# Requisition / Purchase Order

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## **Purpose**

The requisition document in OLE is the first step in the procurement process. It collects information regarding the items that are to be procured, vendors to fulfil the order, delivery and contact information and accounting details. A requisition which has been approved becomes a purchase order. The purchase order externally is a legal contract between the library and the vendor who delivers goods or services, internally, purchase order provides the mechanism to generate payment, receipt, etc. The order holding queue allows users to quickly search through orders and also allows certain global actions such as assigning multiple requisitions to select staff, use a totals tool to sum up prices, approve a group of requisitions (based on permission) and cancel requisition (based on permission).

The following document details tables, classes and other parameters involved in Requisition and Purchase Order documents of OLE.

## **Dependencies (DB tables)**

#### Tables part of Requisition in OLE

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Requisition		
Requisition Item Note		
Requisition Account		
Requisition Item		
Requisition Item Tax		
Requisition Source		
Requisition Status		
Requisition Account Id		
Requisition Item Id		

#### Tables part of Purchase Order in OLE

pur_po_t	Purchase Order
ole_po_purp_t	Purchase Order Purpose
ole_pur_po_err_cds_t	Purchase Order Error Codes
ole_pur_po_fail_doc_t	Purchase Order Failure Document

ole_pur_po_itm_nte_t	Purchase Order Item Note
ole_pur_po_itm_ordr_stat_t	Purchase Order Item Order Status
ole_pur_po_load_sum_t	Purchase Order Load Sum
ole_pur_po_prfl_t	Purchase Order Profile
ole_pur_po_typ_t	Purchase Order Type
pur_po_acct_t	Purchase Order Account
pur_po_contr_lang_t	Purchase Order Contract Language
pur_po_cst_src_t	Purchase Order Cost Source
pur_po_itm_t	Purchase Order Item
pur_po_itm_use_tax_t	Purchase Order Item Tax
pur_po_qt_lang_t	Purchase Order Quote Language
pur_po_qt_lst_t	Purchase Order Quote List
pur_po_qt_lst_vndr_t	Purchase Order Quote List Vendor
pur_po_qt_stat_t	Purchase Order Quote Status
pur_po_snstv_dta_t	Purchase Order Sensitive Data
pur_po_stat_t	Purchase Order Statistical Category
pur_po_trns_mthd_t	Purchase Order Transaction Method
pur_po_vndr_chc_t	Purchase Order Vendor Check
pur_po_vndr_qt_t	Purchase Order Vendor Quantity
pur_po_vndr_stpltn_t	Purchase Order Vendor Stipulation

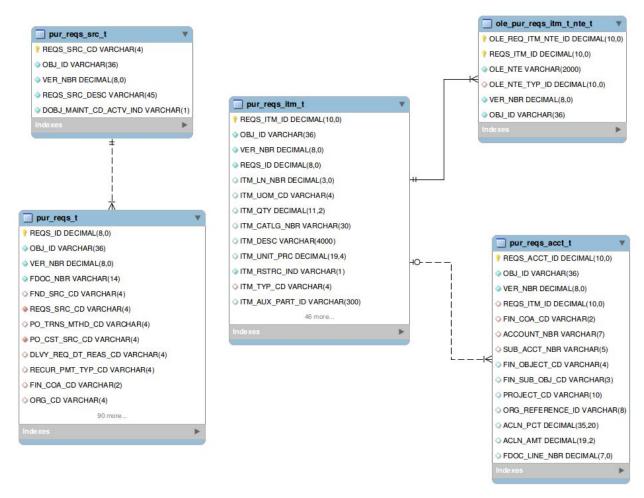
# **Logical Data Model**

The Purchase Order is a product of an approved Requisition in OLE. The PO therefore draws all relevant information from the Requisition document. This information would go on to help in further processing of the Purchase Order such as Receiving, Claiming, Invoicing, Returning, etc.

