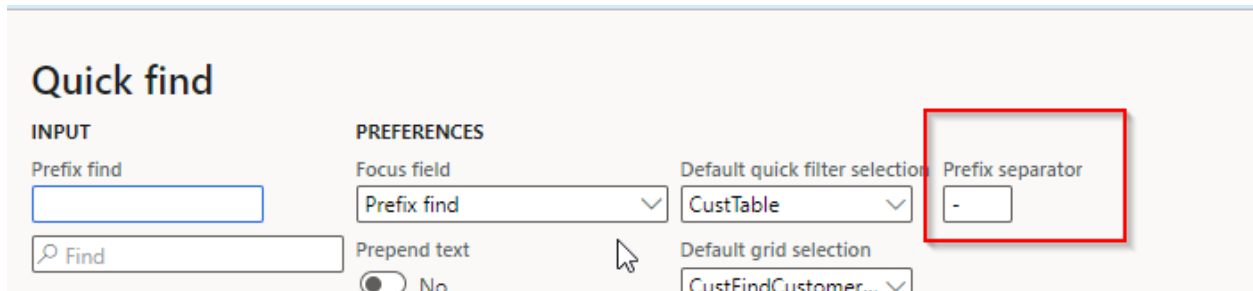
Prefix find

This option allows a user to type the prefix associated to a menu item and then input the find value. For example, assume “Sales” is the prefix assigned to the *Sales order table details* menu item. Inputting Sales-000711 into the control will open the details page for sales order 000711 if the user has access to that menu item.



The screenshot shows the 'Quick find' form with the 'INPUT' section. The 'Prefix find' field contains the text 'Sales-000711'. Below it is a 'Find' button with a magnifying glass icon. To the right, parts of the 'PREFERENCES' section are visible, including 'Focus field' and 'Prepend text'.

Each user can configure their own prefix separator in the preferences section of the quick find form. In the previous example, “-” was set by the user.

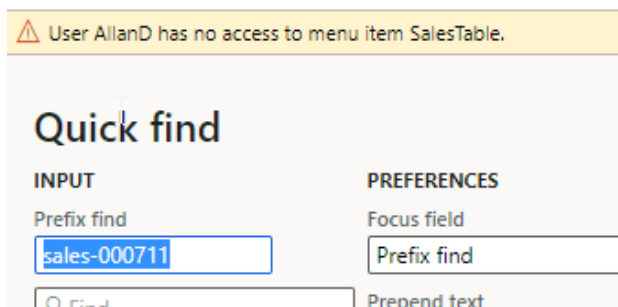


The screenshot shows the 'Quick find' form with the 'PREFERENCES' section. The 'Prefix separator' field is highlighted with a red box and contains a hyphen character '-'. Other fields in the 'PREFERENCES' section include 'Focus field' (set to 'Prefix find'), 'Default quick filter selection' (set to 'CustTable'), 'Prepend text' (set to 'No'), and 'Default grid selection' (set to 'CustFindCustomer...').

Had “/” been configured as the prefix separator, the user would have needed to input *Sales/000711* for the system to find the correct sales order.

If the prefix separator is left blank or a space value is entered, the space bar will act as the separator. In that scenario, *Sales 000711* would then find the correct sales order.

Typing in a prefix to a menu item that the user does not have access to will show this warning and not open the details form.

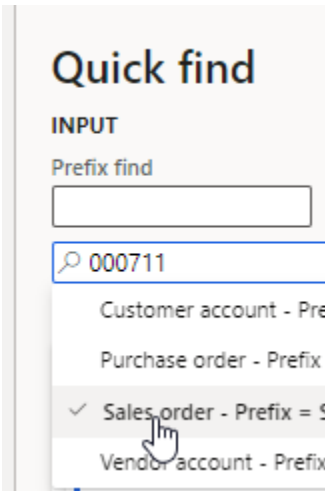


The screenshot shows the 'Quick find' form with a warning message at the top: 'User AllanD has no access to menu item SalesTable.' Below the warning, the 'INPUT' section shows the 'Prefix find' field containing 'sales-000711'. The 'PREFERENCES' section is also visible, showing 'Focus field' and 'Prepend text'.

