

Tools available to migrate customer data

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Objectives

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User tools for Migrations

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Consulting tools for Migrations

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Development tools for Migrations

4

ISV tools for Migrations

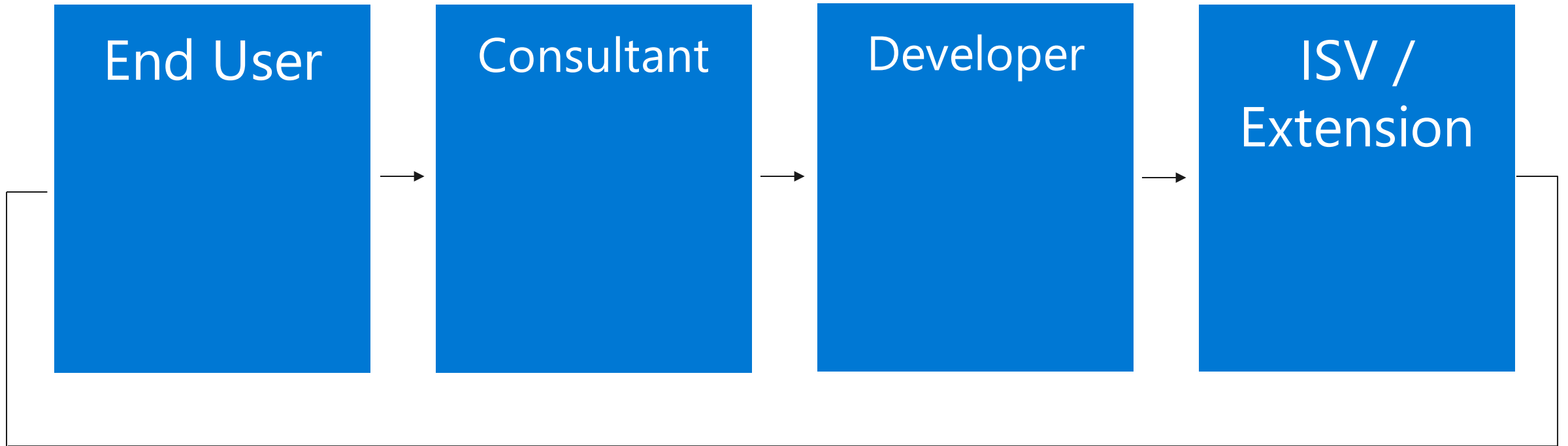
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Sample code included in this presentation is made available AS IS.

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Tools available



User tools for Migrations



Migration Extensions

Microsoft:

- QuickBooks Data Migration
- QuickBooks Online Data Migration
- Dynamics GP Data Migration
- C5 2012 Data Migration (Denmark)

3rd party:

- Data Migration for Microsoft Dynamics SL

Intelligent Cloud Replication

Microsoft:

- Business Central on Prem – Business Central (SaaS)
- Dynamics GP 2018 R2 on Prem – Business Central (SaaS)

Demo – Data Migration Wizard

Jennifer Ranz



Consulting tools for Migrations



Other Tools

Configuration packages (aka RapidStart)

<https://docs.microsoft.com/en-us/dynamics365/financials/admin-how-to-prepare-a-configuration-package>

<https://docs.microsoft.com/en-us/dynamics365/financials/admin-migrate-customer-data>

Support table relation (including creation of missing record)

