

The Largest Independent Gathering  
of the Microsoft User Ecosystem



# Options for the End of Microsoft's Mainstream Support for AX

Decrease Complexities,  
Deliver Results.

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UPGRADE

SUPPORT

ENHANCE

TRAIN

**D365 SUCCESS STARTS HERE**  
Visit us in booth #728!

# | Agenda

- Timing and Implications
- Options & Partner Support
- Upgrade Strategic Overview
- Upgrade Technology Overview



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# Timing & Implications



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- Dynamics AX 2009 – April 12, 2022
- Dynamics AX 2012 – April 12, 2022
- Dynamics AX 2012 R2 – April 12, 2022
- Dynamics AX 2012 R3 – January 10<sup>th</sup>, 2023

## Security & Regulatory Hot Fixes Only

[End of mainstream support for Microsoft Dynamics AX 2009, Dynamics AX 2012, Dynamics AX 2012 R2, and Dynamics AX 2012 R3 – Finance & Operations | Dynamics 365 | Microsoft Docs](#)

**Microsoft Individual Support**

**Regulatory, Audit, and Security Implications**

**Windows & SQL Versions Expire**

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# Options & Partner Support



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**1.**

**Upgrade To  
Dynamics 365**

**2.**

**Internal  
Support**

**3.**

**Partner Help  
Desk**

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# Partner Support Considerations

- Help Desk Prepayments
- Use It or Lose It
- Trade-ins?
- Topography Assessment
- Response Times
- Response by Severity Level
- Hours of Operation
- Ticket Portal Access

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# Upgrade Strategic Overview



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- Partner Assessment
  - Code Tool
  - Data Assessment
  - Licensing Discounts
- Microsoft Tools for AX2012
- AX2009 – Reimplementation

# Assessment Project? Microsoft \$\$

- Variety of Programs Available
  - Code Assessment
  - Data Assessment
  - Licensing Discounts
- Microsoft Pays the Partner Directly
- Verify the Deliverables You Need to Decide
  - Budget
  - Timeline
  - Licensing

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# Upgrade Technology Overview



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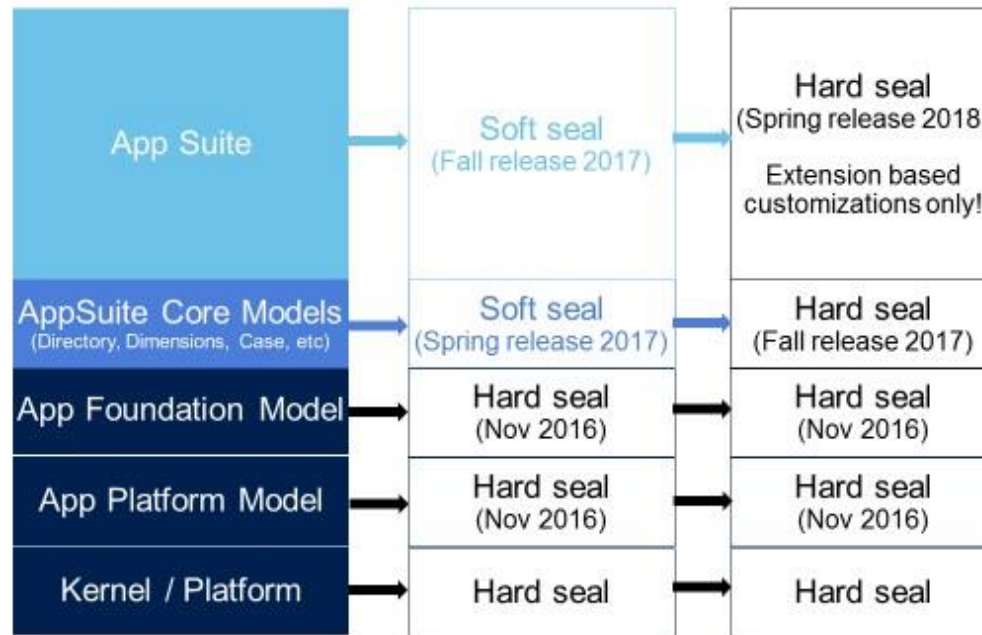
# Extensions and Continuous Updates



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# Release roadmap and priorities



## Top Priorities

- AppSource solutions
- New customers

Dynamics 365 Tech Conference • March 12-15, 2017 • Seattle, WA

Note – Planned timeframes are subject to change.



