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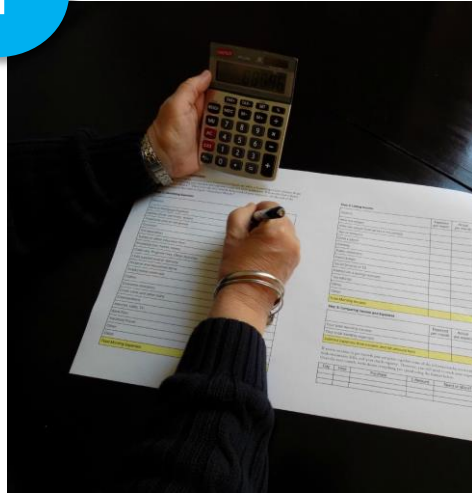
# Better Together: Business Central and Power Platform

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www.bctechdays.com



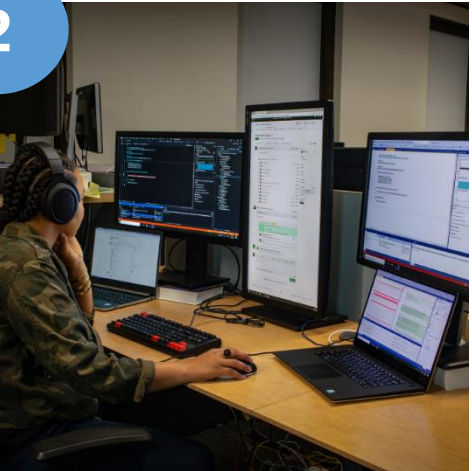
1



## Data sync for Dataverse

Classic/native data sync for  
Dataverse and Dynamics 365  
Sales

2

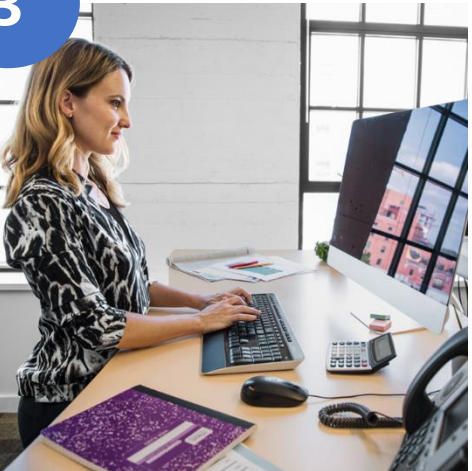