Templates

Mapping of values

Edit in Excel

Easy to use

Can be used to delete data

Not all objects are available, not all fields are available

Doesn't work with Delegated Admin user

Demo – Rapid Start

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Demo – Edit in Excel

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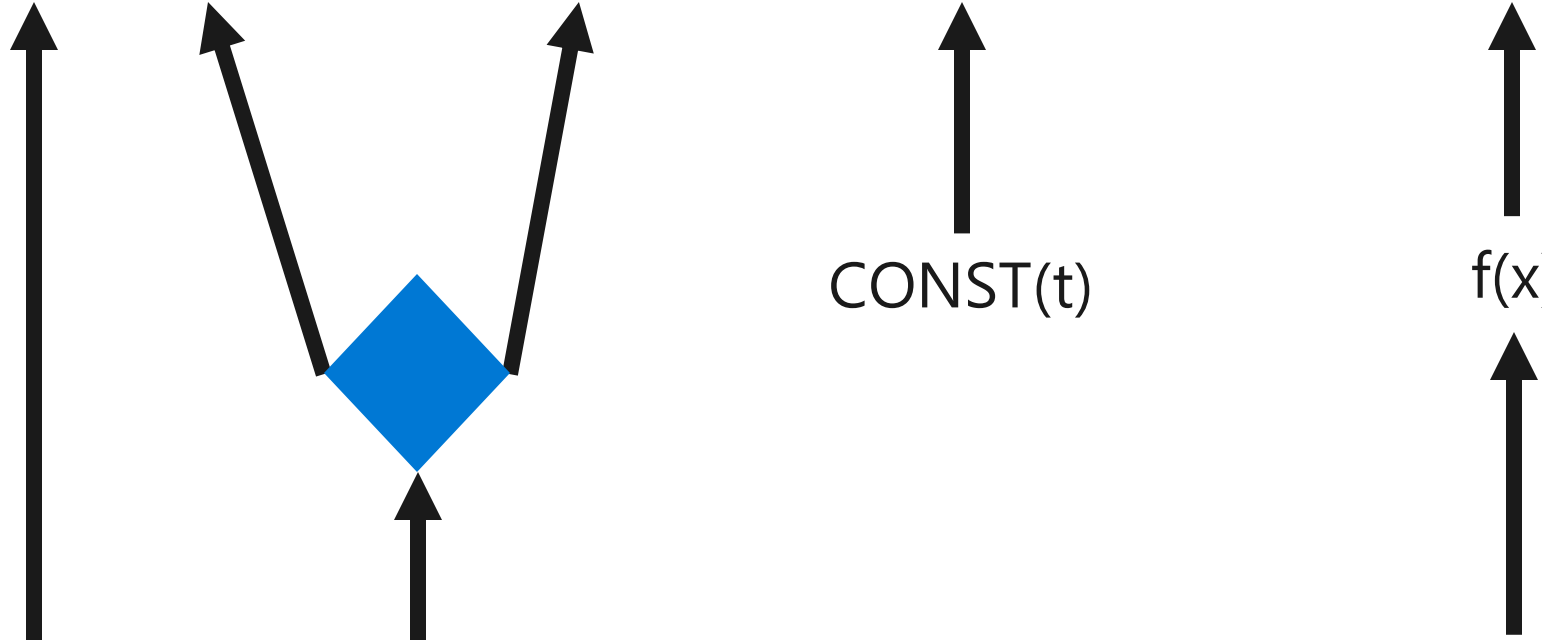
Development tools for Migrations



TARGET



SOURCE



Per-tenant extensions

- Extension of type page on top of existing table
 - page mimics the format of source file [DEMO]
 - Add some basic data processing: mapping, replace, apply template [DEMO]
 - Web-service APIs
- More flexibility with staging table
 - Configuration Package / Edit in Excel to import data into staging table
 - XMLPorts to import XML or CSV data
- Processing logic
 - You can consider using Façade logic starting from here [DEMO]

AutoSaveOff

Book1 - Excel

Andrei Panko

FileHomeInsertDrawPage LayoutFormulasDataReviewViewAdd-insHelpPower PivotTeamSearch

PasteCutCopyFormat PainterClipboard

Font

Alignment

Protection

Number

Styles

Cells

Editing

Share

D7

	A	B	C	D	E	F	G	H	I
1	Address	Company name	ID						
2	1234, Main Street 1	Adatum Corporation	100						
3	2345, Long Avenue 12	Fabrikam, Inc.	200						
4	3456, Wide Trail 123	Northwind Traders	300						
5	4567, Narrow Path 1234	Relecloud	400						
6	5678, Cloudy Walk 12345	Trey Research	500						
7									
8									
9									
10									
11									
12									
13									

