



EUKLEIA
ERP & Software Solution

EUKLEIA SECURITY TOOLS · EST



EUKLEIA SECURITY TOOLS

Agenda

1. Presentation
2. Basic Features
3. Advanced Features
4. Licensing
5. RoadMap

Presentation

Who we are?

EUKLEIA is an IT consulting company specializing in ERP (SAP and Microsoft), providing end-to-end services

Our mission is to support organizations in managing and leveraging their data to foster growth and enable better decision-making. With years of experience, we offer expert advice in choosing the most suitable ERP solution tailored to our client's needs. We guide them throughout the implementation process, ensuring seamless integration and optimal utilization of the selected system.

In addition to ERP, we have expanded our expertise to encompass Business Intelligence and Cloud Architecture, offering comprehensive solutions to drive efficiency and innovation. With a strong focus on client success, we are committed to delivering reliable and transformative IT consulting services.

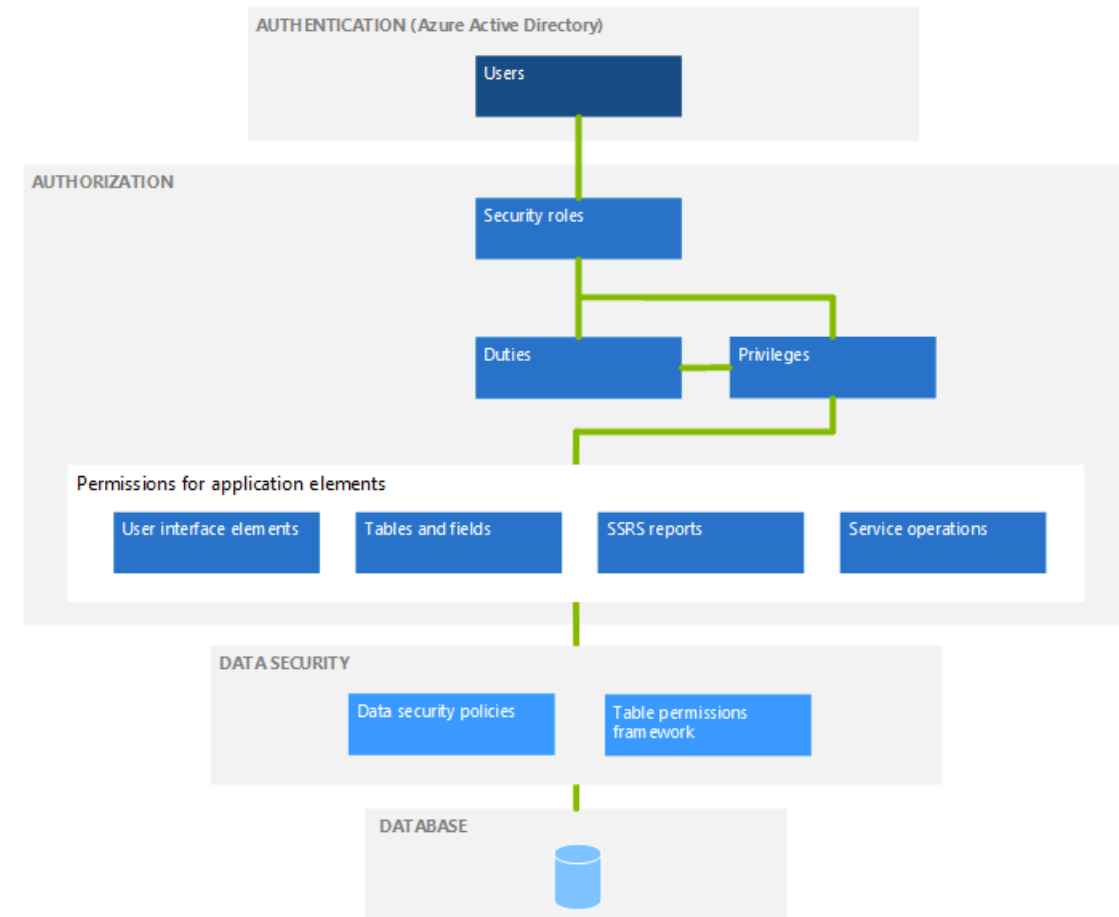
Why EST?