Quick filter find

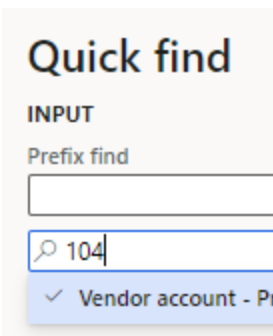
This option is based off the standard quick filter control. Rather than displaying fields from a grid in the drop down, however, it displays the configured quick find menus items a user has access to.

For example, typing in 000711 and selecting the sales order option in the displayed drop down will open the details page for sales order 000711



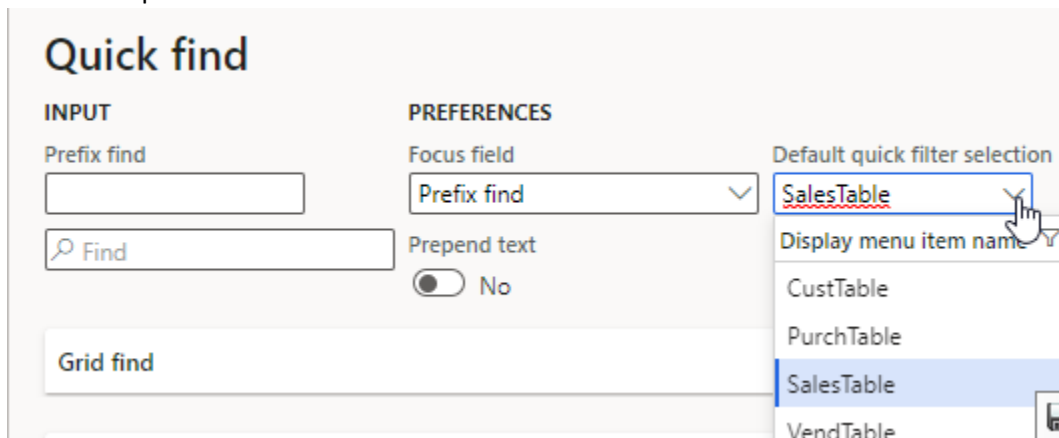
The screenshot shows a 'Quick find' form with an 'INPUT' section. Below the 'Prefix find' label is a text input field. Below that is a search bar containing '000711'. A dropdown menu is open, showing four options: 'Customer account - Pre', 'Purchase order - Prefix', 'Sales order - Prefix = S' (which is selected and has a checkmark), and 'Vendor account - Prefix'.

For a different user that only had access to the vendor form and not sales orders, the drop down would not show the sales order option as shown below.



The screenshot shows a 'Quick find' form with an 'INPUT' section. Below the 'Prefix find' label is a text input field. Below that is a search bar containing '104'. A dropdown menu is open, showing one option: 'Vendor account - Pr'.

Each user can configure the default menu item to be activated in the in the quick filter control when the form first opens.



The screenshot shows a 'Quick find' form with two sections: 'INPUT' and 'PREFERENCES'. The 'INPUT' section has a 'Prefix find' label, a text input field, a search bar containing 'Find', and a 'Grid find' button. The 'PREFERENCES' section has a 'Focus field' dropdown menu set to 'Prefix find', a 'Prepend text' toggle switch set to 'No', and a 'Default quick filter selection' dropdown menu. The 'Default quick filter selection' dropdown menu is open, showing a list of options: 'SalesTable' (which is selected and has a checkmark), 'CustTable', 'PurchTable', 'SalesTable' (highlighted), and 'VendTable'.

Grid find

This option utilizes the *form part* design pattern leveraged in standard workspaces. These *form parts* leverage a quick find control that show associated fields for a menu item. In this example, typing in 00071* and selecting sales order will display all sales orders that meet that wildcard criteria.

The screenshot shows the 'Grid find' interface. On the left, there are four buttons: 'Find customer', 'Find purchase order', 'Find sales order' (which is highlighted with a blue bar), and 'Find vendor'. To the right of these buttons is a search input field containing '00071*'. Below the input field, a dropdown menu is open, showing a list of search criteria: 'Sales order: "00071*"' (which is checked), 'Customer account: "00071*"', 'Customer name: "00071*"', 'Date: "00071*"', and 'Status: "00071*"'. Below the dropdown, a table of results is displayed. The table has columns: 'Sales order', 'Customer account', 'Customer name', 'Date', 'Status', and 'H...'. The first row is selected and highlighted in blue.

