



# XrmToolBox

# Agenda



- Who are we?
- What is XTB?
- When and Why should you use XTB?
- Top 10 tools and when to use them
- Honorable mentions
- Summary & Questions




# Who are we?



**Brian Stokes**  
**Senior developer & Solution architect**  
**@SopraSteria**



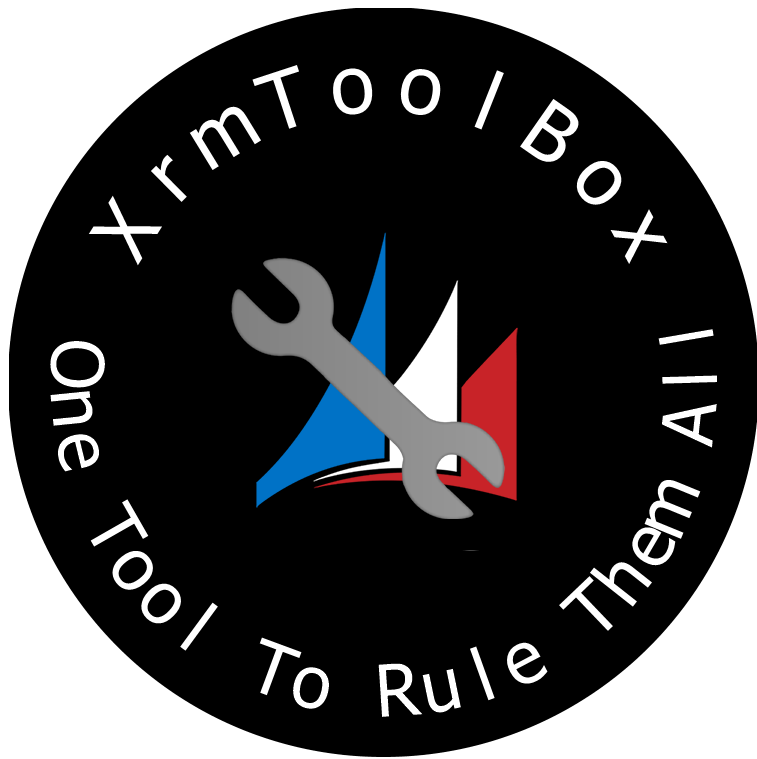
**Verksamhet och Applikationsarkitekt @CRMK**

 @lagerquistsara

 <https://saralagerquist.com>



# What is XTB?



Tanguy TOUZARD



# What is XTB?



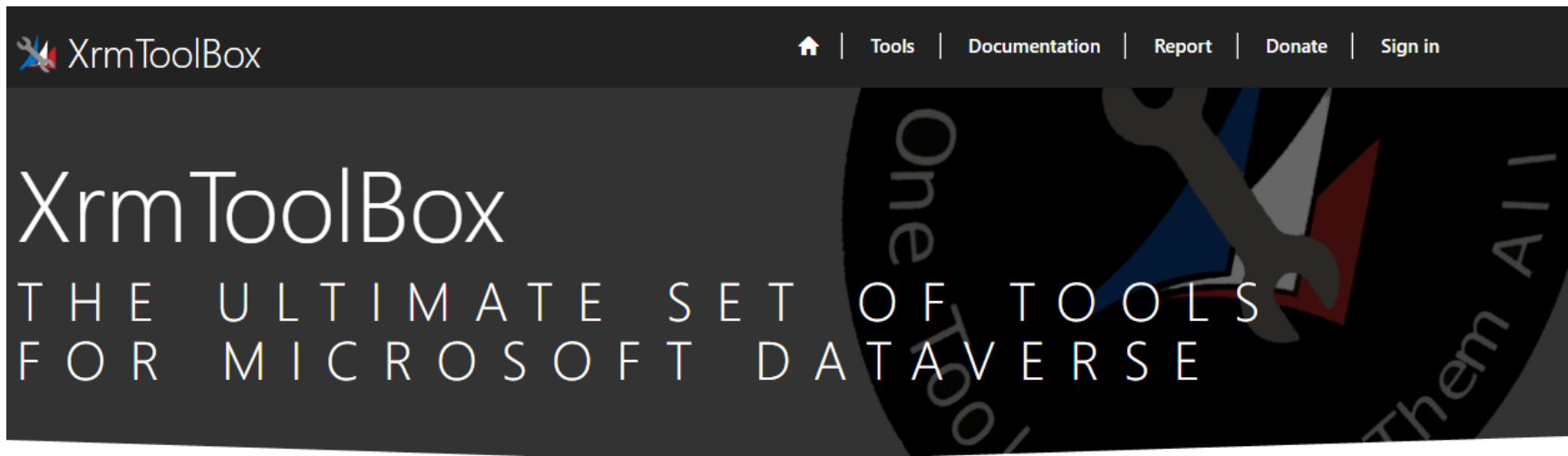
- Created in 2012
- +670 000 downloads
- Free to use!
- Open source
  - Quality may vary
  - When you don't pay for it, you can't expect support
- For Dataverse "only"
- 300+ tools (and counting!)





