



Empower citizen and pro AL developers to do more with Power Platform

NATIVE CONNECTOR + WEB CLIENT INTEGRATION

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Ayrton Massey
MICROSOFT

10 YEAR ANNIVERSARY
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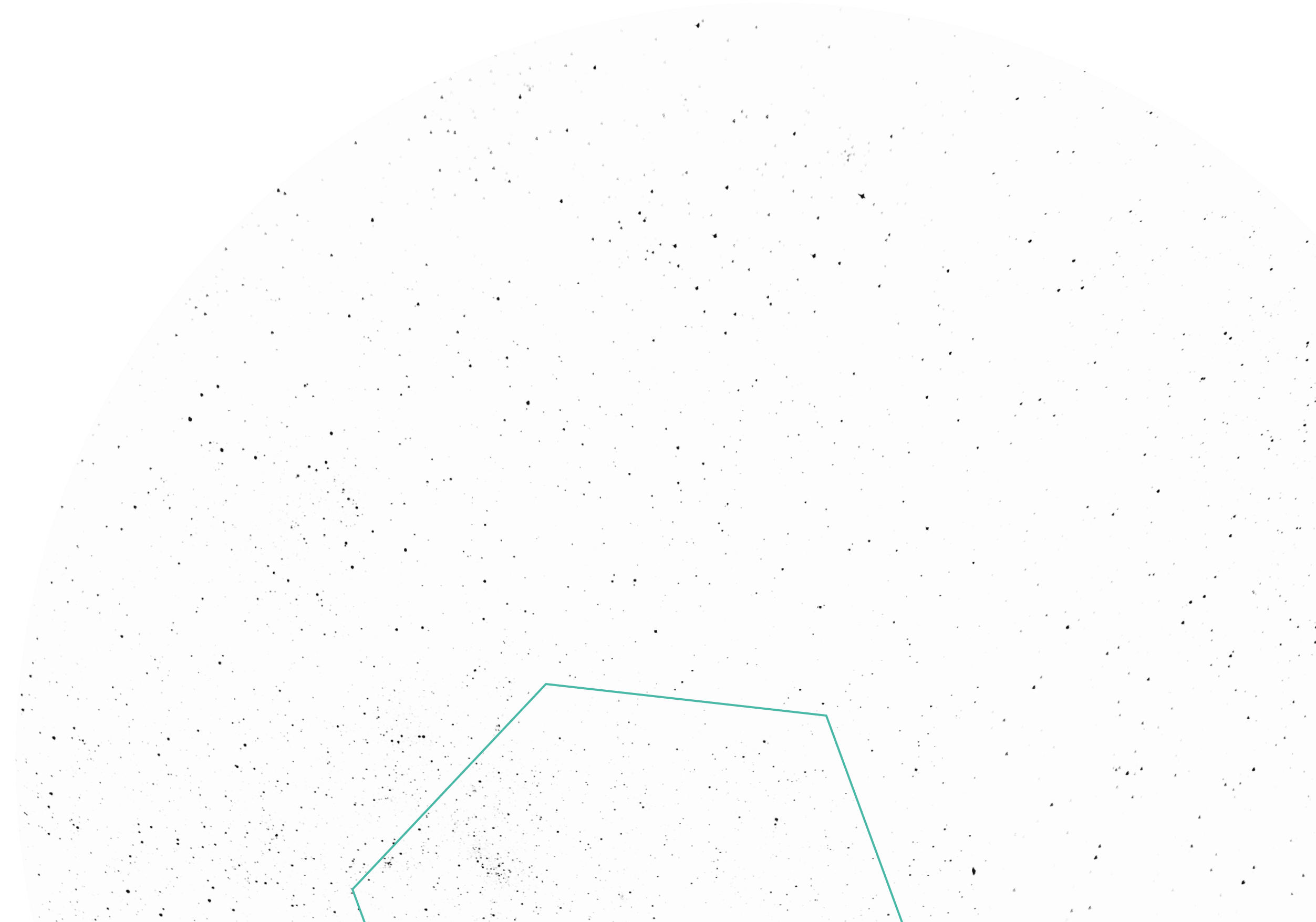
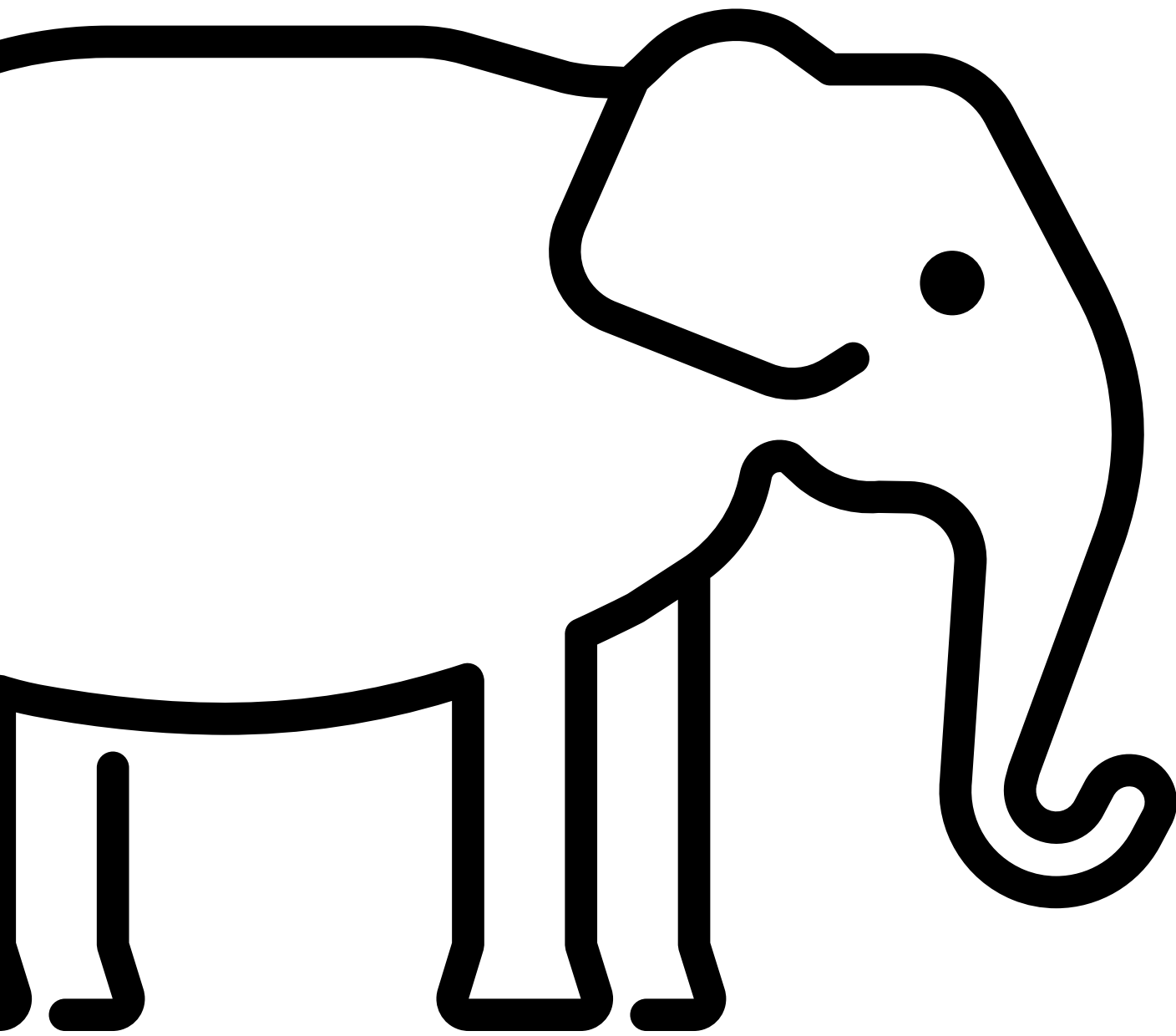
Connector capabilities

Agenda

- Introduction
- Demo
 - Flow templates and approvals
 - CUD triggers, CRUD actions
 - Find records and its capabilities

Disclaimer

- All new features in these slides are for Business Central online only
- Business Central On-Premises connector is supported but still in preview



License?