Sales order	Customer account	Customer name	Date	Status	H...
000710	US-013	Pelican Wholesales	12/7/2016	Invoiced	
000711	US-014	Grebe Wholesales	12/7/2016	Invoiced	
000712	US-015	Contoso Retail Chicago	12/7/2016	Invoiced	
000713	US-016	Whale Wholesales	12/7/2016	Delivered	
000714	US-017	Turtle Wholesales	12/7/2016	Delivered	
000715	US-018	Contoso Retail Detroit	12/7/2016	Invoiced	

A user can then click any of the fields in the found records within the grid to open the associated details page.

Any configured *form parts* a user has access to will be displayed in this section.

Each user can configure the default form part tab page that is activated when the quick find form is opened.

The screenshot shows the 'Quick find' configuration interface. It has two main sections: 'INPUT' and 'PREFERENCES'. In the 'INPUT' section, there is a 'Prefix find' input field and a 'Find' button. In the 'PREFERENCES' section, there are several settings: 'Focus field' is set to 'Prefix find', 'Default quick filter selection' is set to 'SalesTable', 'Default grid selection' is set to '1stFindSalesOrderList' (which is highlighted with a red dashed box), and 'Prepend text' is set to 'No'. Below these settings, there is a 'Grid find' section with four buttons: 'Find customer', 'Find purchase order', 'Find sales order' (which is highlighted with a blue bar), and 'Find vendor'. To the right of these buttons is a search input field containing 'Filter'. Below the input field, a dropdown menu is open, showing a list of search criteria: 'Sales order: "00071*"' (which is checked), 'Customer account: "00071*"', 'Customer name: "00071*"', 'Date: "00071*"', and 'Status: "00071*"'. Below the dropdown, a table of results is displayed. The table has columns: 'Sales order', 'Customer account', 'Customer name', 'Date', 'Status', and 'H...'. The first row is selected and highlighted in blue.

Sales order	Customer account	Customer name	Date	Status	H...
000710	US-013	Pelican Wholesales	12/7/2016	Invoiced	
000711	US-014	Grebe Wholesales	12/7/2016	Invoiced	
000712	US-015	Contoso Retail Chicago	12/7/2016	Invoiced	
000713	US-016	Whale Wholesales	12/7/2016	Delivered	
000714	US-017	Turtle Wholesales	12/7/2016	Delivered	
000715	US-018	Contoso Retail Detroit	12/7/2016	Invoiced	

Group- string control find

This option creates a fast tab for each configured quick find group. Within each group, string controls for each configured menu item within the group are displayed if the user has access to them.

Users can type a value in the control or select from the drop down if the extended data type of the key field is associated to a backing table.

Quick find

INPUT

Prefix find

PREFERENCES

Focus field

Default quick filter selection

Prefix separator

Prepend text

☐ No

Default grid selection

Grid find

Accounts payable

Purchase order

Vendor account

Accounts receivable

Customer account

Sales order

Sales order	Customer name
000002	Contoso Europe
000003	Contoso Retail San Diego
000004	Contoso Retail Los Angeles

Focus field

Allows the user to choose which of the 3 find options the cursor should focus to upon opening the quick find form.

Quick find

INPUT

Prefix find

PREFERENCES

Focus field

Prefix find

Quick filter find

Grid find

Grid find

Setup

Quick Find Menu items

Each organization defines what menu items are available to the quick find form by populating the *Quick find menu item table*.

System Administration -> Setup -> Quick find -> Quick find menu items

TABLE DATA		FIELD DATA	Key field id
Key table name	SalesTable	Key field name	SalesId
Key table id	2022	Key field EDT type id	1720

For most of the system menu items, logic will populate the necessary meta data fields. In scenarios where the meta data is not set up in a way that the logic can find the right table and field, one can manually set the key table name field and key field name field for each menu item and the system will then populate the associated ids.

Setup fields

Label Id

The label that is shown in *Quick Filter Control Find* dropdowns and for the *Group-String control find* controls.

This value initializes from the extended data type of the key field when creating a new record in this table. It can be overridden with another label id or simply with static text.

Prefix

Allows each menu item to be associated with a value that is used in the *Prefix find* option in the quick find form.