<https://docs.microsoft.com/en-us/dynamics365/unified-operations/dev-itpro/extensibility/extensibility-roadmap>

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- Extension objects (Enums, Tables, Entities, etc.)
- Extension classes (chain-of-command)



- Customize with extensions and over-layering:

<https://docs.microsoft.com/en-us/dynamics365/unified-operations/dev-itpro/extensibility/customization-overlayering-extensions>

- Chain of Command:

<https://docs.microsoft.com/en-us/dynamics365/unified-operations/dev-itpro/extensibility/method-wrapping-coc>

- Development tutorial: Extensibility: Replaceable in Chain of Command methods, By Ivan Kashperuk:

[http://kashperuk.blogspot.com/2017/10/development-tutorial-extensibility\\_7.html](http://kashperuk.blogspot.com/2017/10/development-tutorial-extensibility_7.html)

- Best practices (Intrusive customizations):

<https://docs.microsoft.com/en-us/dynamics365/unified-operations/dev-itpro/extensibility/intrusive-customizations>

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# Code Upgrade



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- Integrations
  - AIF Document Services – Deprecated
  - No direct access to the Database
- Virtual Companies
  - Not available in D365FO
  - “Cross-company data sharing” functionality  
<https://learn.microsoft.com/en-us/dynamics365/fin-ops-core/dev-itpro/sysadmin/cross-company-data-sharing>

- Reports
  - SSRS report design requires manual upgrade/re-implementation
  - Complex reports may need to be reworked
  - Consider other reporting options
- Security
  - AX 2009 – Incompatible
  - AX 2012
    - Many new duties/privileges added
    - Even “low customization” upgrades generate a lot of conflicts
    - Consider implementing custom D365 roles from scratch

- Create new project in LCS
  - Methodology: “Upgrade Dynamics AX 2012...”
- From LCS tools, select Code Upgrade
- Upload the model
- Start Code Analyzer



## ← Project: Code Upgrade Demo

Code Upgrade Service: Create job



Upgrade your application code to the latest release of Dynamics 365 for Finance and Operations, Enterprise edition.

Steps 2, 3, 4 only apply if upgrading from AX 2012.

1. Create an upgrade analysis job (the task you are performing now).
2. Export your AX 2012 model store. For more information, see [How to: Export and Import a Model Store](#).
3. Zip (compress) the model store file.
4. Upload your compressed model store.
5. After the job has completed download the metadata file `UpgradedMetadata.zip` or connect to the Visual Studio Team Services project containing the upgraded code.

Name\*

Description

Release you are upgrading from

Release you are upgrading to

**Estimation Only** (Generate analysis reports only. Exported and upgraded models will not be checked in to Visual Studio Team Services and not be available for download.)

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## Project: Code Upgrade Demo

Code Upgrade Service file upload : CodeUpgradeDemo



**Selected version : Microsoft Dynamics AX 2012**

Upload one 6.0 model store file that has been compressed using a Microsoft compression tool.

NAME	TYPE	SIZE
<input checked="" type="checkbox"/> ELSHR2012R2_dataUpgradeTest.zip	ModelStore zip file	380978 KB

Make sure your uploaded zip file contains your model store (\*.axmodelstore). [How to: Export and Import a Model Store.](#)

Remove Analyze code

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# Project: ELS HR 2012 Upgrade to D365

Code Upgrade Service detail: ELSHRCodeUpgrade



Job Status

Name: ELSHR2012R2\_dataUpgradeTest.zip

File Size: 380978 KB

Status: 100%

	Total	Progress				
Time (Minutes)	35	35	<div style="width: 100%; background-color: green;">100%</div>	<span style="color: red;">✖</span> 0	<span style="color: yellow;">!</span> 0	<span style="color: blue;">i</span> 0

Report

ELSHR2012R2\_dataUpgradeTest.zip

Name	File type	View
UpgradedMetadata.zip	Model_Zip	
AX7 metadata version 7.3.11971.56116_ExcelReport	ExcelAnalysisReport	
MigrationSummary.xlsx_ExcelReport	ExcelAnalysisReport	
TaskList.xlsm_ExcelReport	ExcelAnalysisReport	
Models upgrade_ExcelReport	ExcelAnalysisReport	