# Website: XrmToolBox.com

- How to download
- How to connect to an environment
- How to manage connections
- Settings
- Donations



# Kudos from Microsoft



## [Community tools for Microsoft Dataverse \(Dataverse\) - Power Apps |MicrosoftLearn](#)

### XrmToolBox

Many of the most popular ones are distributed in the [XrmToolBox](#). XrmToolBox is a Windows application that connects to Dataverse, providing tools to ease customization, configuration and operation tasks. It is shipped with more than 30 plugins to make administration, customization or configuration tasks easier and less time consuming.

The following is a selected list of community tools distributed via the XrmToolBox that you can use with Dataverse.

Tool	Description
<a href="#">Attribute Manager</a>	Used to rename/delete/or change the type of the column.
<a href="#">Early Bound Generator</a>	Generates Early Bound Tables/Choices/Actions. Uses CrmSvcUtil from the SDK, and shows command line used to create the classes.
<a href="#">Export to Excel</a>	Easily export records from the selected view/fetchxml to Excel.
<a href="#">FetchXML Builder</a>	Create and test FetchXml Queries
<a href="#">Metadata Browser</a>	Browse metadata from your Dataverse environment
<a href="#">Plugin Trace Viewer</a>	Investigate the Plug-in Trace Log with easy filtering and display possibilities
<a href="#">User Settings Utility</a>	Manage users personal settings in bulk
<a href="#">PCF Builder</a>	Easily create, build and test your custom control using Power Apps Component Framework
<a href="#">SQL 4 CDS</a>	SQL 4 CDS allows you to use standard SQL syntax to query and manipulate your data and metadata in Dataverse
<a href="#">Dataverse Custom API Manager</a>	Create, update and get 360° View of Dataverse Custom APIs





# Why and When?



If you are not working with  
XrmToolBox...

...you are just working too hard.

– Jonas Rapp, MVP





# Why and When?



- To make repetitive tasks easier and less time consuming
  - Allow to perform actions not available in the UI
  - Providing tools that Microsoft do not
  - Can't be used with Dataverse4Teams 😞
- 
- OBS: Use at your own risk



# THE LIST

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# 5 – View Layout Replicator

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# Name, Created On



Inactive Events ▾

Edit columns

Edit filters

Filter by keyword

Name ↑ ▾

Created On ▾



# 5 – Bulk Data Updater

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Author: Jonas Rapp

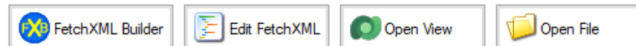
# 5 - Bulk Data Updater



- Easy way Bulk-edit data
- Get your data and;
  - Update (Set fixed, Calculate, Touch, Set null)
  - Assign
  - Set State
  - Delete
  - Trigger Workflow/Plugin
  - Bypass custom business logic
- Integrated with FetchXml Builder
- **Without XTB:** PowerPlatform Export/Change/Import data



Select query for records to affect



5 records of entity account loaded

Records

☐ Include all records returned ☒ Include selected records only

1 records

#	name	address1_country	address1_stateorprovince	address1_composite
1	Fabrikam, Inc.	Ireland	Dublin	DublinIreland
2	Trey Research	United States	California	CaliforniaUnited States
3	Northwind Traders	United States	Ohio	OhioUnited States
4	Alpine Ski House	United States	Texas	TexasUnited States
5	A. Datum Corporation	United States	Washington	WashingtonUnited States