- Premium connector => needs a paid license for Power Apps/Power Automate
- Good news: that's included with all paid Business Central licenses
- For trials/demos: activate a trial for Power Apps/Power Automate

First, the news...


- The Dynamics 365 Business Central connector is GA!

Dynamics 365
Business Central



















Dynamics 365 Business Central is a business management solution for small and mid-sized organizations that automates and streamlines business processes and helps you manage your business.

[See documentation](#)

PREMIUM



Triggers - A trigger is an event that starts a flow

 When a record is changed (V3)	 When a record is created (V3)	 When a record is deleted (V3)	 When a record is modified (V3)	 When a customer approval is requested...	 When a customer approval is requested...
 When a general journal batch approval...	 When a general journal batch approval...	 When a general journal line approval...	 When a general journal line approval...	 When a purchase document approval i...	 When a purchase document approval i...
 When a record is changed (V2)	 When a record is created (V2)	 When a record is deleted (V2)	 When a record is modified (V2)	 When a sales document approval i...	 When a sales document approval i...



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DEMO

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Demo recap

- Triggers “When a record is ...”
- Triggers “When a ... approval is requested”
- Actions “Get/Create/Update/Delete record”

The screenshot shows the 'Create record (V3)' configuration window. It has a header bar with a blue icon, a question mark, and three dots. Below the header, there are four rows of configuration fields, each with a dropdown arrow on the right:

- * Environment name: PRODUCTION
- * Company name: CRONUS NL
- * API category: v2.0
- * Table name: customers

Below these are five more rows of text input fields:

- number
- displayName
- type
- addressLine1
- addressLine2

The screenshot shows the 'When a record is created (V3)' configuration window. It has a header bar with a blue icon, a question mark, and three dots. Below the header, there are four rows of configuration fields, each with a dropdown arrow on the right:

- * Environment name: PRODUCTION
- * Company name: CRONUS NL
- * API category: v2.0
- * Table name: customers

The screenshot shows the 'When a customer approval is requested (V3)' configuration window. It has a header bar with a blue icon, a question mark, and three dots. Below the header, there are eight rows of configuration fields:

- * Environment name: PRODUCTION
- * Company name: CRONUS NL
- First condition: Name
- First condition is: <> 'Contoso'
- Second condition: Select the field for the second condition
- Second condition is: Enter a value for the second condition
- Third condition: Select the field for the third condition
- Third condition is: Enter a value for the third condition
- Fourth condition: Select the field for the fourth condition
- Fourth condition is: Enter a value for the fourth condition

New (and old) capabilities

- Find records (V3)
 - OData orderby, top, skip
 - OData filter...
 - ... but with NST limitations
 - Find field names in API reference
 - Child records
 - Pagination
- Dynamic company/environment
- Old API versions hidden but working
- No ODataV4 web services (*)

Find records (V3)

* Environment name	{x} BCEnvironment x	X
* Company name	{x} BCCompany x	X
* API category	v2.0	X
* Table name	customers	X
Filter Query	An ODATA filter query to restrict the entries returned (e.g. stringColumn eq 'strii	
Order By	An ODATA orderBy query for specifying the order of entries.	
Top Count	Total number of entries to retrieve (default = 1000, maximum = 1000).	
Skip Count	The number of entries to skip (default = 0).	