## Decrease Complexities, Deliver Results.



Metadata migration - remaining manual effort

						Totals	81520 min	
							1358.67 hours	

ELS - Include in Summary	Root name	Root type	Module name	Model name	Layer	ELS - Estimate minutes	Area	Path
ISV	SalesCopying	Class Item	ApplicationSuite	ApplicationSuite.Experlogix Configurator	ISV	30	Sal	dynamics://Class/SalesCopying/Method/copy?Source
ISV	SalesQuotationCopying	Class Item	ApplicationSuite	ApplicationSuite.Experlogix Configurator	ISV	30	Sal	dynamics://Class/SalesQuotationCopying/Method/copy
ISV	SalesQuotationCopying	Class Item	ApplicationSuite	ApplicationSuite.Experlogix Configurator	ISV	30	Sal	dynamics://Class/SalesQuotationCopying/Method/initP
ISV	SalesQuotationCopying	Class Item	ApplicationSuite	ApplicationSuite.Experlogix Configurator	ISV	30	Sal	dynamics://Class/SalesQuotationCopying/Method/copy
ISV	SalesQuotationEditLinesForm_Sales_Confir	Class Item	ApplicationSuite	ApplicationSuite.Experlogix Configurator	ISV	30	Sal	dynamics://Class/SalesQuotationEditLinesForm_Sales_C
ISV	PrintMgmtHierarchy	Class Item	ApplicationFoundation	ApplicationFoundation.RfsmartAx2012Core	ISV	30	Pri	dynamics://Class/PrintMgmtHierarchy/Method/constru
ISV	PrintMgmtNode	Class Item	ApplicationFoundation	ApplicationFoundation.RfsmartAx2012Core	ISV	30	Pri	dynamics://Class/PrintMgmtNode/Method/construct?Si
ISV	WHSWorkExecute	Class Item	ApplicationSuite	ApplicationSuite.RfsmartAx2012Core	ISV	30	WHS	dynamics://Class/WHSWorkExecute/Method/moveLicer
ELS	AxProdJournalBOM	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxP	dynamics://Class/AxProdJournalBOM/Method/setInven
ELS	AxPurchLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxP	dynamics://Class/AxPurchLine/Method/setInventReceiv
ELS	AxPurchLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxP	dynamics://Class/AxPurchLine/Method/setPurchQty?Sc
ELS	AxPurchLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxP	dynamics://Class/AxPurchLine/Method/setQtyOrdered?
ELS	AxPurchRFQCaseLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxP	dynamics://Class/AxPurchRFQCaseLine/Method/setPur
ELS	AxPurchRFQCaseLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxP	dynamics://Class/AxPurchRFQCaseLine/Method/setQty
ELS	AxSalesLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxS	dynamics://Class/AxSalesLine/Method/setInventDelive
ELS	AxSalesLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxS	dynamics://Class/AxSalesLine/Method/setQtyOrdered?
ELS	AxSalesLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxS	dynamics://Class/AxSalesLine/Method/setSalesQty?Sou
ELS	AxSalesQuotationLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxS	dynamics://Class/AxSalesQuotationLine/Method/setInv
ELS	AxSalesQuotationLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxS	dynamics://Class/AxSalesQuotationLine/Method/setQt
ELS	AxSalesQuotationLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	AxS	dynamics://Class/AxSalesQuotationLine/Method/setSal
ELS	BomCalcCost	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Bom	dynamics://Class/BomCalcCost/Method/convertPrices?
ELS	BomCalcItemLine	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Bom	dynamics://Class/BomCalcItemLine/Method/calcConsur
ELS	BomCalcJob_Item_Sales	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Bom	dynamics://Class/BomCalcJob_Item_Sales/Method/seri
ELS	BomCalcSumItemCost	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Bom	dynamics://Class/BomCalcSumItemCost/Method/transf
ELS	BOMLineConsumption	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	BOM	dynamics://Class/BOMLineConsumption/Method/bomC
ELS	BomReportFinishBase	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Bom	dynamics://Class/BomReportFinishBase/Method/calcQt
ELS	CostSheetNodeCalcPurchUnitBased	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Cos	dynamics://Class/CostSheetNodeCalcPurchUnitBased/N
ELS	CostSheetNodeCalculationInUnitBased	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Cos	dynamics://Class/CostSheetNodeCalculationInUnitBase
ELS	CostSheetPanel_ProdCalcTrans	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Cos	dynamics://Class/CostSheetPanel_ProdCalcTrans/Meth
ELS	CustomJournalCalc_RU	Class Item	ApplicationSuite	ApplicationSuite.FPV	VAR	30	Cus	dynamics://Class/CustomJournalCalc_RU/Method/calcD