Microsoft Dynamics D365 Finances & SCM proposes a role-based security architecture.

This architecture allows the realization of detailed security roles. However, our customers encounter difficulty in making it their own and be autonomous.

Even if Microsoft has added new features to help with security topics (Segregation of duties, Security diagnostics,...), it continues to be painful during and after project implementation.

That why we decided to create EST, our goal is to make **simpler and faster security roles management** using the concept of **security matrix**.



What is a security matrix?

Security matrix are often used during project to initiate security roles reflection.

In general, it is look like an Excel file resuming all D365F&O menu entry points, then function teams ask customer business teams to fill by roles with menu items they want.

When the file is filled, functional and technical teams work together to create one by one each role trying to respect Excel matrix.

This work can be time-consuming and annoying.

	A	B	C	D	E	F
1	Path	Label	Type	Name	Access	
2	\Main menu\Accounts payable\Menus\AccountsPayable					
3	\Main menu\Accounts payable\Workspaces					
4	\Main menu\Accounts payable\Workspaces\Vendor invoice entry	Vendor invoice entry	Display	VendInvoiceWorkspace	Read	
5	\Main menu\Accounts payable\Workspaces\Vendor invoice automation	Vendor invoice automation	Display	VendInvoiceAutomationWorkspace	Read	
6	\Main menu\Accounts payable\Workspaces\Vendor payments	Vendor payments	Display	VendPaymentWorkspace	Read	
7	\Main menu\Accounts payable\Vendors					
8	\Main menu\Accounts payable\Vendors\All vendors	All vendors	Display	VendTableListPage	Read	
9	\Main menu\Accounts payable\Vendors\Vendors on hold	Vendors on hold	Display	VendTableHoldListPage	Read	
10	\Main menu\Accounts payable\Vendors\Vendors past due	Vendors past due	Display	VendTablePastDueListPage	Read	
11	\Main menu\Accounts payable\Vendors\Vendors who are diverse	Vendors who are diverse	Display	VendTableDiverseListPage	No access	
12	\Main menu\Accounts payable\Vendors\Vendor exception groups	Vendor exception groups	Display	VendExceptionGroup	Read	
13	\Main menu\Accounts payable\Vendors\Vendor groups	Vendor groups	Display	VendGroup	Read	
14	\Main menu\Accounts payable\Vendors\Vendor price tolerance groups	Vendor price tolerance groups	Display	VendPriceToleranceGroup	Read	
15	\Main menu\Accounts payable\Purchase orders					



EUKLEIA SECURITY TOOLS

Basic Features

Change current user roles

During security roles implementations, users often need to change their own roles to check and validate new security roles.

To be able to manage this, we often create test users account, or we ask to other peoples to change our security roles = **Annoying**.

With our feature, each user can change his own roles without being System Administrator, like that he can test **alone** all security roles.

Standard view ▾
Update current user roles (Demonstrations & Tests Only)

This feature allows you to change your user's roles for demonstration and test purposes