Prepend text

Allows each menu item to be associated with a value that will be prepended to the user input for either the *Prefix Find* or *Quick Filter Find* options.

In the screenshot below, the prepend text is set to 000

If a user inputs Sales-711 into the *Prefix find* option, 000 will be prepended to 711 and the sales order details page for 000711 will open.

Similarly, typing 711 in the quick filter field and selecting sales order will do the same.

However, inputting 000711 would not open the details page as 000000711 does not exist.

Within the preferences section, each user can toggle if they want to prepend text or not to their input value.

Quick Find User Menu items

Each user can override the prefix and prepend text values that have been setup for the organization.

Common->Setup-Quick find menu items.

When a user adds a menu item in this form, the prefix and prepend text values are inherited from the organizational menu item setup.

The screenshot shows the 'Quick find menu items' form. On the left, a list of menu items is displayed with 'SalesTable' selected. On the right, the 'Setup' section is visible, showing the 'Prefix' as 'Sales' and 'Prepend text' as '000'.

A user can then override the values to what they prefer.

The screenshot shows the 'Quick find menu items' form with the 'Setup' section. The 'Prefix' is now 'SO' and the 'Prepend text' is '0007', indicating a user override.

The user would now just need to type in 11 (rather than the 711 required by other users) into the *quick filter find control* to open the details page for sales order 000711.

Prefix find would open the details page for sales order 000711 with either SO-11 (utilizing the user override setup values) or Sales-711 (utilizing the organization default setup).

However, SO-711 (combining the user override prefix 'SO' with the organizational text to prepend '000') would not find any sales order as it would search for 0007711

0007711 does not exist in SalesTable

Quick find

INPUT	PREFERENCES
Prefix find	Focus field
Prepend text	Prefix find
SO-711	Prepend text
Find	Yes

Similarly, Sales-11 would also not find a sales order as it would search for 00011.

00011 does not exist in SalesTable

Quick find

INPUT	PREFERENCES
Prefix find	Focus field
Prepend text	Prefix find
Sales-11	Prepend text
Find	Yes

Each label description in the *quick filter control* will find the correct setup record (either the user setup record if it exists, or the organizational one if the user has not overridden it) and display the associated *Prefix* and *Prepend text* values.

Quick find

INPUT	PREFERENCES
Prefix find	Focus field
Prepend text	Prefix find
711	Prepend text

Customer account - Prefix = Cust: "711"

Purchase order - Prefix = Purch - Prepend text = PO: "711"

✓ Sales order - Prefix = SO - Prepend text = 0007: "711"

Vendor account - Prefix = Vend - Prepend text = 10: "711"

Find purchase order

Quick find form parts

Similar to the menu item setup, each organization defines what *form parts* are available to quick find form in the *Grid Find* section by populating the *Quick find form part menu item table*

System administration ->Setup->Quick find- >Form part menu items

Display menu item name	Label ID
CustFindCustomerList	@SCM:FindCustomer

The label id field initializes from the label of the selected menu item. It can be overridden with another label or with static text.

There is a validation to ensure that correct menu items are being added. For example, if I add the custTable menu item, the admin receives the error below as it is checking the design pattern of the associated form.

Quick find form part menu items

Display menu item name	Label ID
<input type="text" value="CustTable"/>	<input type="text" value=""/>

**Menu item has a design pattern of DetailsMaster.
Expected design pattern is form part section list.
Do you wish to continue?**

Yes **No**

- PurchFindVendorFormPart (sys) [Application Suite]
 - Methods
 - Events
 - Data Sources
 - Parts
 - Design | Pattern: Form Part Section List
 - FilterGroup (Group) | Pattern: Filters and To
 - Grid (Grid)

However, the menu item can still be added if the admin chooses to.

For this example, a run time error would occur when the custTable form part is activated (I don't think the error can be caught since the everything is dynamically created).

Quick find

INPUT

Prefix find

Find

Grid find

Customers

PREFERENCES

Focus field

Grid find

Prepend text

☒

Yes

Default quick filter selection

Prefix separator

✖ The menu item with name CustTable could not be opened.

Show diagnostic information

Copy

Close

Quick find groups

If the organization would like to utilize the *Group-string control find*, they must first set up groups and then assign menu items to those groups.

System Administration -> Quick find -> Quick find groups.