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	A	B	C	D	E	F
1		Metadata migration - remaining manual effort				
2						
3						
4		Root type	Task type	MS	ELS	Comments
5		<b>Base Enum Extension</b>			<b>20</b>	<b>Not available for all enums</b>
6		Base Enum Extension	Resolve: 'InvalidIdentifierNam	10	10	
7		<b>Class Item</b>			<b>30</b>	<b>Create an extension</b>
8		Class Item	Resolve Code Conflict	10	30	
9		Class Item	Resolve Hierarchy Conflict	15	20	
10		Class Item	Element Requires Reimplemer	17	30	
11		<b>Edt String</b>			<b>30</b>	<b>It's depends of kind of extensions</b>
12		Edt String	Resolve: 'EdtDoesNotExist' Met	10	20	Will be recreated
13		<b>Form</b>			<b>30</b>	<b>Create an extension</b>
14		Form	Resolve Parent Not Found Con	17	30	Need to review each; Work with spec and need another place for control
15		Form	Resolve Hierarchy Conflict	15	30	Need to review each; Work with spec and need another place for control
16		Form	Resolve Code Conflict	10	30	Need to review each; Find a way to place code on extension
17		Form	Resolve Property Conflict	5	10	Need to review each; Find a way to place code on extension
18		Form	Element Requires Reimplemer	17	40	Need to review each; Might be fixed when resolve CodeConflicts project
19		Form	Resolve: 'BPErrorFormControlP	10	20	
20		Form	Resolve: 'BPErrorFormDesignPa	10	20	
21		Form	Resolve: 'BPErrorControlNotAl	10	20	

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ELS Summary							
ModelName	(All)						
Layer	(All)						
Include in Summary	ELS						
Report type	Records count	Estimated minutes	Estimated hours				
⊕ ELS MergeReport	4332	47960	799.33	(1) MS inserted code into D365 - marked as "Requires resolution"			
⊕ ELS MergeReport CreateExtension	410	12620	210.33	++ Extensions			
⊕ ELS TaskList	2612	62355	1039.25	(2) MS unable to insert into D365			
⊖ Base Enum	5	110	1.83	++ Extensions			
⊖ DMFEntityType	2	60	1.00				
AxEnum/DMFEntityType	2	60	1.00	(3) MS inserted code into D365 - marked as "Resolved" - requires review and extensions			
⊕ NumberSeqModule	2	20	0.33	(4) Overlaying conflict requires rework			
⊕ ProdErrorCause	1	30	0.50				
⊕ Class Item	397	11560	192.67				
⊕ Form	458	9205	153.42				
⊕ Macro Dictionary	3	90	1.50				
⊕ Menu Extension	7	160	2.67				
⊕ Menu Item Action	15	170	2.83				
⊕ Report	8	120	2.00				
⊕ Security Duty	585	7045	117.42				
⊕ Security Privilege	401	12580	209.67				
⊕ Security Role	355	13125	218.75				
⊕ Simple Query	7	280	4.67				
⊕ Table	345	7410	123.50				
⊕ View	3	50	0.83				
⊕ Map	9	180	3.00				
⊕ Info Part	1	60	1.00				
⊕ Base Enum Extension	1	10	0.17				
⊕ Menu Item Output	1	10	0.17				
⊕ Aggregate Dimension	2	40	0.67				
⊕ Aggregate Measurement	9	150	2.50				
⊕ ELS TaskList CreateExtension	811	11660	194.33				
<b>Grand Total</b>	<b>8165</b>	<b>134595</b>	<b>2243.25</b>				

