

What is Security in D365 F&O

- It is a set of required roles and permission assigned for a person in a certain organization to complete all their daily tasks and operations.
- Provide users with the access only to the appropriate levels of information that is required to do their jobs
- Uses Role based security Model : Categorize users by role and restrict access based on those roles
- Prevent a user's access to records the user does not own or share.



Security Architecture

Authentication

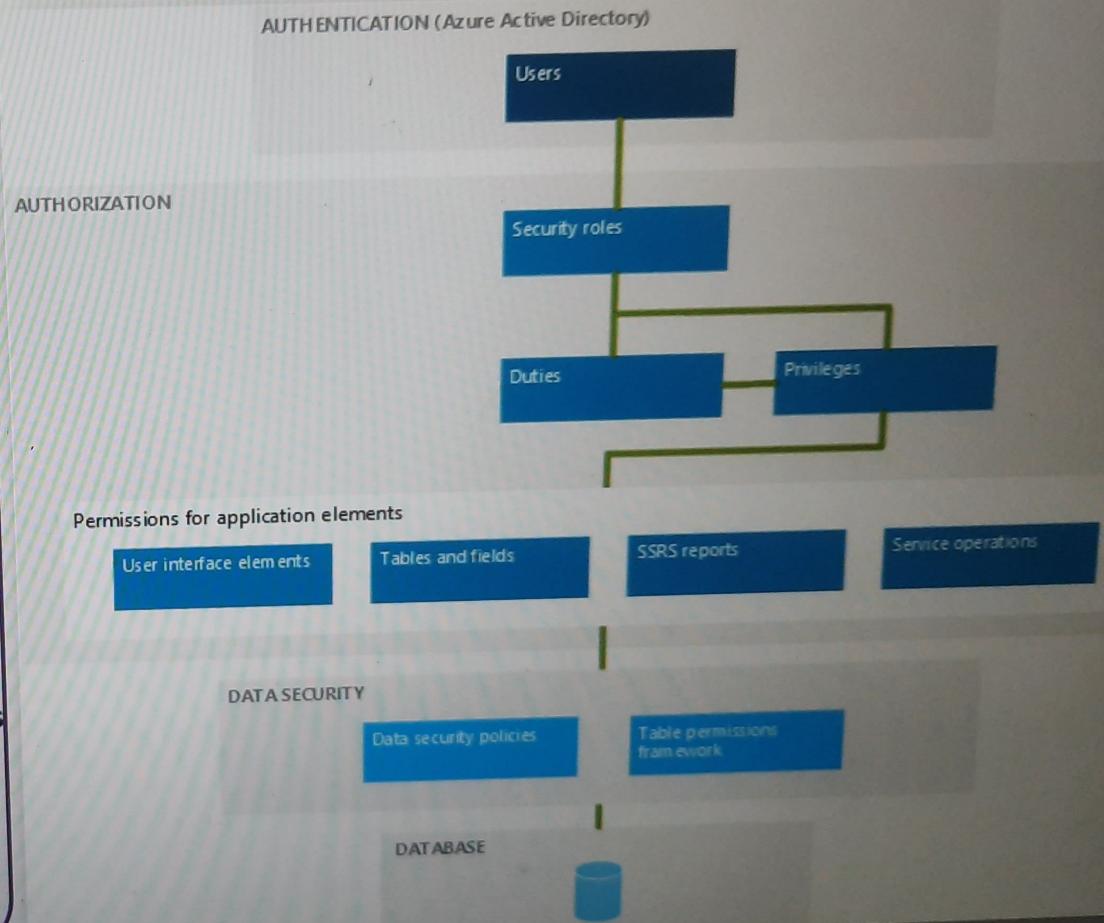
- User should have a valid Microsoft Azure Active Directory (AAD) account
- Users must be provisioned into a finance and operations instance

Authorization

- Authorization is the control of access to Finance and Operations applications
- Security permissions are used to control access to individual elements of the program: menus, menu items, action and command buttons, reports