Current security roles

Budget clerk

New security roles

Mark current roles

<input type="radio"/> Role name	↑ Role description	Role ADT name	UserLicenseType
<input checked="" type="radio"/> Accountant	Documents accounting events a...	LEDGERACCOUNTANT	Operations
<input type="radio"/> Accounting manager	Reviews accounting, customer i...	LEDGERACCOUNTINGMANAGER	Operations
<input type="radio"/> Accounting supervisor	Reviews accounting process per...	LEDGERACCOUNTINGSUPERVIS...	Operations
<input type="radio"/> Accounts payable centralized p...	Documents accounts payable ce...	PAYMACCOUNTSPAYABLECENT...	Operations
<input type="radio"/> Accounts payable clerk	Documents vendor invoice even...	VENDINVOICEACCOUNTSPAYAB...	Operations
<input type="radio"/> Accounts payable manager	Reviews vendor invoice process ...	VENDINVOICEACCOUNTSPAYAB...	Operations
<input type="radio"/> Accounts payable payments clerk	Documents accounts payable p...	PAYMACCOUNTSPAYABLEPAYM...	Operations
<input type="radio"/> Accounts payable positive paym...	Document accounts payable po...	PAYMPOSITIVEPAYMENTCLERK	Team Members
<input type="radio"/> Accounts receivable centralized ...	Documents accounts receivable...	PAYMACCOUNTSRECEIVABLECE...	Operations
<input type="radio"/> Accounts receivable clerk	Documents customer invoice ev...	CUSTINVOICEACCOUNTSRECEI...	Operations
<input type="radio"/> Accounts receivable manager	Reviews customer invoice proce...	CUSTINVOICEACCOUNTSRECEI...	Operations
<input type="radio"/> Accounts receivable payments c...	Documents accounts receivable...	PAYMACCOUNTSRECEIVABLEPA...	Operations
<input type="radio"/> Applicant anonymous (external)	External user application for em...	ANONYMOUSAPPLICANT	None
<input type="radio"/> Auditor	Manages and reviews audit poli...	AUDITPOLICYMANAGER	Operations

Security matrix – Form Details

When you select a menu item display, you can display and select an access level for all menu items contained into linked form.

Form details

Standard view ▾

Filter

Form name	Control name	Menu item type	Menu item name	Label	License (View)	License (Maintain)	Access level
VendTable	Activities	Display	smmActivitiesListPage	All activities	Team Members	Team Members	No access
VendTable	AddContacts	Display	ContactPersonNew	Contact	Team Members	Team Members	No access
VendTable	AdvanceApplication	Display	VendAdvanceApplication	Apply	Team Members	Activity	No access
VendTable	AdvanceReverseApplication	Display	VendAdvanceApplicationReversal	Reverse	Team Members	Activity	No access
VendTable	AlcoholLicenseReTable_RU	Display	AlcoholLicenseReTable_RU	Alcohol licenses	Team Members	Operations	No access
VendTable	ApprovalJournalHistory	Display	PurchPostingHistoryInvoiceAppr...	Approval journal history and matching details	Team Members	Operations	No access
VendTable	Balance	Display	VendOpenBalanceCurrency	Balance	Team Members	Operations	No access
VendTable	BankAccounts	Display	VendBankAccounts	Bank accounts	Team Members	Activity	No access
VendTable	BusinessRelation	Display	smmBusReTableAction	Prospect	Team Members	Activity	No access
VendTable	BusinessSector	Display	SmmBusinessSectors	Business classifications	Team Members	Activity	No access
VendTable	buttonFiscalDocumentText_BR	Display	FiscalDocumentText_BR	Fiscal document texts	Team Members	Team Members	No access
VendTable	CallLists	Display	smmTMCaListGroup	Call list	Team Members	Operations	No access
VendTable	Campaigns	Display	smmCampaignTable	Campaign	Team Members	Operations	No access
VendTable	Cases	Display	CaseListPage	All cases	Team Members	Team Members	No access
VendTable	CashAccountingRegime_ES	Display	CashAccountingRegime_ES	Special regime for cash accounting method	Team Members	Activity	No access
VendTable	Categories	Display	DirPartyEcoResCategory	Categories	Team Members	Team Members	No access
VendTable	ClosedTransactionEditing	Display	VendOpenTransReverseAction	Undo settlement	Team Members	Operations	No access
VendTable	ConfigureCatalogImportProcess...	Action	CatVendorConfigureForCatalog...	Configure vendor for catalog import	Team Members	Activity	No access
VendTable	Contacts	Display	smmContactsListPage	All contacts	Team Members	Team Members	No access
VendTable	CopyOfNewCase	Display	CaseDetailNewPurchase	Create case	Team Members	Team Members	No access
VendTable	CreateAction	Display	smmActivitiesActionNew	New action	Team Members	Team Members	No access
VendTable	CreateTask	Display	smmActivitiesTaskNew	New task	Team Members	Team Members	No access
VendTable	CreateTradeAgreements	Display	PriceDiscAdmTable_PurchCreate	Create trade agreements	Team Members	Operations	No access
VendTable	DefaultAccount	Display	VendDefaultLedgerListPanelActi...	Default account	Team Members	Operations	No access