## Dataverse Virtual Tables

PREVIEW

Our data in Dataverse  
Any Power Apps  
Support for data-change events

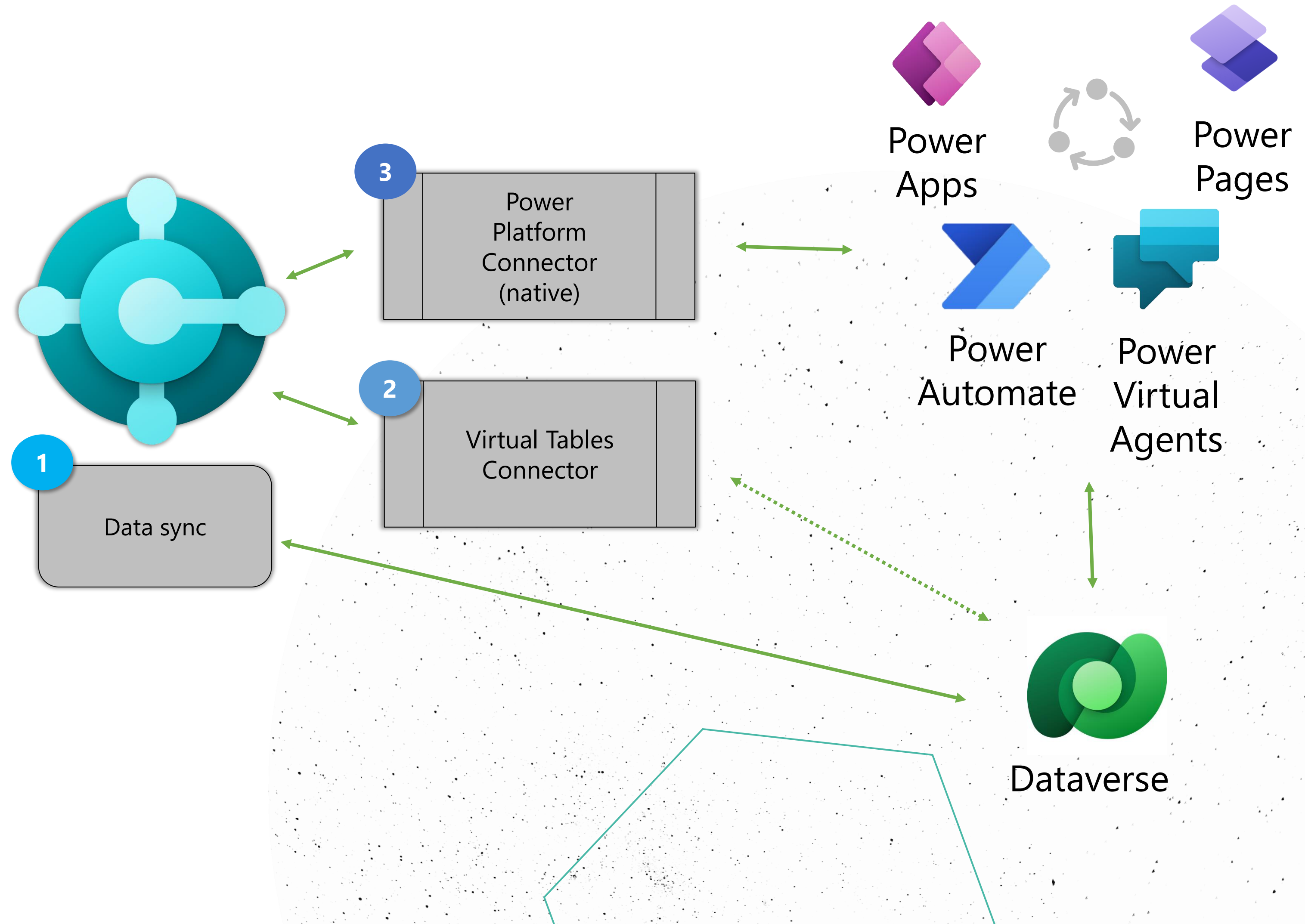
3



## Power Platform Connector

Power Apps (mobile)  
Power Automate (or Logic Apps)  
Power Virtual Agents or Pages\*

\* via Power Automate







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# Dataverse Integration Data Synchronization and Extensibility