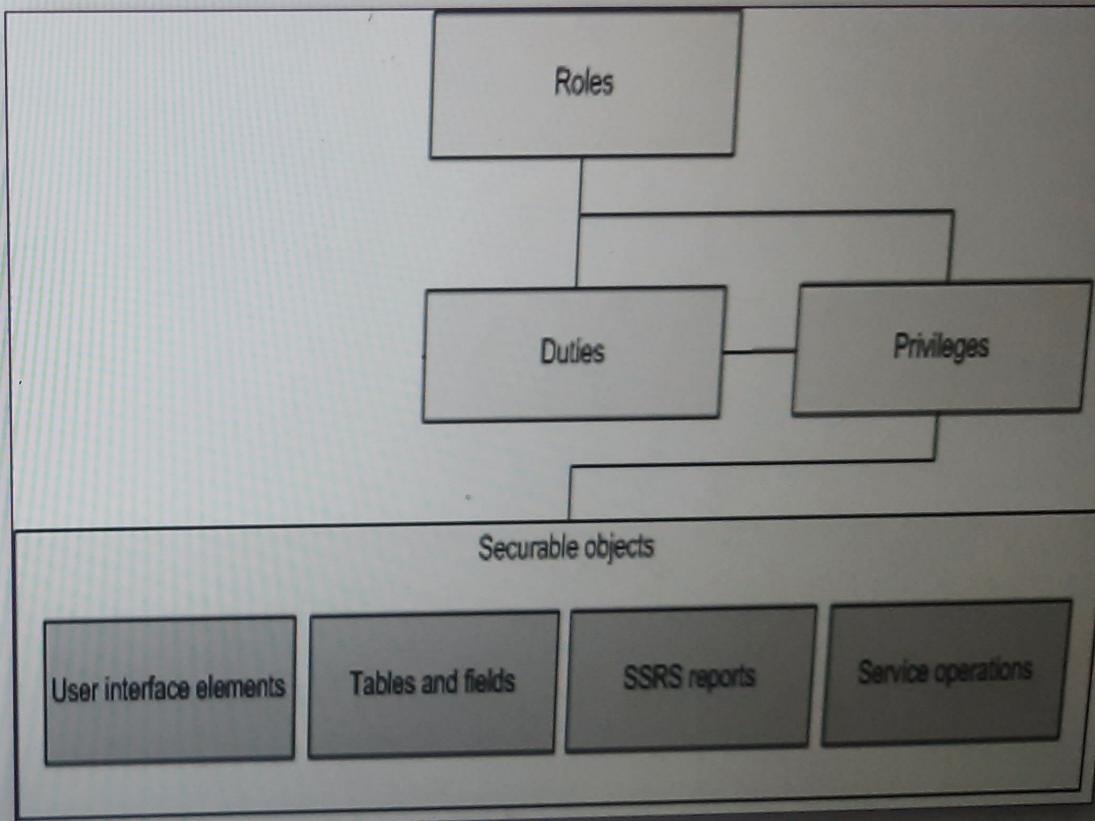
Data Security

- Restricting access to table records based on security policies



Role Based Security

- Permissions represent access to individual securable objects, such as menu items and tables
- Privileges are composed of permissions and represent access to tasks, such as canceling payments and processing deposits
- Duties are composed of privileges and represent parts of a business process, such as maintaining bank transactions
- Both duties and privileges can be assigned to roles based on their responsibilities in the organization and their participation in business processes.
- A user who is not assigned to any role has no access to finance and operations



Security Roles

- Security Roles are set of privileges and duties that give users access to various 'securable objects'
- All users must be assigned to at least one security role in order to have access to finance and operations
- Security roles can be organized into a hierarchy.
- The role hierarchy allows the administrator to define a role based on another role. For example, the sales manager role could be defined as a parent role of the manager role and the salesperson role. A parent role automatically inherits the duties, privileges, and conditions that are assigned to its child roles
- Can modify existing security roles, create new security roles, or change which security roles are re assigned to each user

Segregation of duties Data

Segregation of duties rules
Validate segregation of duties rules for unpublished roles

Security configuration

Roles Duties Privileges Unpublished objects (27)

Undo Redo Create new Show all levels Add references Create new and add reference

Role
Accountant
Accounting manager
Accounting supervisor
Accounts payable centralized payments clerk
Accounts payable clerk
Accounts payable manager
Accounts payable payments clerk
Accounts payable positive payment clerk
Accounts receivable centralized payments clerk
Accounts receivable clerk
Accounts receivable manager
Accounts receivable payments clerk
AOT browser user
Applicant anonymous (external)
Auditor
Batch job manager
Budget clerk
Budget contributor
Budget manager
Business document clerk