Update Assign Set State Delete

## Update 1 Accounts

Select attribute to update

address1\_stateorprovince (String)

☒ Set fixed ☐ Calculate ☐ Touch ☐ Set nu

Dublin

☒ Only when change is needed Add attribute

Verify attributes to update

Name	Action	Value
address1_stat...	SetValue	Dublin
address1_cou...	SetValue	Ireland

&lt; &gt;

Remove

Execution

Wait betw. calls 0 seconds

Batch size 1 ☐ Ignore errors☒ Bypass Custom Business Logic [Read the Docs!](#)

1 records updated, 0 records failed.

Update records

How can I help XrmToolBox ?

Donate on PayPal

XrmToolBox is free and it won't change. But you can show your support by making a donation to its author.

[Click here to donate](#)[Dismiss](#)



# 4 – Solution Layer Explorer

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# 4 – Shuffle

Author: Jonas Rapp, Imran Akram & Community

# 4 – Shuffle



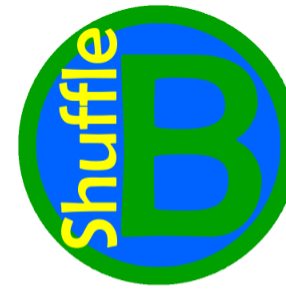
- 3 tools – Builder & Runner / Deployer
- Easy way to move reference/config data between environments
  - Example: Subjects, Categories, Sub-categories, Configuration
- A Package Deployer to make deployments easier
- CI - DevOps Pipeline Extension
- Integration with FetchXml Builder
- Handles Many-to-Many relationships
- **Without XTB:** Dynamics "Configuration Migration Tool"



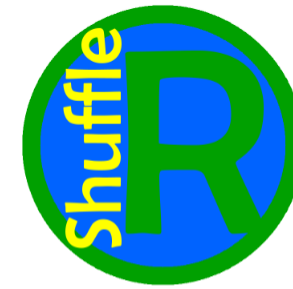
# 4 – Shuffle



- GitHub project
- Now officially a Tool in XTB
- Docs: <https://jonasr.app/shuffle>
- Blog: <https://saralagerquist.com/>



Shuffle Builder



Shuffle Runner



Shuffle Deployer

## Shuffle Builder, Shuffle Runner, and Shuffle Deployer

These were first created by **Jonas Rapp**, at my company **Cinteros AB** in Stockholm, Sweden.

*Shuffle* is a concept of a bunch of tools – console apps, plugin extensions, Azure DevOps extensions for pipelines, WinForm tools, and finally as XrmToolBox tools.

They were evolved into more and more features when we as the developers (mainly **Jonas** and **Imran Akram**) while we were at Innofactor, but now we have moved on, and we are the only ones who really understand *the codes*.

So **Shuffle tools** are now released by us, as individuals, and **we will keep updating, fixing, and improving them!**



Shuffle Builder (Sales Trial)

New

Open

Validate

Save

Do the Shuffle!

Shuffle Definition

ShuffleDefinition

Blocks (0)

DataBlock Reasons

Export

Import

Match

Attribute cr0ca\_reasonid

Quick Actions

nothing to add

Node Properties

Create with Id

☒

Save

CreateUpdate

Delete

None

Update inactive

☐

Update identical

☐

Information

Define how data shall be imported.

Node XML

<Import CreateWithId="true" >

<Match>

<Attribute Name="cr0ca\_reasonid" Display="Name"

</Match>

</Import>

Shuffle Definition XML

<ShuffleDefinition>

<Blocks>

<DataBlock Name="Reasons" Entity="cr0ca\_reasonid">

<Export>

<FetchXML><fetch><from>cr0ca\_reasonid</from></fetch></Export>

<Import CreateWithId="true" >

<Match>

<Attribute Name="cr0ca\_reasonid" Display="Name">

</Match>

</Import>

</DataBlock>

</Blocks>

</ShuffleDefinition>

Start page

Tools

Tool Library

FetchXML Builder (Sales Trial)

Shuffle Runner (Sales Trial)