☒ No access ☐ Read ☐ Update ☐ Create ☐ Delete

Apply



Security matrix – Overview

We have developed a security matrix process into D365F&O, this feature allows you to:

- Display all menus items in all D365F&O languages
- Select which menus entry points and which access level you want
- Select for menu items display, all menu items contained in linked forms and define an access level
- Archive your security matrix with versioning
- Export/Import security matrix with Excel

The screenshot shows the 'Security matrix' configuration window for 'DemoSecurityMatrix' (ID: AAA0000007). The interface includes a left sidebar with a tree view of menu items, a main 'Designer' area with a 'SELECTION' table, and a right sidebar for 'ACCESS LEVEL' settings.

General Information:

- ID: AAA0000007
- Name: DemoSecurityMatrix
- Version: 1
- License: None
- ISO: FR
- Description: MyMatrix
- Status: Draft

Designer - SELECTION Table:

Path	Label	License (Maintain)	License (View)	Access level	
\Main men...	Vendor exception groups	Operations	Team Members	No access	✗
\Main men...	Vendor groups	Activity	Team Members	No access	✗
\Main men...	Vendor price tolerance groups	Activity	Team Members	No access	✗
\Main men...	Vendors who are diverse	Team Members	Team Members	No access	✗
\Main men...	Vendors on hold	Activity	Team Members	No access	✗
\Main men...	All vendors	Team Members	Team Members	No access	✗
\Main men...	Vendors past due	Activity	Team Members	No access	✗

ACCESS LEVEL Settings:

- ☒ No access
- ☐ Read
- ☐ Update
- ☐ Create
- ☐ Delete

NAVIGATION Tree View:

- Accounts payable
- Workspaces
- Vendors (selected)
 - All vendors
 - Vendors on hold
 - Vendors past due
 - Vendors who are diverse
 - Vendor exception groups
 - Vendor groups
 - Vendor price tolerance groups
- Purchase orders
- Invoices
- Payments

Security matrix – Version management

The screenshot displays the 'Security matrix' application interface. At the top, there is a navigation bar with 'Save', '+ New', and 'Delete' buttons, along with 'General' and 'Options' tabs. Below this, a 'Versions' section is highlighted with a blue box, containing 'Draft', 'Post', 'Undo', and 'Activate' buttons. The main content area shows the 'AAA0000007 : DemoSecurityMatrix' configuration. Under the 'General' tab, the 'IDENTIFICATION' section includes fields for ID (AAA0000007), Name (DemoSecurityMatrix), Version (2), License (None), ISO (FR), Description (MyMatrixV2), and Status (Draft). Below this, the 'Versions' section is highlighted with a blue box, showing a table of versions. The table has columns for ID, Version, Name, Description, Active, Status, License, Created by, Created date and time, Posted by, Posted on, and Modified by. Two versions are listed: Version 1 (DemoSecurityMatrix, MyMatrix, Active, Posted) and Version 2 (DemoSecurityMatrix, MyMatrixV2, Draft, None).

ID	Version	Name	Description	Active	Status	License	Created by	Created date and time	Posted by	Posted on	Modified by
AAA0000007	1	DemoSecurityMatrix	MyMatrix	✓	Posted	None	mikael.pires	10/11/2023 10:32:19 AM	mikael.pires	10/11/2023 10:48:03 AM	mikael.pires
AAA0000007	2	DemoSecurityMatrix	MyMatrixV2		Draft	None	mikael.pires	10/11/2023 10:48:24 AM			mikael.pires

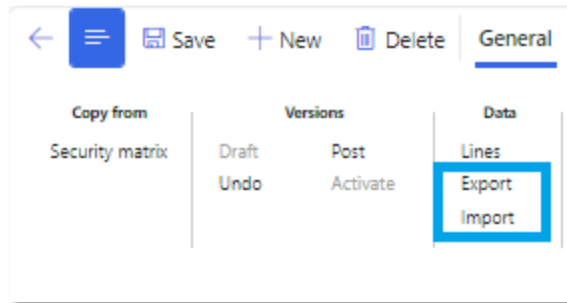
With version management, you can create several version for your security matrix and archive all modifications done. Each version can be exported on Excel, you can create a new version from another one, etc...