ACCOUNTANT

Description
Documents accounting events and responds to accounting inquiries

AOT name
LedgerAccountant

Security policy context string

Duties ↑
Configure electronic fiscal document
Enable bank management process
Enable electronic document exchange
Enable escheatment processing for stale-dated account
Enable EU sales list process
Enable financial reports generator
Enable fixed assets process
Enable Instratst process
Enable receipt electronic fiscal document process
Enable sales taxes process
Enable tax accounting process
Enable the fixed asset process for Russian fixed assets
Enable translation process
GeneralJournalEntryWorkspaceMaintain
Generate DIOT declaration
Generate financial reports
Generate ISR report
Inquire about accounting data
Inquire about cash accounts
Inquire about cash journals

References ↑
Duties +
Parent roles
Privileges +
Sub roles
Tables +

Duties

- It is a collection of security privileges and represent a specific part of business process.
- The administrator assigns duties to security roles. A duty can be assigned to more than one role.
- Adding or removing duties is common to provide or revoke access to certain parts of business process
- The administrator can modify the privileges that are associated with a duty, or create new duties

The screenshot shows the 'Segregation of duties' configuration page. At the top, there are tabs for 'Segregation of duties' (which is selected), 'Data', and a search icon. Below the tabs, there's a section titled 'Segregation of duties rules' with a sub-section 'Validate segregation of duties rules for unpublished roles'. The main area is titled 'Security configuration' and contains a list of roles. On the right side, there's a detailed view for the 'ACCOUNTANT' role, showing its description, AOT name (LedgerAccountant), security policy context string, references (with 'Duties +' highlighted), parent roles, privileges, sub roles, and tables. A red box highlights the 'Duties +' section under 'References'.

Role
Accountant
Accounting manager
Accounting supervisor
Accounts payable centralized payments clerk
Accounts payable clerk
Accounts payable manager
Accounts payable payments clerk
Accounts payable positive payment clerk
Accounts receivable centralized payments clerk
Accounts receivable clerk
Accounts receivable manager
Accounts receivable payments clerk
AOT browser user
Applicant anonymous (external)
Auditor
Batch job manager
Budget clerk
Budget contributor
Budget manager
Business document clerk

ACCOUNTANT

Description
Documents accounting events and responds to accounting inquiries

AOT name
LedgerAccountant

Security policy context string

References ↑

Duties +

Parent roles

Privileges +

Sub roles

Tables +

Duties ↑

Configure electronic fiscal document

Enable bank management process

Enable electronic document exchange

Enable escheatment processing for stale-dated acc

Enable EU sales list process

Enable financial reports generator

Enable fixed assets process

Enable intrastat process

Enable receipt electronic fiscal document process

Enable sales taxes process

Enable tax accounting process

Enable the fixed asset process for Russian fixed assets

Enable translation process

GenerateJournalEntryWorkspaceMaintain

Generate DIOT declaration

Generate financial reports

Generate ISR report

Inquire about accounting data

Inquire about cash accounts

Inquire about cash journals

Privileges

- A privilege specifies the level of access that is required to perform a job, solve a problem, or complete an assignment.
- A privilege contains permissions to individual application objects, such as user interface elements and tables
- The administrator can modify the permissions that are associated with a privilege or create new privileges.

The screenshot displays two main sections of a software application:

Segregation of duties (Top Left):

- Header: Segregation of duties rules
- Description: Validate segregation of duties rules for unpublished roles
- Buttons: Undo, Redo, Create new, Show all levels, Add references, Create new and add reference

Security configuration (Bottom Left):

- Header: Security configuration
- Navigation: Roles, Duties, Privileges, Unpublished objects (27)
- Buttons: Undo, Redo, Create new, Show all levels, Add references, Create new and add reference
- Table (Duties tab selected):

Role	Duties
ACCOUNTANT	Maintain fixed assets Maintain fixed assets for Russia Maintain incoming factures Maintain Intrastat transactions Maintain journals and transactions Maintain journals and transactions Maintain IP Sales Tax report Maintain online invoicing system parameters Maintain outgoing factures Maintain outgoing factures Maintain overdue vendor debt CIT and PIT journals Maintain periodic settlement and unsettlement Maintain positive payments Maintain prepayment factures Maintain purchase books Maintain sales books Maintain sales tax transactions Maintain tax engine basic setup
- Table (Privileges tab selected):

Role	Privileges
Maintain fixed assets	Generate asset retirement obligation report Maintain asset additions Maintain asset book records Maintain asset book setup shift depreciation entity Maintain asset book shift depreciation entity Maintain asset books from fixed asset management Maintain asset hub Maintain asset retirement obligation transactions Maintain asset shift depreciation profile entity Maintain asset undepreciated balance schedule entity Maintain comprometry Maintain depreciation profile changes for fixed assets Maintain depreciation rate schedule entity Maintain depreciation rates for fixed assets Maintain dimensions display Maintain discount rate entity Maintain fixed asset depreciation group Maintain fixed asset depreciation suspension Maintain fixed asset discount rates Maintain fixed asset management workspace

Determine Duties and Privileges

- Security Diagnostics : To find the list of duties and privileges assigned to a form
- The Security diagnostics dialog will show the Roles, Duties and Privileges that have access to this Menu Item
- Form → Options → Security diagnostics

Security diagnostics

This is the list of security objects that grant the active security entry point.