[Hide advanced options](#) ^



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DEMO END

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What are we cooking

- Support for images in Power Apps and Power Automate
- Support for related records in Power Automate

Find more information @

- aka.ms/bcautomate
 - Power Automate/Power Apps connector docs
 - aka.ms/bcyammer
-
- <https://docs.microsoft.com/en-us/dynamics365/business-central/across-workflow>
 - https://docs.microsoft.com/en-us/dynamics365/business-central/dev-itpro/api-reference/v2.0/resources/dynamics_customer
 - <https://docs.microsoft.com/en-us/dynamics365/business-central/dev-itpro/developer/devenv-develop-custom-api>



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Enough Power Platform UI...

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Better Together: Virtual Tables

Lukasz Zoglowek
Microsoft

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Agenda

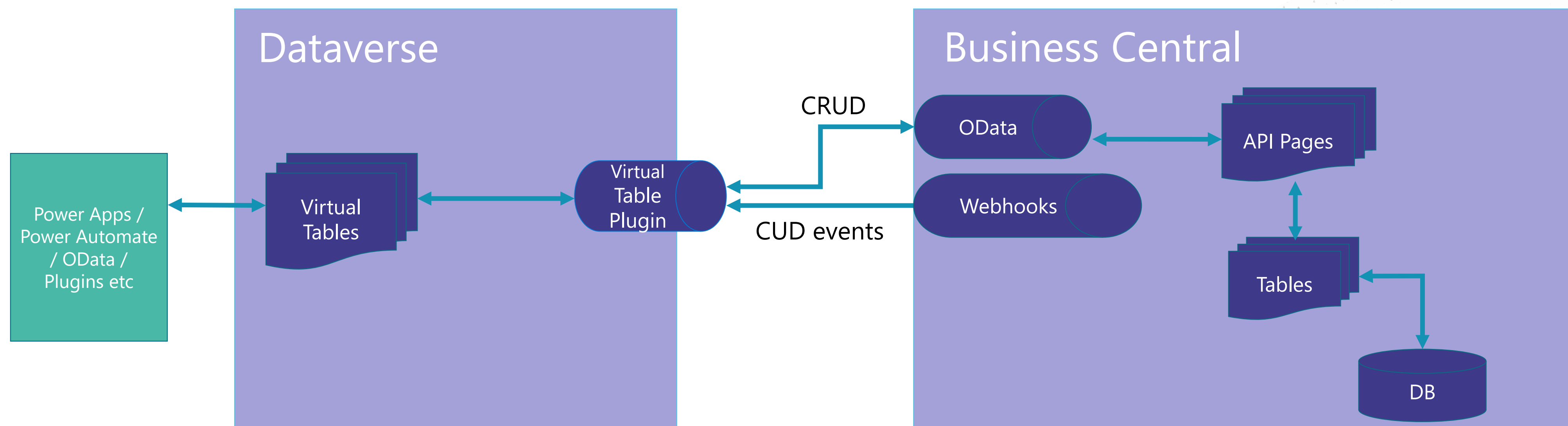
- Introduction
- New setup experience
- Generate Virtual Table and create model driven app (demo)
- Create synthetic relationship (demo)
- Cud events and Pro-dev plugin development (demo)

Introduction

- Business Central Virtual Tables (VE) is a virtual data provider on Dataverse
- Virtual Tables do not physically live on Dataverse
- Business Central Dataverse solution enables:
 - Runtime generation of virtual tables
 - CRUD operations (Create, Read, Update, Delete)
 - CUD events (Create, Update, Delete)

Introduction


- OData API Pages endpoint is used for VE generation/CRUD
- Both built-in and custom API Pages are supported



New setup experience

- Turn on by going to Assisted Setup
- Install: *Business Central Virtual Table (Preview)* from app source

Dataverse Connection Setup



Quickly set up the connection, couple records, and even synchronize data.

Enable data synchronization ☐

Connect Business Central to Dataverse to synchronize data with other business apps.

Quickly set up Business Central virtual tables in Dataverse and enable business events that Business Central sends to Dataverse.

Enable virtual tables and events ☒

If you choose Next we will try to find your Dataverse environments so you can choose the one to connect to.