Djordje Čenić  
Onat Buyukakkus  
Microsoft

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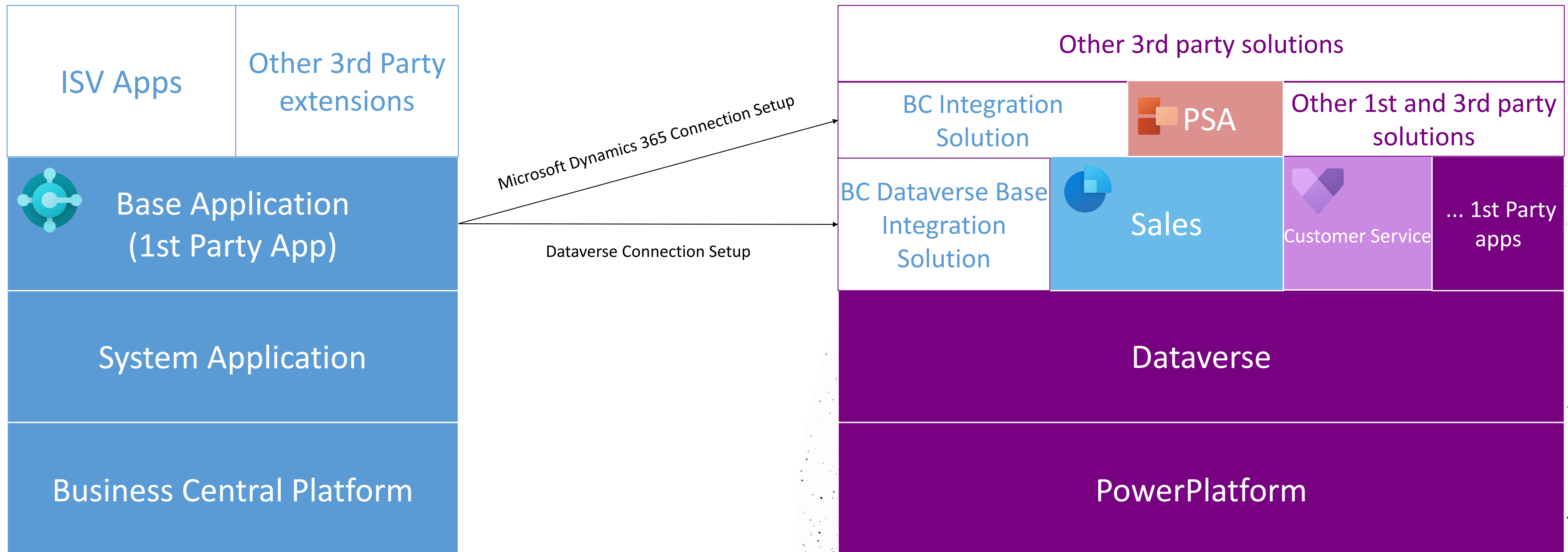
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# Agenda

- Keep the data about your customers, vendors and contacts in synch with your Dataverse environment.
- Keep the data about your items, resources, sales quotes, sales orders, opportunities and posted sales invoices in synch with your Dynamics 365 Sales app (running on Dataverse).
- Customize and extend the data synchronization.

# Data Synchronization with Dataverse



# Synchronize customers, vendors and contacts

- Use assisted setup wizard to set the data synchronization up.
- Perform initial data synch in cases where you already have corresponding data in both environments.
- Map option sets such as payment terms, shipment methods and shipping agents to corresponding Dataverse types.
- Set up rules for synchronization conflict resolution proactively.
- Get an overview of synchronization errors.

Customers - Dynamics 365 Busin

https://businesscentral.dynamics.com/?company=CRONUS%20USA%2C%20Inc.&node=0000233e-438d-0000-0c28-4f00836bd2d2&page=22&dc=0&bookmark=21%3bEgAAAAJ7BTEAMAAwADAAMA%3d%3d

Dynamics 365 Business Central

CRONUS USA, Inc.

FinanceCash ManagementSalesPurchasingShopify

Customers: All


SearchNewDeleteProcessNew DocumentCustomerPrices & DiscountsReportMore options

No. ↑	Name	Responsibility Center	Location Code	Phone No.	Contact	Balance (\$)	Balance Due (\$)
<a href="#">10000</a>	⋮ Adatum Corporation			<a href="#">11111111</a>	Robert Townes	0.00	0.00
20000	Trey Research			22222222	Helen Ray	3,036.60	2,024.40
30000	School of Fine Art				Meagan Bond	53,833.52	51,793.67
40000	Alpine Ski House				Ian Deberry	4,316.92	4,316.92
50000	Relecloud				Jesse Homer	8,836.80	5,754.96

DetailsAttachments (0)

Power BI Report

Get started with Power BI



Sell-to Customer Sales History

Customer No. 10000

0	0	2
Ongoing Sales Quotes	Ongoing Sales Blanket Orders	Ongoing Sales Orders
2	0	0
Ongoing Sales Invoices	Ongoing Sales Return Orders	Ongoing Sales Credit Memos
33	33	0

tel:11111111

Type here to search

16°C Mostly cloudy

ENG DA 10:05 AM 8/30/2022



# Synchronize sales data

- Use assisted setup wizard to set the data synchronization up.
- Get an overview of the integration table mapping for the new feature, available in Business Central Wave 2 2022 – bidirectional synchronization of sales orders.