Sheet1ScenarioScenario2_excel

Customers2.xlsx - Saved

Display Settings160%

SAMPLE SOURCE DATA

ISV tools for Migrations



Search

Edit In Excel

DATA MIGRATORS



DESCRIPTION

Import from Excel

Import from QuickBooks Online

Import from QuickBooks

Import from Dynamics GP

DIRECTIONS 2018



OK

Cancel

Back

Next

Finish

OnRegisterDataMigrator

```
[EventSubscriber(ObjectType::Codeunit, Codeunit::"Data  
Migration Facade", 'OnRegisterDataMigrator', '', true,  
true) ]
```

```
local procedure
```

```
OnRegisterDataMigratorRegisterDIRDataMigrator(var  
DataMigratorRegistration: Record "Data Migrator  
Registration")
```

```
begin
```

```
DataMigratorRegistration.RegisterDataMigrator(GetCurrentCode  
UnitNumber(), CopyStr(DataMigratorDescTxt, 1, 250));
```

DATA MIGRATION



INSTRUCTIONS

To prepare the data for migration, follow these steps:

1. THIS TEXT COMES FROM EXTENSION
2. Place some instructions on how to export data from the legacy system
.. or guide user on how to connect to the service
4. Return to this assisted setup guide, choose Next.

Back

Next

Finish

OnGetInstructions

```
EventSubscriber (ObjectType::Codeunit, Codeunit::"Data  
Migration Facade", 'OnGetInstructions', '', true, true)]
```

```
local procedure OnGetInstructionsGetDIRInstructions (var  
DataMigratorRegistration: Record "Data Migrator  
Registration"; var Instructions: Text; var Handled: Boolean)  
begin  
    if DataMigratorRegistration."No." <>  
        GetCurrentCodeUnitNumber() then exit;  
  
    Instructions := Instructions1Txt + Instructions2Txt..;  
    Handled := true;
```

DATA MIGRATION



INSTRUCTIONS

To prepare the data for migration, follow these steps:

1. THIS TEXT COMES FROM EXTENSION
2. Place some instructions on how to export data from the legacy system
.. or guide user on how to connect to the service
4. Return to this assisted setup guide, choose Next.



Here you can add logic that connects to legacy system/service.

OK

Back

Next

Finish

OnDataImport

```
EventSubscriber (ObjectType::Codeunit, Codeunit::"Data  
Migration Facade", 'OnDataImport', '', true, true)]
```

```
local procedure OnDataImportImportDIRData (var  
DataMigratorRegistration: Record "Data Migrator  
Registration"; var Handled: Boolean)
```

```
begin
```

```
if DataMigratorRegistration."No." <>  
GetCurrentCodeUnitNumber() then exit;
```

```
Handled := DIRDataMigrationMgt.ImportData();
```

DATA MIGRATION





Data is ready for migration

Verify that the number of records are correct.

	SELE...	TABLE NAME	NO. OF RECORDS	
	☒	Customer	857	

Back

Migrate

Finish

OnSelectDataToApply

```
[EventSubscriber(ObjectType::Codeunit, Codeunit::"Data Migration  
Facade", 'OnSelectDataToApply', '', true, true)]
```

```
local procedure OnSelectDataToApplyCreateDataMigrationEntites (var  
DataMigratorRegistration: Record "Data Migrator Registration";  
var DataMigrationEntity: Record "Data Migration Entity"; var  
Handled: Boolean)  
begin  
if DataMigratorRegistration."No." <> GetCurrentCodeUnitNumber()  
then exit;  
  
Handled :=  
DIRDataMigrationMgt.CreateDataMigrationEntites (DataMigrationEntit  
y);
```

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w ✕ Delete

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options

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Additional input from user.