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Security matrix – Excel Import/Export

With Excel Import/Export feature, you can generate an Excel file with all your security matrix data. You can edit this file and re-import it to update your security matrix or create a new one.



Pending vendor invoices assigned to me					
	A	B	C	D	E
	Path	Label	Type	Name	Access
1	\Main menu\Accounts payable\Menus\AccountsPayable				
2	\Main menu\Accounts payable\Workspaces				
3	\Main menu\Accounts payable\Workspaces\Vendor invoice entry	Vendor invoice entry	Display	VendInvoiceWorkspace	Read
4	\Main menu\Accounts payable\Workspaces\Vendor invoice automation	Vendor invoice automation	Display	VendInvoiceAutomationWorkspace	Read
5	\Main menu\Accounts payable\Workspaces\Vendor payments	Vendor payments	Display	VendPaymentWorkspace	Read
6	\Main menu\Accounts payable\Vendors				
7	\Main menu\Accounts payable\Vendors\All vendors	All vendors	Display	VendTableListPage	Read
8	\Main menu\Accounts payable\Vendors\Vendors on hold	Vendors on hold	Display	VendTableHoldListPage	Read
9	\Main menu\Accounts payable\Vendors\Vendors past due	Vendors past due	Display	VendTablePastDueListPage	Read
10	\Main menu\Accounts payable\Vendors\Vendors who are diverse	Vendors who are diverse	Display	VendTableDiverseListPage	No access
11	\Main menu\Accounts payable\Vendors\Vendor exception groups	Vendor exception groups	Display	VendExceptionGroup	Read
12	\Main menu\Accounts payable\Vendors\Vendor groups	Vendor groups	Display	VendGroup	Read
13	\Main menu\Accounts payable\Vendors\Vendor price tolerance groups	Vendor price tolerance groups	Display	VendPriceToleranceGroup	Read
14	\Main menu\Accounts payable\Purchase orders				
15	\Main menu\Accounts payable\Purchase orders\All purchase orders	All purchase orders	Display	PurchTableListPage	Read
16	\Main menu\Accounts payable\Purchase orders\Purchase orders assigned to me	Purchase orders assigned to me	Display	PurchTableListPageAssignedToMe	Read
17	\Main menu\Accounts payable\Purchase orders\Purchase orders received but not	Purchase orders received but not invoiced	Display	PurchTableReceivedNotInvoicedListPage	Read
18	\Main menu\Accounts payable\Purchase orders\Purchase agreements	Purchase agreements	Display	PurchAgreementListPage	Read
19	\Main menu\Accounts payable\Purchase orders\Open prepayments	Open prepayments	Display	PurchPrepayOpen	Read
20	\Main menu\Accounts payable\Invoices				
21	\Main menu\Accounts payable\Invoices\Pending vendor invoices	Pending vendor invoices	Display	VendInvoiceInfoListPage	Read
22	\Main menu\Accounts payable\Invoices\Pending vendor invoices assigned to me	Pending vendor invoices assigned to me	Display	VendInvoiceAssignedToMeListPage	Read
23	\Main menu\Accounts payable\Invoices\Invoice journal	Invoice journal	Display	LedgerJournalTable9	Read
24	\Main menu\Accounts payable\Invoices\Global invoice journal	Global invoice journal	Display	LedgerJournalTableVendInvoiceGlobal	Read
25	\Main menu\Accounts payable\Invoices\Open vendor invoices	Open vendor invoices	Display	VendOpenInvoicesListPage	Read
26	\Main menu\Accounts payable\Invoices\Vendor invoices due today	Vendor invoices due today	Display	VendOpenInvoicesDueTodayListPage	Read
27	\Main menu\Accounts payable\Invoices\Vendor invoices past due	Vendor invoices past due	Display	VendOpenInvoicesPastDueListPage	Read
28	\Main menu\Accounts payable\Invoices\Vendor invoices assigned to queues that I	Vendor invoices assigned to queues that I belong to	Display	VendInvoiceAssignedToQueuesThatIBelongTo	Read
29	\Main menu\Accounts payable\Invoices\Invoice register	Invoice register	Display	LedgerJournalTable6	Read
30	\Main menu\Accounts payable\Invoices\Invoice pool	Invoice pool	Display	VendTransInvoicePoolReg	Read
31	\Main menu\Accounts payable\Invoices\Invoice approval	Invoice approval	Display	LedgerJournalTable4	Read
32	\Main menu\Accounts payable\Invoices\Invoice approval	Invoice approval	Display	LedgerJournalTable4	Read