Vendors - Dynamics 365 Business Central

CRONUS USA, Inc.

Finance

Cash Management

Vendors: All

Search

New

Delete

Pro

Don't know what to search for? Try exploring pages and reports

No. ↑	Name	Location Code	Phone No.	Contact	Search Name	Balance (\$)	Balance Due (\$)	P
10000	Fabrikam, Inc.		4255550101	Krystal York	FABRIKAM, ...	2,071.13	2,071.13	
20000	First Up Consultants			Evan McIntosh	FIRST UP C...	4,903.88	4,903.88	
30000	Graphic Design Institute			Bryce Jasso	GRAPHIC D...	6,979.57	6,979.57	
40000	Wide World Importers			Toby Rhode	WIDE WOR...	18,193.10	18,193.10	
50000	Nod Publishers			Raymond Hillard	NOD PUBLI...	17,273.87	17,273.87	
81000	Raw material supplier				RAW MATE...	0.00	0.00	
82000	Subcontractor				SUBCONTR...	0.00	0.00	

Details

Attachments (0)

Power BI Report

Get started with Power BI

Vendor Statistics

Vendor No.	10000
Balance (\$)	2,071.13
Balance (LCY) As Customer	0.00
Outstanding Orders (\$)	5,792.79
Amt. Rcd. Not Invd. (\$)	0.00
Outstanding Invoices (\$)	226.84
Total (\$)	8,090.76
Overdue Amounts (\$) as of 0...	2,071.13
Invoiced Prepayment Amoun...	0.00
Payments (\$)	20,814.56

Type here to search

16°C Partly sunny

ENG DA 10:49 AM 8/30/2022

# Just-in-time synch of changes in Dataverse

- We provide the ability to get real-time synchronization when a change in Dataverse happens.
- To make this work, you must make Power Automate cloud flow for each entity in [powerautomate.com](https://powerautomate.com) in your Dataverse environment.
- Find the templates by searching for "Notify Business Central" in the template search field:
  - [Flow Template for account changes \(both customer and vendor\)](#)
  - [Flow Template for contact changes](#)
  - [Flow Template for currency changes](#)
- Create flows from templates and set up the connection in the Business Central Connector (connect, choose Business Central environment and company).



View - Integration Table Mapping

https://businesscentral.dynamics.com/?company=CRONUS%20USA%2C%20Inc.&page=5335&dc=0&bookmark=25%3b1xQAAAJ7%2f0MATwBOAFQAQQBDAFQ%3d

Dynamics 365 Business Central

CRONUS USA, Inc.

Finance

Vendors: All

Search

+ N

No. ↑

Name

10000

Fabrikam, Inc.