Definition

C:\Users\brstokes\OneDrive - Sopra Steria\PPCS\_Demo\PhoneCallReasons\_Definition.xml

Data

C:\Users\brstokes\OneDrive - Sopra Steria\PPCS\_Demo\PhoneCallReasons\_Definition.data.xml

Action

Export

Import

Type

Simple

Params

- Shuffle -

Blocks

Records

Log

Loading data from: C:\Users\brstokes\OneDrive - Sopra Steria\PPCS\_Demo\PhoneCallReasons\_Definition.data.xml

Deserialize from: Simple

Block Reasons: 3 records

Importing block: Reasons - 3 records

001 Skipped: <null> (Identical)

002 Skipped: <null> (Identical)

003 Skipped: <null> (Identical)

Created: 0 Updated: 0 Skipped: 3 Deleted: 0 Failed: 0

Created: 0

Updated: 0

Skipped: 3

Deleted: 0

Failed: 0

Connected to 'orq1a467e40.crm12.dynamics.com (Sales Trial)'

Connected!

# Plats 3 – Easy Translator

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# 3 – SQL 4 CDS

Author: Mark Carrington



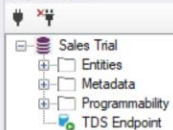
# 3 - SQL 4 CDS



- Prefer SQL over FetchXml?
- CRUD Operations Supported
- SSMS interface in XTB
- Intellisense
- Impersonation
- **Without XTB:** Advanced Find



Object Explorer



SQLQuery1.sql\* (Sales Trial)

```
1 SELECT accountid, name, address1_city, address1_country
2 FROM account
3
4 UPDATE account
5 SET address1_city = 'Dublin'
6 WHERE accountid = 'a4cea450-cb0c-ea11-a813-000d3a1b1223'
7
8 INSERT INTO account (name, address1_city, address1_country)
9 Values ('Demo Test','Dublin','Ireland')
10
11 DELETE FROM account
12 WHERE accountid = '50137d03-b7ea-ed11-a7c6-000d3a959c8c'
```

Messages

1 Account deleted

# 2 – Documentation (2 for 1)

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ERD to Visio by Carl Cookson

Flow to Visio by Carl Cookson

# 2– User Security Manager

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Author: Nishant Rana, Prashant Maurya

# 2 - User Security Manager



- Easily administrate user Security Roles and FLS
- View a list of user assigned roles, inherited roles or FLS
- Add/Remove a user(s);
  - Security Roles
  - Teams
  - FLS
- Change the Business Unit of the user
- Generate Reports
- **Without XTB:** SystemUser/Team/FieldLevelSecurity in GUI





# 1 – FetchXML Builder

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# FetchXML Builder



Creator: Jonas Rapp 

~6000 uses/day

Integrated with ~50 other tools in  
XTB





# 1 - FetchXML Builder features

- Power Automate Parameters
- Integration from other XrmToolBox tools
- Update Dynamics 365 Views
- Dataverse/CRM/D365 metadata intellisense
- Aggregate query support
- Query to FetchXML
- Query to code (C#/js/SQL/OData)
- Query to Power Automate List Records parameters
- Results in view
- Results serialized (XML/JSON)
- Query Repository
- Abort query execution over multiple pages
- Multiple options and settings
- Fully configurable window layout



# Brians Verktyg



- 5 - Bulk Data Updater
- 4 - Shuffle
- 3 - SQL 4 CDS
- 2 - User Security Manager
- 1 - FetchXML Builder



# Saras Verktyg



- 5 – View Layout Replicator
- 4 – Solution Layer Explorer
- 3 – Easy Translator
- 2 – Documentation Tools
- 1 - FetchXML Builder



# Honourable Mentions...



- Data Transporter
- Visual Studio Solution Accelerator (Pro dev)
- UML Diagram Generator
- Recycle Bin
- Security Debugger
- Plugin Trace Viewer (Pro dev)
- Audit Center
- Iconator
- Webresource Manager (Pro dev)



# Summary

- Open Source = kanske ej uppdateras, kanske har buggar
- Documentation of some tools;  
<https://linnzawwin.blogspot.com/p/tools.html>
- Podcast: <https://xrmtoolcast.libsyn.com>





# Tack & Frågor!

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