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Advanced Features

User roles proposals - Overview

From your security matrix, you can generate user roles proposals. A proposal propose all security elements needed to cover your security matrix data. Proposal calculate several combination of duties and privileges to cover your security matrix. Each combination has scores, and you can see which roles can be interesting with its matching score.

Personalize

Always open for editing
Personalize this page

Page options

Security diagnostics
Advanced filter or sort

Edit

Record info
Go to

Share

Read mode
Revert

Power Automate

Create a custom alert
Manage my alerts

See your flows
Create a flow

Security roles proposals

AAA0000002 : MySecurityMatrix

Standard view

Filter

PRO0000001
AAA0000002
1
10/16/2023 2:43:36 PM
mikael.pires

PRO0000002
AAA0000002
1
10/17/2023 12:37:18 PM
mikael.pires

PRO0000003
AAA0000002
3
10/17/2023 12:42:24 PM
mikael.pires

PRO0000004
AAA0000002
3
10/17/2023 12:46:43 PM
mikael.pires

PRO0000005
AAA0000002
3
10/17/2023 12:54:51 PM
mikael.pires

General

IDENTIFICATION

Proposal Id
PRO0000005

Security matrix Id
AAA0000002

Version
3

Name
MySecurityMatrix

Description
Matrix on vendor forms

Status
Draft

Created date and time
10/17/2023 12:54:51 PM

Created by
mikael.pires

BEST PROPOSAL

Method
Only duties

Score
69.44

PARAMETERS

Privileges selection method
Less entry point

Usage percent minimum
50.00

SCORES WEIGHTING

Matrix coverage
1

Duties usage
1

Duty/Privilege ratio
1

MISCELLANEOUS

Retained
No

Comment

Access not covered

Details

METHOD

Best number of privileges
Best usage percent
Only duties

SCORES

Matrix coverage
77.94

Duties usage
88.89

Duty/Privilege ratio
9.89

Total
58.91

SECURITY OBJECTS IDENTIFIED

Type	AOT name	Label	Usage percent
Duty	MCRBrokerClaimMaintain	Maintain broker claims	50.00
Duty	ProcRoleCenterPurchProcessReview	Review purchasing reports thro...	100.00
Duty	VendDirectiveAccountantMaintain_PSN	Maintain the Accountant accept...	100.00
Duty	VendDirectiveInquire_PSN	Inquire into mandates	100.00
Duty	VendInvoicePoliciesRoleCenterInquire	Inquire into vendor invoice poli...	100.00
Duty	VendInvoiceVendorInRegisterView	Inquire into vendor invoice regi...	50.00
Duty	VendorBankAccountingInquiryViewDuty	View duty for vendor collaborati...	100.00

SUGGESTED SECURITY ROLES

AOT name	Role name	Score
PAYMACCOUNTSPAYABLEPAYME...	Accounts payable payments clerk	7.00
VENDINVOICEACCOUNTSPAYABL...	Accounts payable clerk	5.50
VENDINVOICEACCOUNTSPAYABL...	Accounts payable manager	3.50
COMPANYCHIEFEXECUTIVEOFFIC...	Chief executive officer	2.00
LEDGERACCOUNTINGMANAGER	Accounting manager	1.00