Filter

AR

Standard view

Quick find groups

Quick find group id

AR

Label ID

Accounts Receivable

Menu items

+ New Delete

☐ Display menu item name

☐ SalesTable

☒ CustTable

The label id field again can either an actual label id or static text.

The system cycles through each of these groups, and if a user has access to any of the menu items associated to that group, a fast tab will be displayed. Each menu item within the group that a user has access to is then displayed.

Quick find

INPUT

Prefix find

Find

PREFERENCES

Focus field

Default quick filter selection

Prefix separator

Prepend text

☒

Yes

Default grid selection

Grid find

Accounts Receivable

Customer account

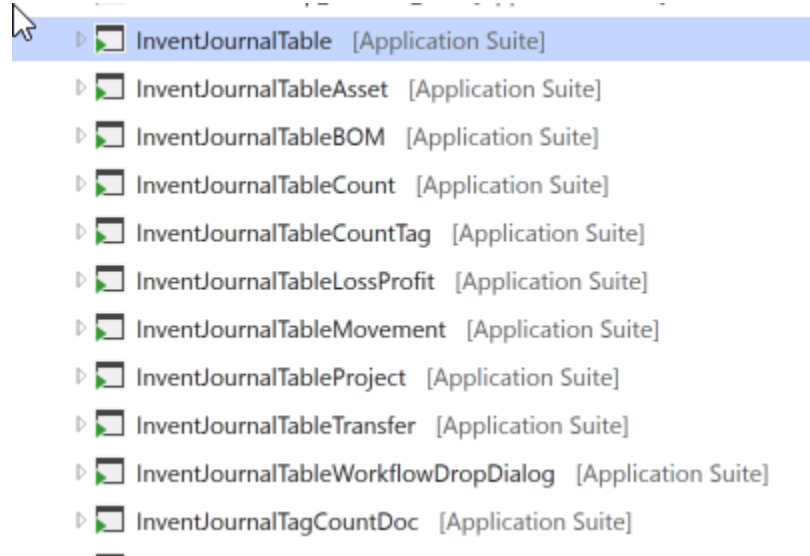
Sales order

Journal menu item considerations

Unlike the majority of list pages, journal forms (inventory, ledger, and project) are a little bit different and need additional considerations.

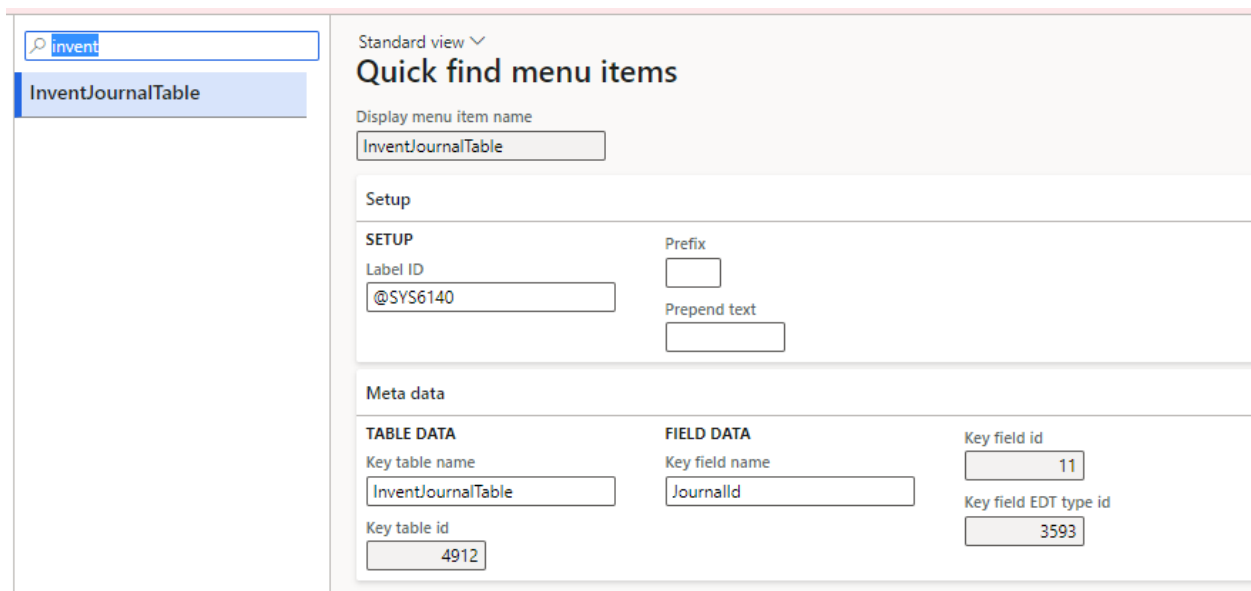
Inventory journals

Each inventory journal type is associated to its own specific menu item.