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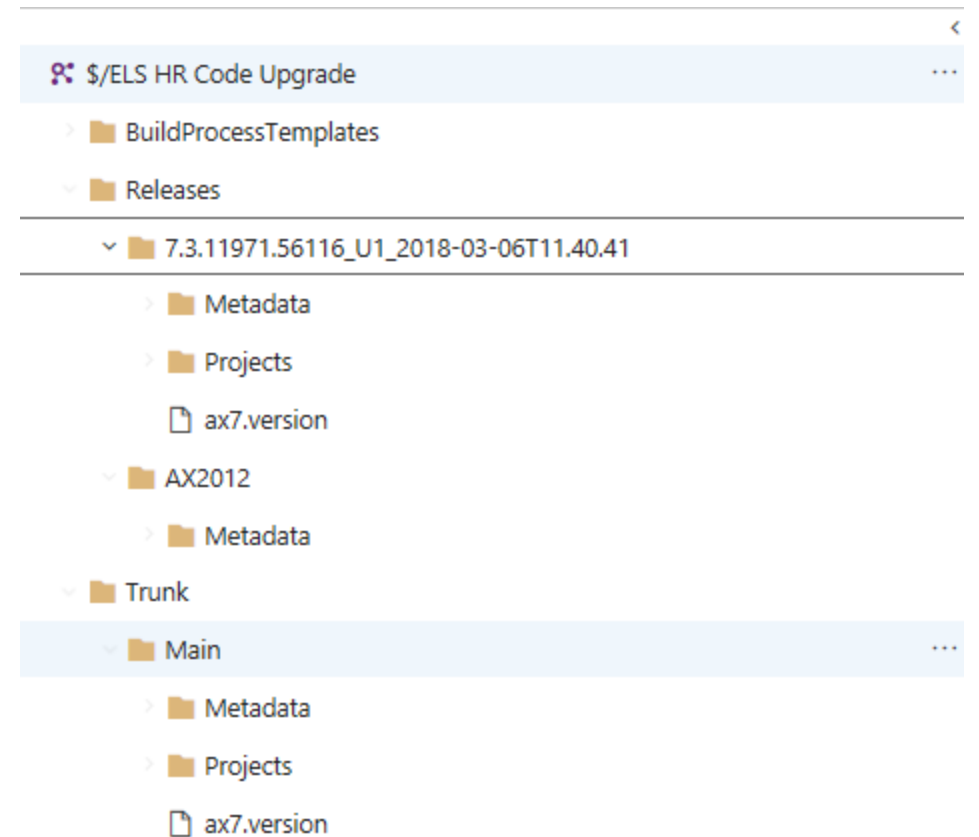
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# AX 2012 – Post-LCS Upgrade

- Code is checked into source control (VSTS)
- Objects are listed in separate “upgraded” and “conflict” D365FO projects
- Work items are created



- No direct upgrade process available
  - AX 2009 = ~1800 tables ⇔ D365 FO = ~6500 tables
- Options
  - AX 2009 > AX 2012 > D365FO
  - Re-implementation

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# Data Upgrade



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- For AX 2012 R2 and R3 customers only – Data Upgrade
  - Full process described in details on Microsoft Docs site –  
<https://docs.microsoft.com/en-us/dynamics365/unified-operations/dev-itpro/migration-upgrade/upgrade-overview-2012>
- For AX 2012 RTM customers – Data upgrade is not available
  - Not supported



# AX 2009 – What is available today

- Data Migration to D365FO
- The data that will be moved over is limited to
  - Configuration/Setup data
  - Master data
  - Balances
  - Open Documents
  - System Configuration.
- Historical transactions are not migrated!



<https://learn.microsoft.com/en-us/dynamics365/fin-ops-core/dev-itpro/migration-upgrade/data-migration-tool>

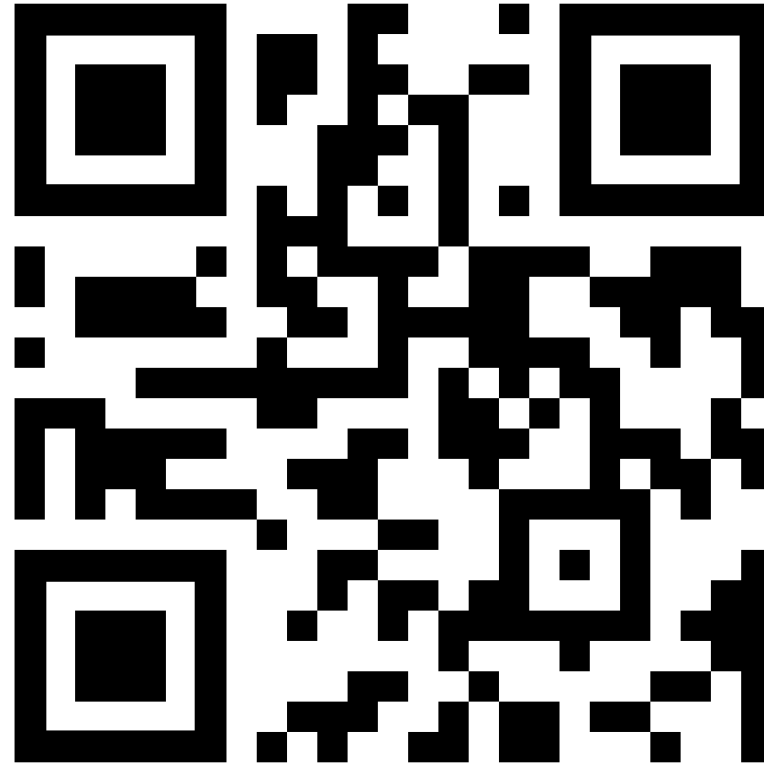
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