User roles proposals

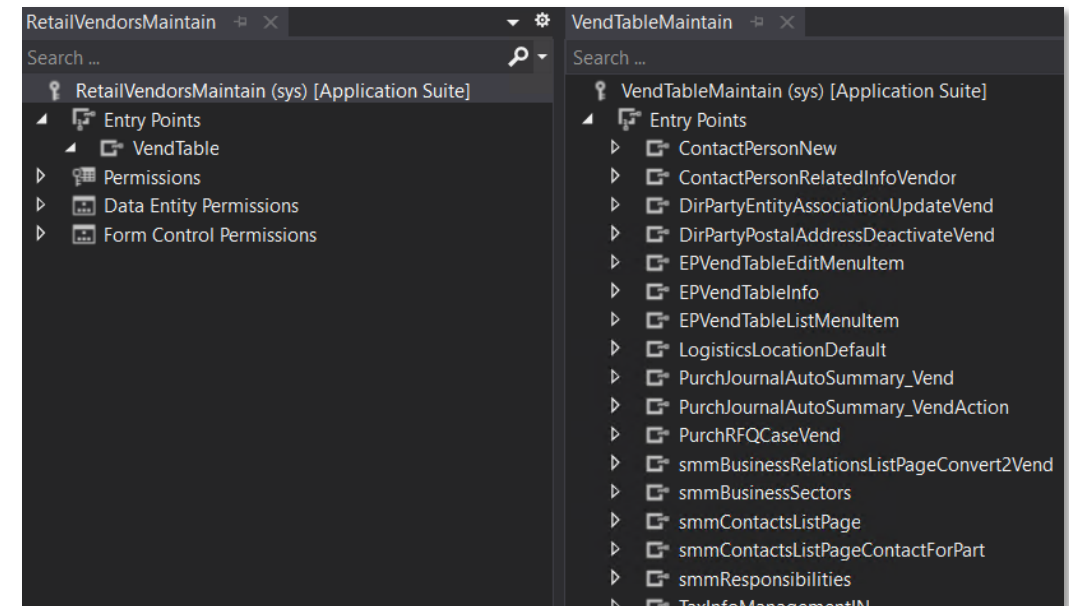
Privileges selection method

Couple menu item and access level can be defined in several privileges, so we have defined several selection method:

- **All** = Select all privileges that contains this couple
- **First only** = Select first privilege by alphabetical order
- **Most entry points** = Select privilege with most entry points
- **Less entry points** = Select privilege with less entry points

In this example, we will select:

- **All** = RetailVendorsMaintain and VendTableMaintain privileges
- **First Only** = RetailVendorsMaintain privilege
- **Most entry points** = VendTableMaintain privilege
- **Less entry points** = RetailVendorsMaintain privilege