As an alternative to configuring a record in the quick find setup for each of these menu items, a feature has been developed that requires just one record in the setup.

To do so, setup a record for inventJournalTable and set the key table and field name values manually as shown below.

A screenshot of a web-based setup form titled 'Quick find menu items'. The form is divided into several sections. At the top, there is a search bar with the text 'invent' and a dropdown menu showing 'InventJournalTable'. Below this, the 'Display menu item name' field contains 'InventJournalTable'. The 'Setup' section includes a 'SETUP' header, a 'Label ID' field with the value '@SYS6140', a 'Prefix' field, and a 'Prepend text' field. The 'Meta data' section includes a 'TABLE DATA' header with 'Key table name' (InventJournalTable) and 'Key table id' (4912), and a 'FIELD DATA' header with 'Key field name' (JournalId), 'Key field id' (11), and 'Key field EDT type id' (3593).

Logic has been added that will open the correct journal form based on the journal type of the journal id the user inputs or selects.

For example, since 00031 is a movement journal, inputting that value will open the movement journal form if the user has access to it.

Quick find

INPUT

Prefix find

00031

PREFERENCES

Focus field

Grid find

Prepend text

- Customer account - Prefix = Cust: "00031"
- ✓ Inventory journal: "00031"
- Purchase order - Prefix = Purch - Prepend text = PO: "00031"
- Sales order - Prefix = SO - Prepend text = 0007: "00031"
- Vendor account - Prefix = Vend - Prepend text = 10: "00031"

https://ecklund28c5e53dae09bcc84devaos.axcloud.dynamics.com/?cmp=usmf&mi=InventJournalTableMovement

Finance and Operations

Search for a page

Edit New Delete Validate Post Functions View postings Print Unlock Workflow Options

Personalize Page options Share

Always open for editing Personalize this page Security diagnostics Advanced filter or sort Record info Go to Get a link Create a custom alert Manage my alerts

Movement | 00031 : INVENTORY MOVEMENT JOURNAL | Standard view

00031 : Inventory movement journal

Journal header details

VOUCHER Selection by POSTING Delete lines after posting

If a user inputs an adjustment journal (00052) and selects the same control

Quick find

INPUT

Prefix find

00052

PREFERENCES

Focus field

Grid find

Prepend text

- Customer account - Prefix = Cust: "00052"
- ✓ Inventory journal: "00052"

the adjustment journal form will open if the user has access to it.

https://ecklund28c5e53dae09bcc84devaos.axcloud.dynamics.com/?cmp=usmf&mi=InventJournalTableLossProfit

Finance and Operations

Edit New Delete Validate Post Functions View postings Print Unlock Workflow Options

Personalize Always open for editing Personalize this page

Page options Security diagnostics Advanced filter or sort Record info Go to

Share Get a link Create a custom alert Manage my alerts

Inventory adjustment | 00052 : INVENTORY ADJUSTMENT JOURNAL | Standard view

00052 : Inventory adjustment journal

Journal header details

Journal lines

+ New Delete Display dimensions Inventory Functions

Date	Item number	Product name	Site	Warehouse	Location	CW quantity	CW unit	Quantity	Unit quant...	Unit
1/11/2017	A0001	HDMI 6' Cables	2	24	CP-001			10.00	10.00	Pcs
1/11/2017	A0002	HDMI 12' Cables	2	24	CP-005			10.00	10.00	Pcs

This same logic also works in *Prefix find* and within the fast tab groups.

Project journals

There are 4 journals in the project module.

The expense journal can be handled by the ledger journal strategy, and the item journal can be handled by the invent journal strategy.

For hour and fee journals, similar logic as inventory journals has been added. You can set up one record for ProjJournalTable and that will work for both types of journals.