Add roles to user Hide object identifiers

Filter

Object identifier	Object type	Label
CollectionLetterCollection...	Role	Collections agent
CollectionLetterCollection...	Role	Collections manager
CustInvoiceAccountsReceiv...	Role	Accounts receivable clerk
CustInvoiceAccountsReceiv...	Role	Accounts receivable man...
LedgerAccountant	Role	Accountant
LedgerAccountingManager	Role	Accounting manager
LedgerAccountingSupervi...	Role	Accounting supervisor
LedgerFinancialController	Role	Financial controller
PaymAccountsReceivable...	Role	Accounts receivable centr...
PaymAccountsReceivable...	Role	Accounts receivable pay...
CollectionLetterCollection...	Duty	Inquire into collections st...
CustInvoiceInvoiceAndCa...	Duty	Enable invoice and cash p...
CustInvoiceInvoiceAndCa...	Duty	Inquire into invoice and c...
CustReasonsMaintain	Privilege	Maintain customer reason...
CustReasonsView	Privilege	View customer reason co...

Finance and Operations Preview

Edit + New Delete Options

Personalize Security diagnostics

Always open for editing Personalize this page Advanced filter or s... Record info

Share Get a link Create a custom alert Manage my alerts

Reason...	Default comment	Customer
ADDR	Check returned - unknown...	
ADJ	General adjustment	
ERROR	Correction of data entry e...	✓
LOST	Payment lost in mail	✓
MISC	Please enter a comment	✓
NSF	Non-sufficient funds	✓
OTHER	Other	✓
PRICE	Price	✓
QUALITY	Quality	✓
REVAL	Please enter a comment	
WRITEOFF	Write-off customer balance	✓

Role Mapping

- To create a new security role, navigate to **System administration > Security > Security configuration**
- Click the “Create new” button.

The screenshot shows a software interface for managing segregation of duties rules. At the top, there are tabs for "Segregation of duties" (which is selected), "Data", and a search icon. Below the tabs, it says "Segregation of duties rules" and "Validate segregation of duties rules for unpublished roles".

In the center, there's a section titled "Security configuration" with tabs for "Roles", "Duties", "Privileges", and "Unpublished objects (27)". A red box highlights the "Create new" button, which is located next to other buttons: "Undo", "Redo", "Show all levels", "Delete", "Duplicate", "Copy", "View permissions", and "Audit trail".

The main list area displays a scrollable list of roles, starting with "Accountant" (which is currently selected, indicated by a blue background) and continuing with "Accounting manager", "Accounting supervisor", "Accounts payable centralized payments clerk", "Accounts payable clerk", "Accounts payable manager", "Accounts payable payments clerk", "Accounts payable positive payment clerk", "Accounts receivable centralized payments clerk", "Accounts receivable clerk", "Accounts receivable manager", "Accounts receivable payments clerk", "AOT browser user", "Applicant anonymous (external)", "Auditor", "Batch job manager", and "Budget clerk".

On the right side of the interface, there are several expandable sections: "ACCOUNTANT" (Description: "Documents accounting events and responds to accounting inquiries"), "AOT name" (set to "LedgerAccountant"), "Security policy context string" (empty), "References" (empty), "Duties" (empty), "Parent roles" (empty), "Privileges" (empty), "Sub roles" (empty), and "Tables" (empty).

Assign Duties to Role

- Choose the security role created -> click on “Duties” reference
- Click “Add reference”
- Select the required duties.