Back Next Finish

Virtual tables - basics

- Table name:
`dyn365bc_{entityName}_{publisher}_{group}_{version}`
- Primary key - needs to be a Guid (SystemId)
- Primary attribute: *displayName* or first field of type string
- Labels: table captions, field, enums

Generate Virtual Tables. Model driven app

- Demo

Business Manager - Dynamics 365 Business Central - [InPrivate]

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https://businesscentral.dynamics.com/?RedirectedFromSignup=1

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InPrivate

⋮

☰

Dynamics 365 Business Central

🔍

🔔

⚙️

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MA

CRONUS USA, Inc.

Finance

Cash Management

Sales

Purchasing

Shopify

☰

Customers

Vendors

Items

Bank Accounts

Chart of Accounts


↗

Get started

Hi, meet Business Central!

You're all set to try out our demo company, Cronus. Go explore on your own, or take a quick tour first.

Show demo tours



Activities

Sales This Month

\$1,906

> See more

Overdue Sales Invoice Amount

\$63,890

> See more

Overdue Purch. Invoice Amount

\$49,422

> See more

Sales Invoices Predicted Overdue

0

> See more

Ongoing Sales

Sales Quotes

2

>

Sales Orders

4

>

Sales Invoices

7

>

Ongoing Purchases

Purchase Orders

5

>

Ongoing Purch. Invoices

3

>

Purch. Invoices Next Week

0

>

Payments

Unprocessed Payments

1

>

Average Collection Days

5.8


>

Outstanding V. Invoices

13

>

Scan documents



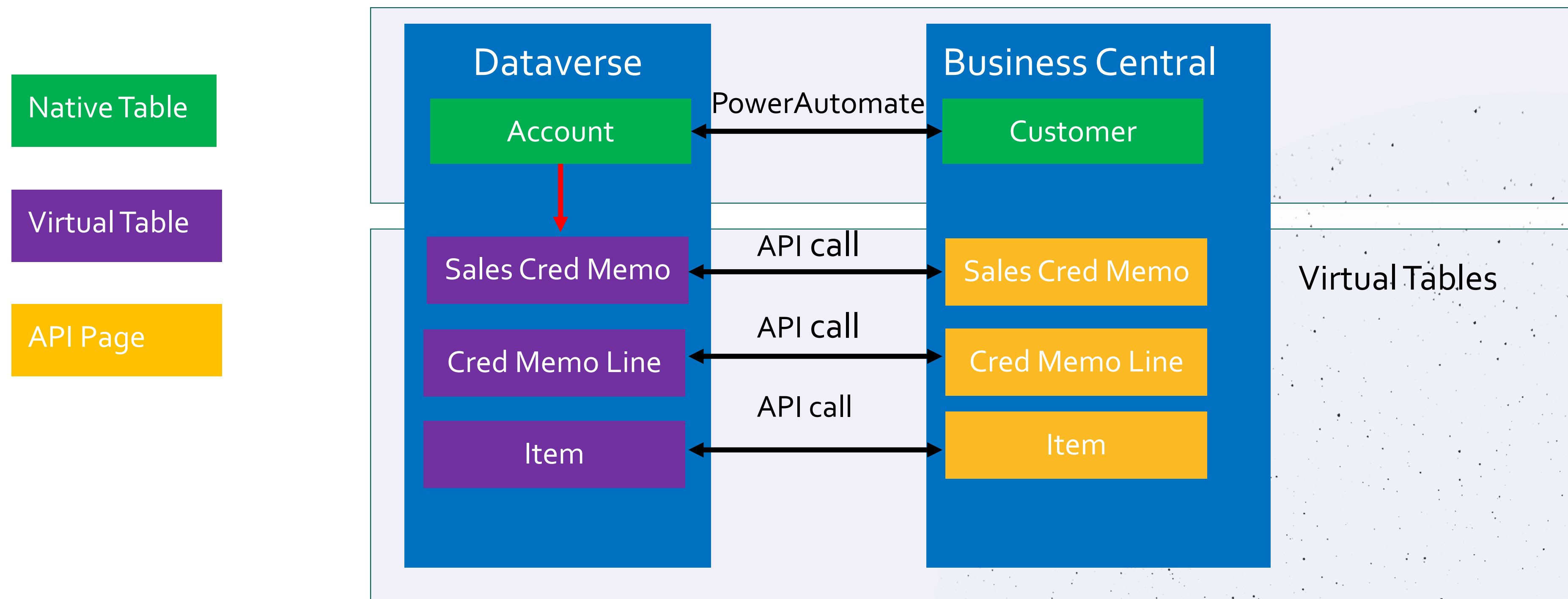
Create Incoming from Camera

Relationships

Type	Dataverse example	AL Code example
1:N	SalesOrders form with Lines subgrid	<pre>page 30028 "Sales Orders" { part(salesOrderLines; "Sales Order Lines") { Caption = 'Lines'; EntityName = 'salesOrderLine'; EntitySetName = 'salesOrderLines'; SubPageLink = "Document Id" = Field(Id); } }</pre>
N:1	SalesOrders form with lookup to Customer	<pre>page 30028 "Sales Orders" { field(customerId; "Customer Id") { Caption = 'Customer Id'; } } table 5495 "Sales Order Entity Buffer" { field(9631; "Customer Id"; Guid) { TableRelation = Customer.SystemId; } }</pre>
1:1	Customer form with quick view form	<pre>page 30009 "Customer" { part(customerDetails; "Customer Details") { Multiplicity = ZeroOrOne; EntityName = 'customerDetail'; EntitySetName = 'customerDetails'; SubPageLink = SystemId = Field(SystemId); } }</pre>

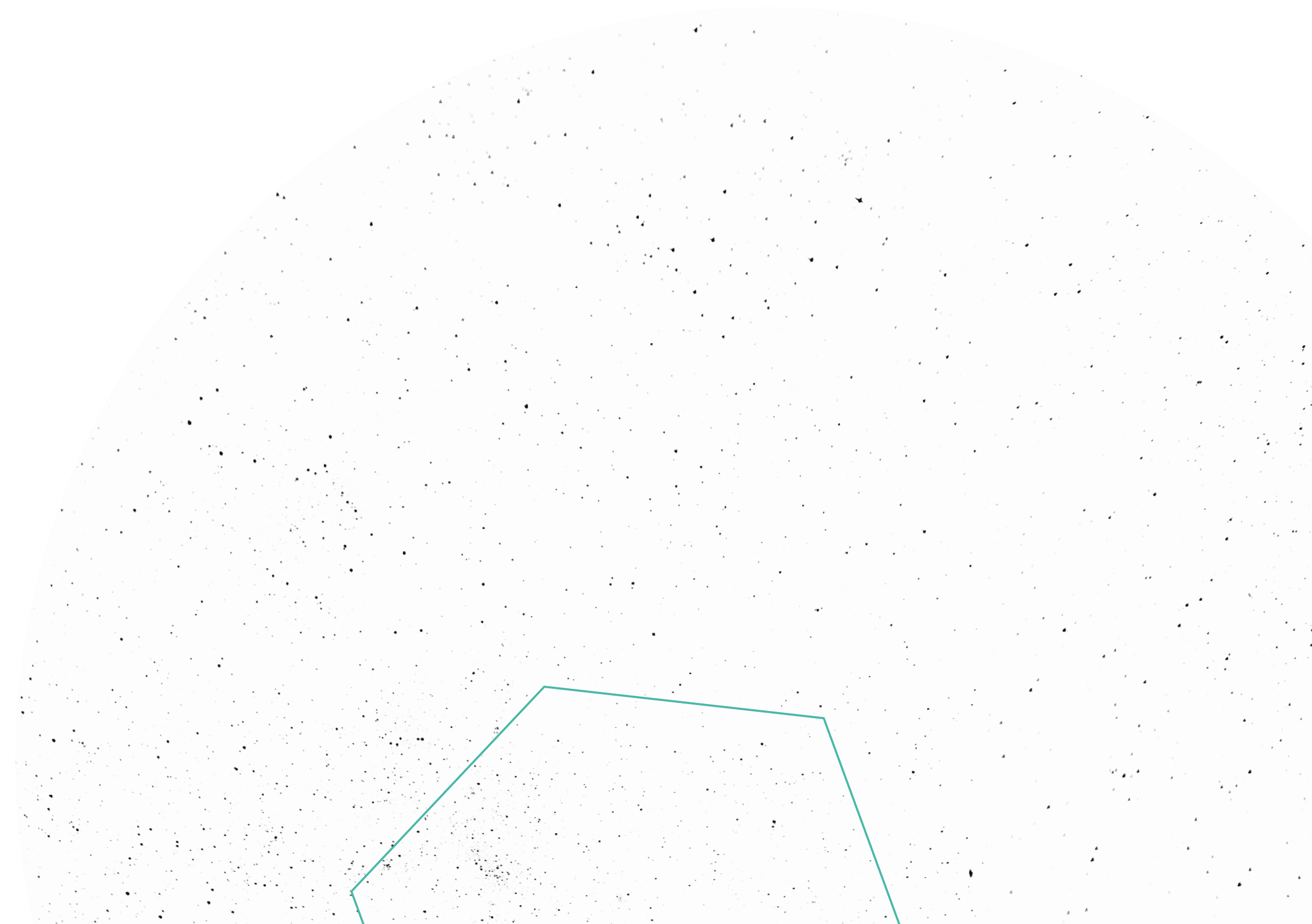
Synthetic relations (native to virtual)