This page is also from EXTENSION, where you can ask user for additional input.

Input 1 (some date)

Input 2 (text)

OK

OnApplySelectedData

```
EventSubscriber (ObjectType::Codeunit, Codeunit::"Data  
Migration Facade", 'OnApplySelectedData', '', true, true) ]
```

```
local procedure OnApplySelectedDataApplyDIRData (var  
DataMigratorRegistration: Record "Data Migrator  
Registration"; var DataMigrationEntity: Record "Data  
Migration Entity"; var Handled: Boolean)  
begin  
    if DataMigratorRegistration."No." <>  
        GetCurrentCodeUnitNumber() then exit;  
  
    Handled :=  
        DIRDataMigrationMgt.ApplySelectedData(DataMigrationEntity);
```

✕ Data migration is in progress. Refresh the page to update the migration status.



Data Migration Overview

Search

Process

Edit In Excel

TABLE NAME		MIGRATED NUMBER	TOTAL NUMBER	PROGRESS PERCENT	STATUS	NEXTTASK	ERROR COUNT
Customer	:	0	857	0%	Completed with Err...	Review and fix errors	1



Customers

Search Edit List Manage Edit In Excel

ERROR MESSAGE		ACCOUNT	NAME	PHONE	EMAIL
The email address "an-invalid-email" is not valid.		1	Test participant	1234567	an-invalid-email

OnSelectRowFromDashboard

```
EventSubscriber (ObjectType::CodeUnit, CodeUnit::"Data  
Migration Facade", 'OnSelectRowFromDashboard', '',  
false, false)]
```

```
local procedure OnSelectRecordSubscriber (var  
DataMigrationStatus: Record "Data Migration Status")  
begin  
    if not (DataMigrationStatus."Migration Type" =  
DIRMigrationTypeTxt) then exit;  
  
    case DataMigrationStatus."Destination Table ID" of  
        Database::Customer:begin  
            Page.Run (Page::"DirectionsCustTable List");
```

Data Migration Façade

Table of Contents

- Welcome
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 - Cached Web Service Calls
 - Conditional Cascading Update
 - Copy Document
 - Create Data from Templates
 - Create URLs to NAV Clients
 - Creating Custom Charts
 - Cross Session Events
 - Currently Active Record
 - Data Migration Façade**
 - Discovery Event
 - Document
 - Easy Update of Setup or

Sign In

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Rate: ★★★★★

View history

Data Migration Façade

By David Bastide and Soumya Dutta at Microsoft Development Center Copenhagen



Context:

This pattern is describing how you can migrate data using the Data Migration Façade.

Problem:

Writing migration code from an external source, such as a product from a competitor, can be time consuming, as you need to tackle the problems of what to migrate, in which order,

Microsoft Dynamics NAV

Get help on your Microsoft Dynamics NAV solution from qualified experts in the forums, read blogs and how-to articles, and watch videos.



Page Details

Created by



David Bastide

20 Dec 2017 10:35 AM

Last revision by



David Bastide

20 Dec 2017 10:46 AM

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Comments: 0

Microsoft / ALAppExtensions

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-  Issues 0
-  Pull requests 0
-  Projects 0
-  Wiki
-  Insights

Branch: master ▾ ALAppExtensions / C52012DataMigration / source / accounts /

Create new file Upload files Find file History

 David Bastide Initial commit of C5 extension		Latest commit a7b1ee2 12 days ago
..		
 transactions	Initial commit of C5 extension	12 days ago
 COD1862.C5LedTableMigrator.al	Initial commit of C5 extension	12 days ago
 PAG1863.C5LedTable.al	Initial commit of C5 extension	12 days ago
 PAG1903.C5LedTableList.al	Initial commit of C5 extension	12 days ago
 TAB1863.C5LedTable.al	Initial commit of C5 extension	12 days ago
 XML1860.C5LedTable.al	Initial commit of C5 extension	12 days ago



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