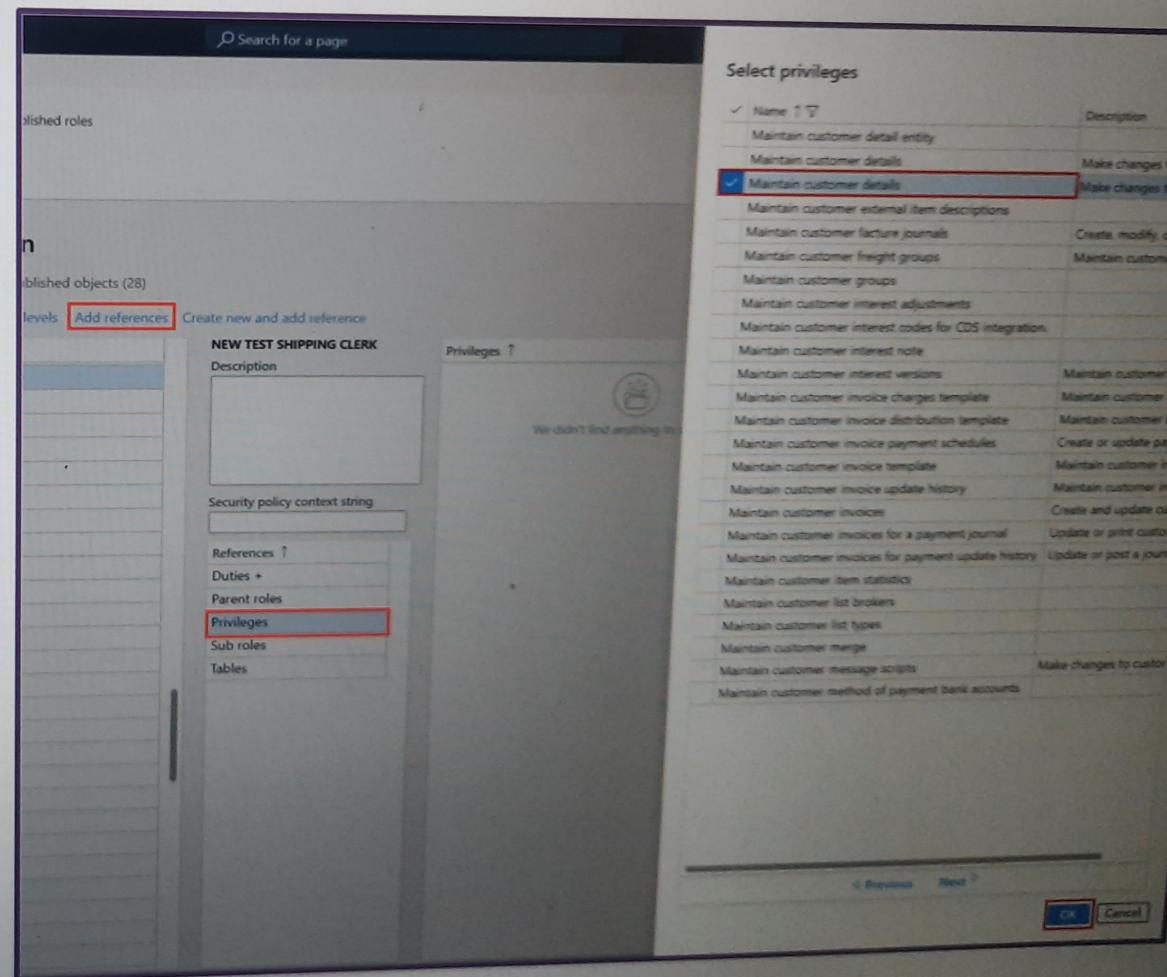
The screenshot shows the SAP Fiori interface for assigning duties to a role. A modal dialog box titled "Select duties" is open. On the left, there's a search bar and a sidebar with navigation links: "References (28)", "Create new and add reference", "NEW TEST SHIPPING CLERK", "Description", "Duties (1)", and "Tables". The main area lists various duties under "Name" and "Description". One duty, "Maintain sales packing slip", is selected and highlighted with a red border. At the bottom right of the dialog are "OK" and "Cancel" buttons.

The screenshot shows two pages from the SAP Fiori interface. The top part is the "Segregation of duties" page, which includes a header "Segregation of duties Data", a sub-header "Segregation of duties rules", and a note "Validate segregation of duties rules for unpublished roles". The bottom part is the "Security configuration" page for the "NEW TEST SHIPPING CLERK" role. It has tabs for "Roles", "Duties", "Privileges", and "Unpublished objects (28)". The "Duties" tab is active and shows a list of duties: "New Test Shipping Clerk", "Office integration power user", "Payroll administrator", "Payroll manager", "Pending worker", "Process engineer", "Process engineering manager", "Product design manager", "Product designer", "Production manager", "Production planner", "Production supervisor", "Project accountant", and "Project assistant". The "Duties" link in the sidebar is also highlighted with a red border. The "Add references" button in the toolbar is also highlighted with a red border.