20000

First Up Consultants

30000

Graphic Design Institute

40000

Wide World Importers

50000

Nod Publishers

81000

Raw material supplier

82000

Subcontractor

Integration Table Mappings

Search

Edit List

Delete

Synchronization

Mapping

Uncoupling

Coupling

More

Integration Synch. Job Log

Synchronize Modified Records

Run Full Synchronization

Name ↑	Table	Table Filter	Direction	Integration Table
→ CONTACT	Contact	VERSION(1) SORTING(Field1) W...	Bidirectional	Dataverse Cont
CURRENCY	Currency		ToIntegrati...	Dataverse Tran
CUSTOMER	Customer	VERSION(1) SORTING(Field1) W...	Bidirectional	Dataverse Accc
CUSTPRCGRP-PRICE	Customer Price Group		ToIntegrati...	CRM Pricelevel
ITEM UOM	Item Unit of Measure		ToIntegrati...	CRM Uom
ITEM-PRODUCT	Item	VERSION(1) SORTING(Field1) W...	Bidirectional	CRM Product
OPPORTUNITY	Opportunity	VERSION(1) SORTING(Field1) W...	Bidirectional	CRM Opportun
PAYMENT TERMS	Payment Terms		ToIntegrati...	Dataverse Accc
POSTEDSALESINV-INV	Sales Invoice Header		ToIntegrati...	CRM Invoice
POSTEDSALESLINE-INV	Sales Invoice Line		ToIntegrati...	CRM Invoicede
RESOURCE UOM	Resource Unit of Measure		ToIntegrati...	CRM Uom
RESOURCE-PRODUCT	Resource	VERSION(1) SORTING(Field1) W...	Bidirectional	CRM Product
SALESORDER-ORDER	Sales Header	VERSION(1) SORTING(Field1,Fiel...	Bidirectional	CRM Salesorde
SALESPEOPLE	Salesperson/Purchaser		FromIntegr...	Dataverse Syste
SALESPRC-PRODPRICE	Sales Price	VERSION(1) SORTING(Field1,Fiel...	ToIntegrati...	CRM Productpr
SHIPMENT METHOD	Shipment Method		ToIntegrati...	Dataverse Accc
SHIPPING AGENT	Shipping Agent		ToIntegrati...	Dataverse Accc
SOLINE-ORDERDETAIL	Sales Line	VERSION(1) SORTING(Field1,Fiel...	Bidirectional	CRM Salesorde
UNIT GROUP	Unit Group		ToIntegrati...	CRM Uomsche
VENDOR	Vendor	VERSION(1) SORTING(Field1) W...	Bidirectional	Dataverse Accc

Attachments (0)

Report

Get started with Power BI

Statistics

10000

2,071.13

0.00

5,792.79

0.00

226.84

8,090.76

2,071.13

0.00

20,814.56

Type here to search

Microsoft

16°C Cloudy

10:16 PM

8/30/2022

# Useful data synchronization documentation

## Setting up:

- [Perform Initial Setup and Synchronization](#)
- [Manage Integration Table Mappings](#)
- [Synchronization of Sales-specific Entities](#)
- [Manage Scheduled Synchronization Jobs](#)
- [Make Power Automate Flows for Notifications About Dataverse Changes](#)

## Troubleshooting:

- [Resolve Synchronization Conflicts on Coupled Records](#)
- [Troubleshoot Synchronization Errors](#)



# Customize and extend the synchronization


- Creating an integration table object in Business Central using AL Table Proxy Generator (altpgen).
- Creating a list page for Dataverse entity in Business Central.
- Extending a page in Business Central for coupling and synchronizing.
- Using events to create an integration table and field mappings between a table in Business Central table and an integration table for Dataverse.

Filter by title

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    - > Set up and manage instances
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      - Choose a data integration technology
      - Throttling FAQ
      - Configure Dataverse integration
      - Dataverse tables**
      - Configure Dataverse virtual tables
      - Human Resources virtual tables FAQ
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## Dataverse tables

Article • 05/03/2022 • 2 minutes to read • 5 contributors



**ⓘ Important**

The functionality noted in this article is currently available in both the stand-alone Dynamics 365 Human Resources and the merged Finance infrastructure. Navigation might be different than noted while we make updates. If you need to find a specific page, you can use Search.

**Applies to these Dynamics 365 apps:**

## Human Resources

Microsoft Dynamics 365 Human Resources uses Dataverse to enable extensibility and integration scenarios.

ⓘ **Note**

Human Resources entities correspond to Dataverse tables. For more information about Dataverse (formerly Common Data Service) and terminology updates, see [What is Microsoft Dataverse?](#)

The following Dataverse tables are available based on Human Resources entities.