ProjJournalTable

Projjournaltable

ProjJournalTableEmpl

Standard view

Quick find menu items

Display menu item name Description

Projjournaltable

Setup

SETUP

Label ID Prefix

@Proj:Journal

Prepend text

Meta data

TABLE DATA

Key table name

ProjJournalTable

Key table id

11673

FIELD DATA

Key field name

JournalId

Key field id

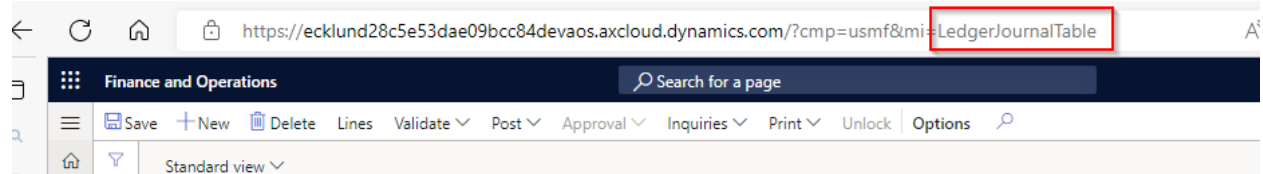
9

Key field EDT type id

15246

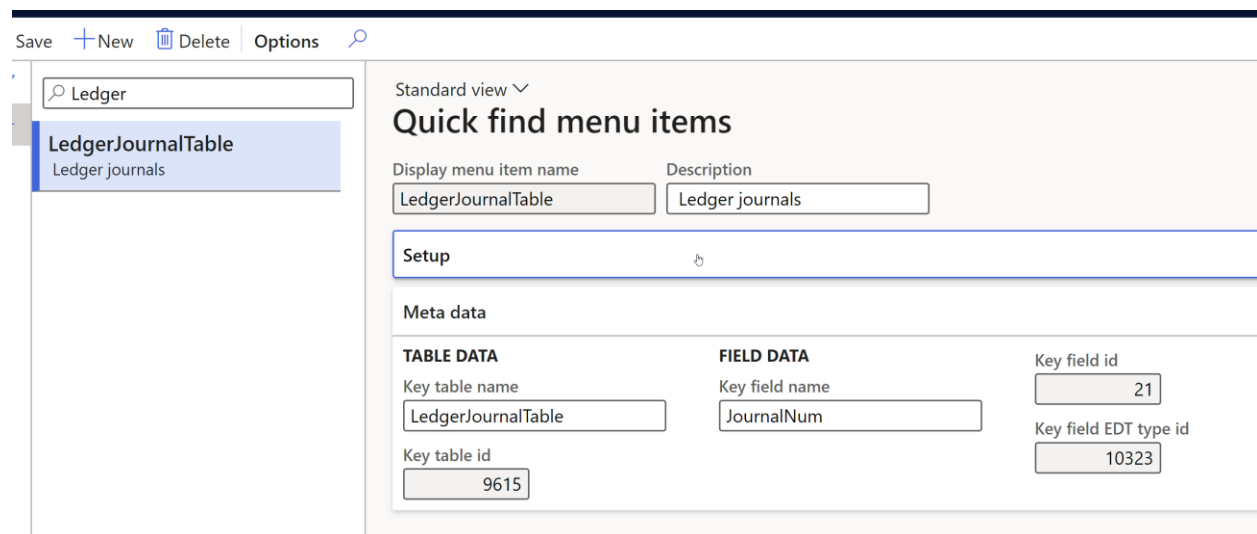
Ledger journals

Unlike inventory journals, users can navigate to the LedgerJournalTable menu item in which all journals are displayed.



If the user clicks on a journal that they don't have access to, nothing happens. If they do have access, then the lines of the journal are shown .

One strategy is just to use one menu item for all ledger journals.



Quick find menu items	
Display menu item name	Description
LedgerJournalTable	Ledger journals
Setup	
Meta data	
TABLE DATA	FIELD DATA
Key table name	Key field name
LedgerJournalTable	JournalNum
Key table id	Key field id
9615	21
	Key field EDT type id
	10323

This will bring the user to the main journal table form when the can then clicking on the journal ID to get to the journal lines.

Additional development would be required to get directly to the lines (LedgerJournalTrans) from the quick find form as done for inventory and project journals