Assign Privileges to Duties

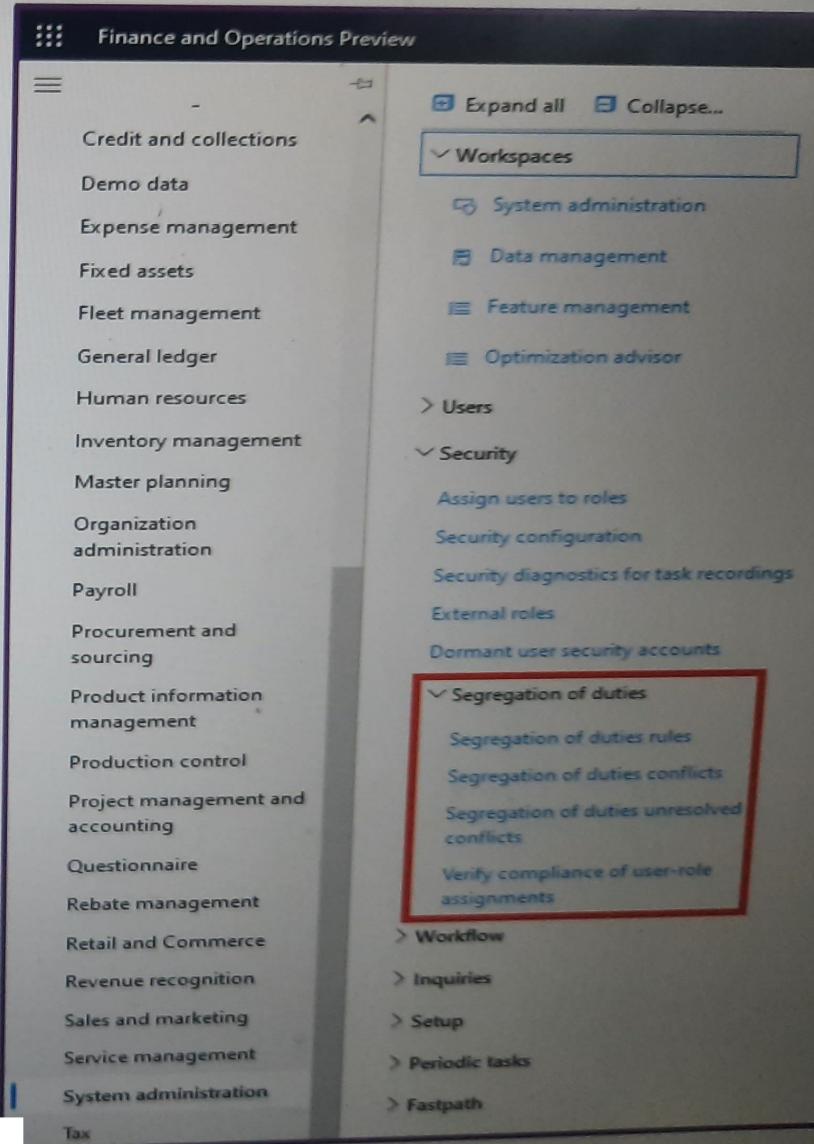
Add specific privileges to your duty by clicking the “Privileges” reference in the middle of the form.

- Click “Add references” button again to open the privilege pane. Select the required duties.
- Select the privilege that you want to add and click the “Ok” button.



Segregation of Duties (SOD)

- Set up rules to separate tasks that must be performed by different user
- For example, you might not want the same person to acknowledge the receipt of goods and to process payment to the vendor.
- Segregation of duties helps you reduce the risk of fraud, and it also helps you detect errors or irregularities
- **System Administration → Security → Segregation of duties**



Segregation of Duties rules

- Set up rules for the SOD Violations
- **System Administration → Security → Segregation of duties**
- Select the first Duty that is controlled by the rule : Maintain Vendor Master
- Select the Second Duty that is controlled by the rule : Maintain Vendor Payments
- Enter severity and Risk and actions that you might take to mitigate the security
- **System Administration → Security → Segregation of duties**

Segregation of duties rules

Standard view ▾

Filter

Name	First duty	Second duty	Severity	Security risk	Security mitigation
Maintain Vendors and Maintain Payment Method	Maintain vendor master	Maintain vendor payments	High	Create fictitious vendor and payment method	Transaction sampling and ...
Transaction sampling and bank account validation					