## Benefit tables

Name	Table
Benefit Calculation Frequency	cdm_benefitcalculationfrequency
Benefit Calculation Frequency Pay Period	cdm_benefitcalculationfrequencypayperiod
Benefit Calculation Rate	cdm_benefitcalculationrate

### ☰ In this article

- Benefit tables
- Business process tasks tables
- Compensation tables
- Organization tables

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Dataverse tables - Human Resou

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Custom Integration with Dataverse

Custom option mappings with Dataverse

AL Proxy Table Generator

Integrating with Microsoft Power Automate

Integrating with Microsoft Power BI

Integrating with Microsoft Power Platform

Integrating with Microsoft Teams

Integrating with Shopify

Business Central API (v2.0)

Removed or deprecated features

Business Central on-premises

Docs / Dynamics 365 / Business Central / Developer and Admin

Customizing an Integration with Microsoft Dataverse

Article • 09/01/2022 • 19 minutes to read • 8 contributors

This walkthrough describes how to customize an integration between Business Central and Microsoft Dataverse. The walkthrough will guide you through setting up an integration between an employee in Business Central and a worker in Microsoft Dataverse.

Tip

Sample code that shows how to integrate an employee in Business Central and a worker in Microsoft Dataverse is available in the BCTech repository.

About this walkthrough

1. Develop an AL extension to integrate tables in Microsoft Dataverse and Business Central. For more information, see Developing Extensions in AL.

2. Create an integration table object in Business Central for mapping a Microsoft Dataverse table to a Business Central record type.

3. Use a Microsoft Dataverse integration table as the data source for a page in Business Central that displays data from Microsoft Dataverse table rows.

4. Extend a page in Business Central for coupling and synchronizing table rows in Microsoft Dataverse with table records in Business Central.

5. Use events to create an integration table and a field mapping between a table in Business Central and an integration

In this article

About this walkthrough

Prerequisites

Create an integration table in Business Central for the Dataverse table

Create a page for displaying Dataverse data

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IT

Engineering System...

PrivateDeployment...

Talent

DateTime

Product

Team

Enterprise

Explore

Marketplace

Pricing

Search

Sign in

Sign up

microsoft / BCTech

Public

Notifications

Fork 200

Star 297

Code

Issues 30

Pull requests 3

Actions

Projects

Wiki

Security

Insights

master

BCTech / samples / DataverseCustomEmployeeWorkerIntegration /

Go to file

onbuyuka

Update readme

211b9a2

3 hours ago

History

..

Codeunits

Update Dataverse customization projects (#136)

2 days ago

PageExtensions

Update Dataverse customization projects (#136)

2 days ago

Pages

Update Dataverse customization projects (#136)

2 days ago

PermissionSets

Update Dataverse customization projects (#136)

2 days ago

TableExtensions

Update Dataverse customization projects (#136)

2 days ago

Tables

Update Dataverse customization projects (#136)

2 days ago

README.md

Update readme

3 hours ago

app.json

Update Dataverse customization projects (#136)

2 days ago

README.md

Introduction to Dataverse Custom Employee Worker Integration

This extension describes setting up an integration between an employee in Microsoft Dynamics 365 Business Central and a worker in Dataverse.

The Dataverse Custom Employee Worker Integration extension includes the following capabilities:

• Creating an integration table object in Business Central for mapping a Dataverse table to a Business Central record type

• Using a Dataverse integration table as the data source for a page in Business Central that displays data from Dataverse entity records



≡ Extension: Business Central integration with Dataverse ×

## Map the BC Fruit table to the Dataverse proxy CDS cr657\_Fruit table

Choose the mapping from the drop downs listed below. Then click on the button below to generate the AL extension code that will enable the mapping you specified.

Generate AL code

BC Fruit field	Sync interaction type	Data source
Id	From Dataverse only ▼	cr657_FruitId
Name	To Dataverse only ▼	cr657_Name
Painted	To Dataverse only ▼	cr657_Color
Taste	Fill constant value ▼	Tangy

A helper extension to scaffold mappings between Dynamics 365 Business Central table and external tables.

S

matters

# Useful customization links

- [Customizing an Integration with Microsoft Dataverse - Business Central | Microsoft Docs](#)
- [AL Table Proxy Generator - Business Central | Microsoft Docs](#)

## Samples:

- [BCTech/samples/DataverseCustomEmployeeWorkerIntegration at master · microsoft/BCTech \(github.com\)](#)
- [BCTech/samples/DataverseCustomContactIntegration at master · microsoft/BCTech \(github.com\)](#)