User roles proposals

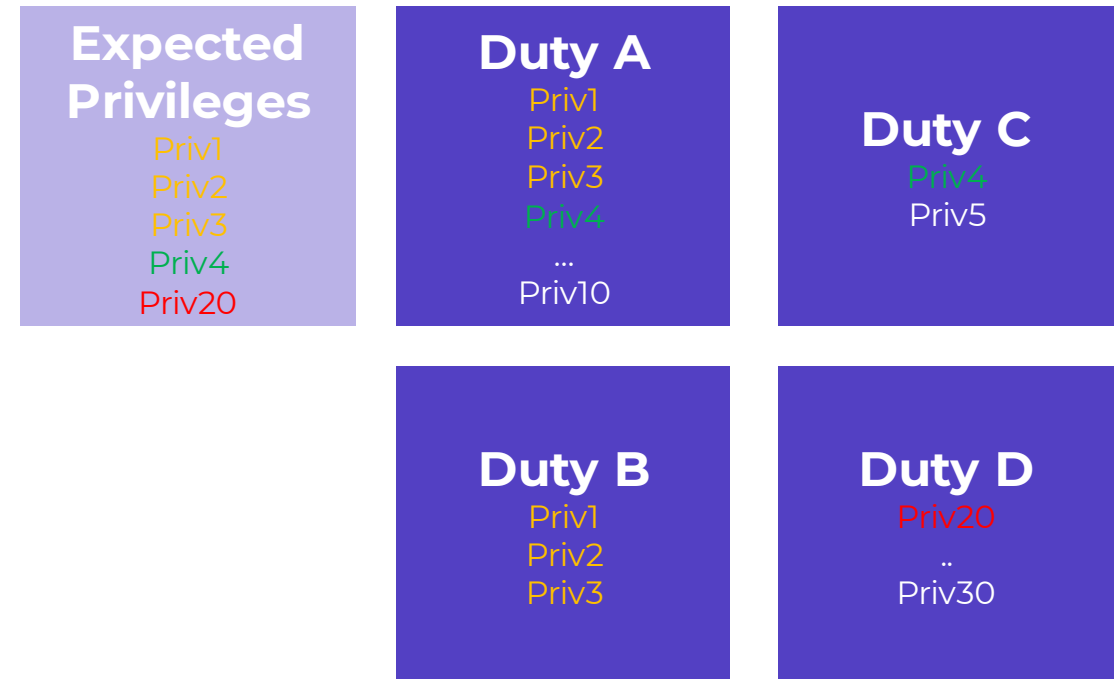
Proposal methods & Scores

User roles proposal have 3 calculations methods:

- **Best number of privileges** = We select duties ordered by number of expected privileges they contain. *
→ **Duty A** = 4 privileges & **Priv20**
- **Best usage percent** = We select duties ordered by the ratio between number of expected privileges in it and all duty's privileges.*
→ **Duty B** = 100% & **Duty C** = 50% & **Priv20**
- **Only duties** = We select only duties using "Best percent as possible" approach
→ **Duty B** = 100% & **Duty C** = 50% & **Duty D** = 10%

For each method, we calculate 4 scores:

- **Matrix coverage** = Percent of expected menuitems/access level found into existing privileges
- **Duties usage** = For duties, average of ratio between number of expected privileges in its and all duty's privileges
- **Ratio Duties/Privileges** = Percent of Duties used in all security objects used (Duties & Privileges)
- **Total** = Average of those 3 scores with possibility to apply weighting for each score



* A minimum ratio between number of expected privileges and duty's privileges can be defined. In our example, we have defined this minimum to 50%

User roles proposals

Suggested security roles

For each proposal method, you can find 5 suggested roles ordered by their score, score is calculated using following method:

$$\frac{\text{Nb of duties covered by current role} + \text{Nb of privileges covered by current role}}{\text{Nb of duties in current proposal} + \text{Nb of privileges in current proposal}}$$

More and more you will adapt your security objects (privileges, duties and roles), you will have higher scores and better security roles suggested.

At the end, user roles proposals will suggest your customized roles as best role to cover your security matrix.

SUGGESTED SECURITY ROLES

<input type="radio"/>	AOT name	Role name	Score ↓	
	DE0C8E42-A245-4581-A44F-19...	EUKSECVendorExample	100.00	
	VENDINVOICEACCOUNTSPAYAB...	Accounts payable clerk	2.15	
<input checked="" type="checkbox"/>	TRADEBUYINGAGENT	Buying agent	1.82	
	TRADEPURCHASINGMANAGER	Purchasing manager	0.83	
	VENDINVOICEACCOUNTSPAYAB...	Accounts payable manager	0.78	



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Licensing

Licensing

Our licenses must be renewed once a year and price is fixed regardless number of users or environments :

- **Basis** – Access to basic features – **2K / Year**
- **Advanced** – Access to Basic + Advanced features – **6K / Year**



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RoadMap

Release schedule

We will release a new EST version at each Microsoft releases, and we will release when it is needed hotfix update:

- New EST version will contain new features, hotfixes and new Microsoft release compliance.
- Hotfix update will contain only hotfixes.

!/ In 2024, Microsoft will change its release schedule plan, we will have 4 updates instead of 7 !/
<https://learn.microsoft.com/en-us/dynamics365/fin-ops-core/dev-itpro/get-started/public-preview-releases>

Next releases

V1 – November 2023

First Release

V1.1 – December 2023

Advanced

- Create role from proposal
- Create Security Matrix from Security roles

V1.2 – Q1 2024

Basis

- Security matrix data entities

Advanced

- User roles proposals data entities

V1.3 – Q2 2024

Basis

- Security matrix comparison

Advanced

- User roles proposals comparison

V1.4 – Q3 2024

Basis

- Security matrix reporting

Advanced

- User roles proposals reporting

V1.5 – Q4 2024

Focus on customers feedbacks



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Thank You



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