- Use Virtual Tables to create a relation between native table(s) and Virtual Table



Synthetic relations

- Demo



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2

[See more](#)

Sales Orders

4

[See more](#)

Sales Invoices

7

[See more](#)

Ongoing Purchases

Purchase Orders

5

[See more](#)

Ongoing Purch. Invoices

3

[See more](#)

Purch. Invoices Next Week

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[See more](#)

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[See more](#)

Outstanding V. Invoices

13

[See more](#)

Scan documents



Create Incoming Invoices from Camera

Dataverse Virtual Tables – CUD events

- Add support for:
 - Record added
 - Record deleted
 - Record modified
- Visible with the standard Dataverse connector

The screenshot displays a Microsoft Dynamics 365 Flow canvas with two steps connected by a downward arrow. The first step is titled "When a row is added, modified or deleted" and includes the following configuration:

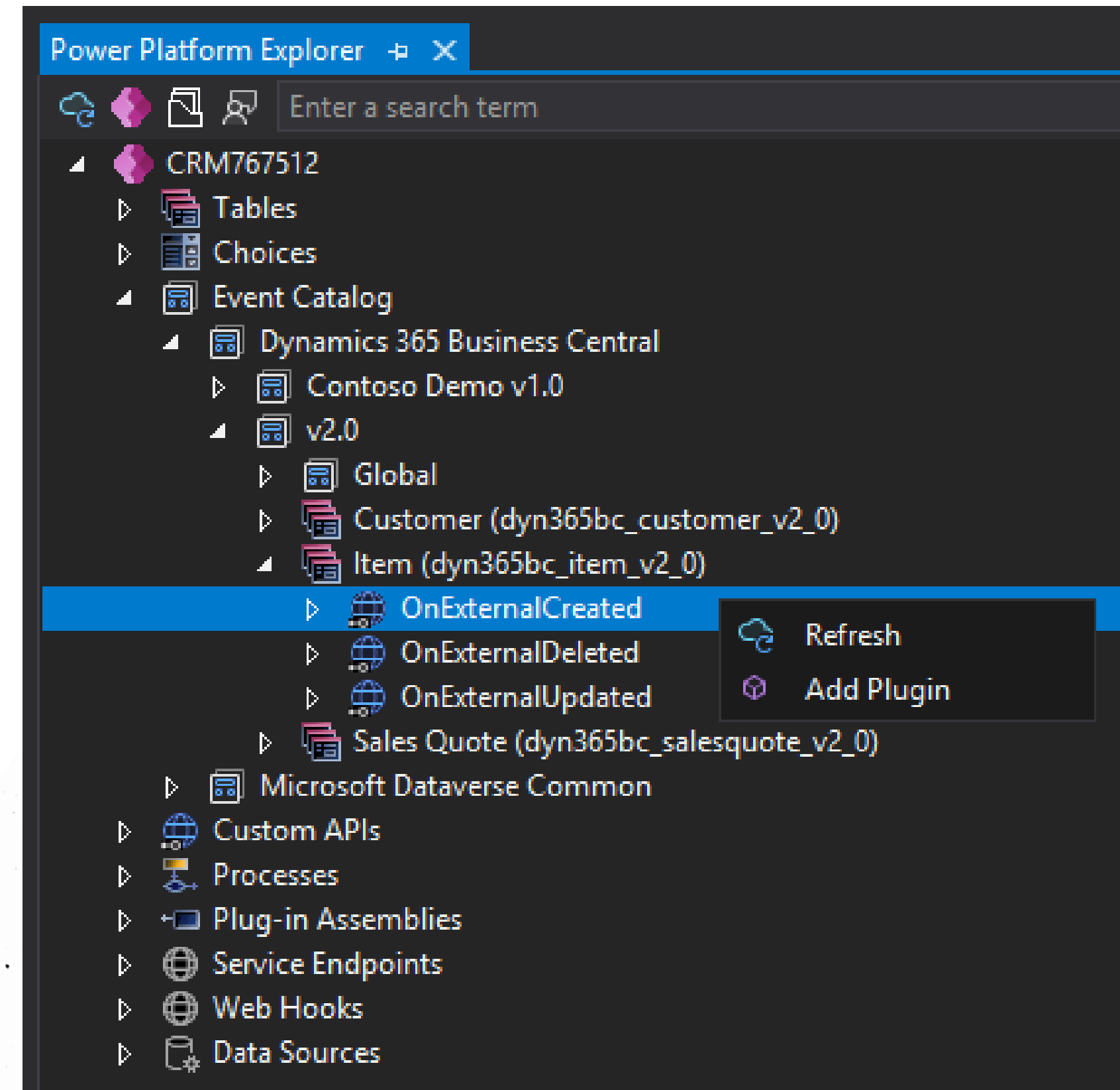
- * Change type:** Added
- * Table name:** Items
- * Scope:** Organization
- [Show advanced options](#)

The second step is titled "Get a row by ID" and includes the following configuration:

- * Table name:** Items
- * Row ID:** Id x
- [Show advanced options](#)

Pro-dev plugin development

- Support for asynchronous pipeline events in Dataverse
- Add custom SDK processing steps for CUD events in a C# plugin
- Unblock custom business scenarios



Pro-dev plugin development

- Demo

Power Apps

Search

Environment
Contoso (default)

MA

New flow

Flows

Cloud flows Desktop flows Business process flows Shared with me

You don't have any flows

Choose from 100s of templates to start automating your workflows.

PowerAppsMaker templates you might like

Power Apps button

By Microsoft

Instant492037

Add an item to SharePoint and send an email

By Microsoft

Instant77761

Create a new issue in JIRA from a Power App

By Microsoft Power Automate Community

Instant804

Create an item in Dynamics NAV from Power Apps

By Microsoft Power Automate Community

Instant179

Create OneNote pages for posts to Yammer from a Power Apps control

By Microsoft Power Automate Community

Instant153

Create pins in Pinterest from a button in Power Apps

By Microsoft Power Automate Community

Instant104

Post a tweet, make a push notification and send an SMS

By Microsoft Power Automate Community

Instant96

Post your most recent Instagram media to Blogger

By Microsoft Power Automate Community

Instant55

Ask a virtual agent

Virtual Table. What is next?

- More events: external business events
- More entities: expand the standard set of entities
- More features
- Remove “Preview” flag