AX2012 Data Upgrade
(in Self Service environment)

TechTalk

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# AX2012 Data Upgrade

## Agenda

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## Assumptions

**Audience** is familiar with AX2012 Data Upgrade pre-requisites.
AX2012 Data Upgrade Tooling Journey

- Longer cut-over due to import, export, time to move to the cloud
- SQL admin access

bacpac
- IAAS Full control
- No longer supported

dacpac
- IAAS
- Without RDP Access
- Elastic Pool
- Deprecated

Replication
- IAAS
- Enhanced Cutover experience
- GA

Self Service upgrade experience
- Self Service
- Use Replication
- Seamless LCS experience
*Preview

- Leverages SQL Transactional Replication
- Enhanced cut-over experience
- **Online Database Migration Toolkit**

- Leverages SQL Transactional Replication
- Single Console App upgrade experience
- **AX2012 Database Upgrade toolkit for Dynamics 365**

- Facilitated migration in Elastic Pool without SQLAdmin and RDP access
- Long cut-over due to one time data movement
- Latency & connectivity issues during data movement for large database

- **DatabaseMovementTool kit**
Overview – SQL Transaction Replication

Using SQL Transaction Replication

On-premises Distribution

AX2012 AXDB (Publisher) — Distribution Database (Distributor) — Microsoft SQL Server

Transactional Replication Components:

1. Three Replication “Roles”
   1. Publisher – source
   2. Distributor – queue
   3. Subscriber – destination

2. Two Executables to move data
   1. logRead.exe (source->queue)
   2. Distrib.exe (queue->destination)

3. Initialize
   1. Generate snapshot files
   2. Apply snapshot to the ‘subscriber’
Benefits

- Leverages SQL Transaction Replication feature
- Minimize overall data upgrade cut-over time immensely
- It automates the setup and execution of ‘publication’, ‘distribution’ & ‘subscriber’ etc.
- Ensures to move all your AX2012 tables’ schema, data and other required artifacts to Dynamics 365 F&O Sandbox database
- Ensures to keep your target Sandbox database ready for data upgrade at the time of cut-over

Transactional replication
AX2012 Database upgrade toolkit for Dynamics 365 (SF)

- Upgrade from AX 2012 - Data upgrade in self-service environments - Finance & Operations | Dynamics 365 | Microsoft Docs

- AX2012 – Source
- Dynamics 365 Finance and Operations – Target

- Pre-requisites (source)
  - AX2012 R2 and R3
  - Installation of KBs
  - Clean-up data
  - Replication Feature in SQL Server instance with proper user setup
  - SQL Server Agent is running
  - .NET Core 3.1 or higher SDK
  - Disk space in SQL Server
  - Etc.

- Pre-requisites (target)
  - Self Service environment
  - LCS access
  - Custom package deployed in Sandbox
Replication - Online Database Migration Toolkit (IAAS)

Download from LCS

Automates SQL Transactional Replication setup
Data Upgrade – AX2012 Database Upgrade Toolkit for Dynamics 365 (Self Service environment)

Download from LCS

Automates SQL Transactional Replication setup + AX2012 data upgrade
AX2012 Database upgrade toolkit for Dynamics 365 – Salient Features

- Enables data upgrade in Self Service Environments
- Uses SQL Transaction Replication to move AX2012 data to the Azure SQL in the cloud
- Seamless LCS Experience
- Single AX2012 data upgrade toolkit
- DUO – All new data upgrade orchestrator (managed)
Quick Glance: AX2012 Database Upgrade toolkit (Self Service)

- Execution Steps 1 through 12
- Reporting
- Tooling
Quick Glance: LCS Experience
AX2012 Database upgrade toolkit for Dynamics 365

- Enables data upgrade in Self Service Environments
- Uses SQL Transaction Replication to move AX2012 data to the Azure SQL in the cloud
- Seamless LCS Experience
- Single AX2012 data upgrade toolkit
Go live – AX2012 Database Upgrade Toolkit (Self Service)

Start
- Ensure all pre-requisites are fulfilled and custom code is deployed in Sandbox
- Download and use AX2012 Database Upgrade Toolkit for Dynamics 365 from LCS
- Execute Replication setup from source (till step 6), keep monitoring it on regular basis

Downtime
- Turn off AX2012 AOSes, Execute Cutover steps from source
- Take point-in-time restore of target database
- Trigger Data Upgrade
- Copy database to production

End
- Allow users back in
- Complete application setup
- Perform smoke test
Roadmap

• AX2012 Upgrade – environments deployed to Self Service (currently gets deployed in IAAS)
• Environment Rollback to ‘Replicated’ state in case of un-recoverable failure
• Visibility of detailed data upgrade log for analysis
• Continuous feedback
• DUO – Data upgrade orchestrator support for DevTest/Demo topologies
Resources

Public docs:

- Upgrade from AX 2012 - Pre-upgrade checklist for data upgrade - Finance & Operations | Dynamics 365 | Microsoft Docs
- Upgrade from AX 2012 - Data upgrade in self-service environments - Finance & Operations | Dynamics 365 | Microsoft Docs
- Upgrade from AX 2012 - SQL Transactional Replication - Finance & Operations | Dynamics 365 | Microsoft Docs
- Upgrade from AX 2012 - Data upgrade FAQ - Finance & Operations | Dynamics 365 | Microsoft Docs
Thank you.