Thus the Requisition document contains information such as the Delivery address where the item would be delivered. Vendor details to specify preferred vendors from whom to procure the items. Item information is added as bibliographic data. A new bib information can be added or an existing one used to order more copies. Also item related information such as cost, location, discounts if any are added. The fund related details as to which account belonging to which chart, object code, organization group is to be tapped for the procurement are also specified. On approval the Requisition document auto generates a PO (called APO) with the same details. These details come in handy when working with related functionalities such as Invoicing, Receiving, Claiming and Returning.

## **Physical Data Model**

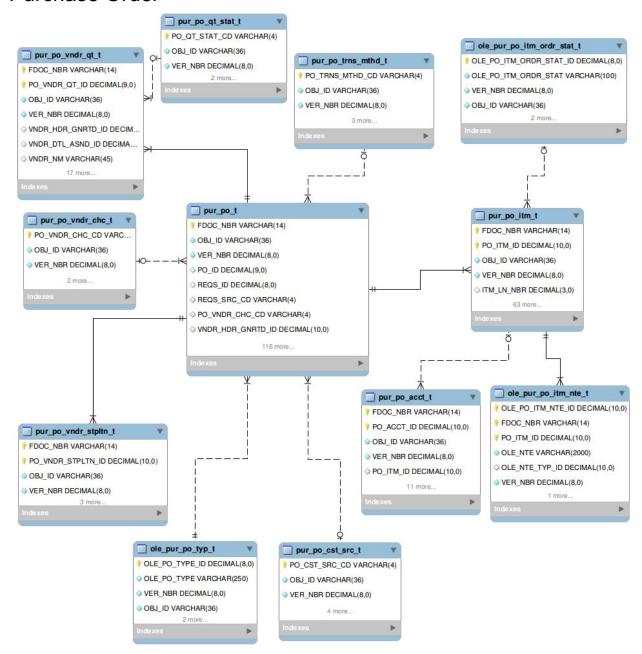
## Requisition



The *pur\_reqs\_t* table is the main table for the requisition process. The REQS\_ID is the primary key of the table and is referenced as the foreign key in other reference tables. The requisition holds item related information and this is stored in the *pur\_reqs\_itm\_t* table. It uses the

REQS\_ID as the foreign key to link the items to a requisition. The *pur\_reqs\_acct\_t* table would hold information on chart of account related details.

#### **Purchase Order**



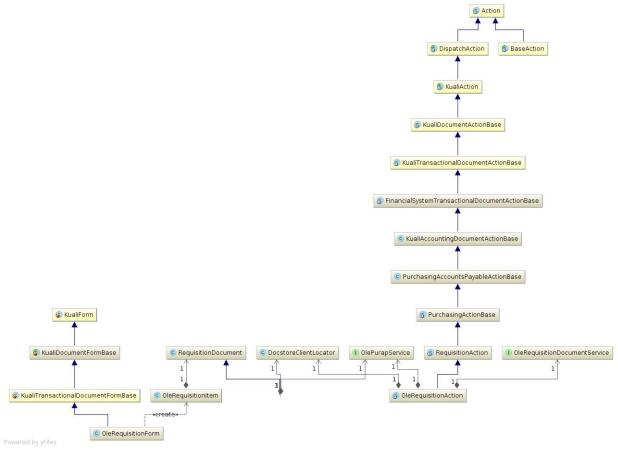
The *pur\_po\_t* table is the main table that holds data relevant to the Purchase Orders. The PO\_ID column is the primary key and is referenced across tables. The *pur\_po\_itm\_t* table contains information on items in that particular purchase order. These information are carried from the requisition document in which the operator would have originally added them. The *pur\_po\_acct\_t* table contains the fund related information and records the chart of account

information that is linked to the purchase order transaction. The Vendor related information resides on purchase order vendor tables -  $pur_po_vndr_qt_t$ ,  $pur_po_vndr_chc_t$  and  $pur_po_vndr_stpltn_t$ . The  $ole_pur_po_typ_t$  table holds the type of purchase order and the  $pur_po_trns_mthd_t$  contains the transaction method of POs.

All tables with persistable data contains two properties by default – Version Number and Object Id. This is in order to take advantage of KRAD features. More information can be found in Rice Documentation here.

## Service Interface Design (Java)

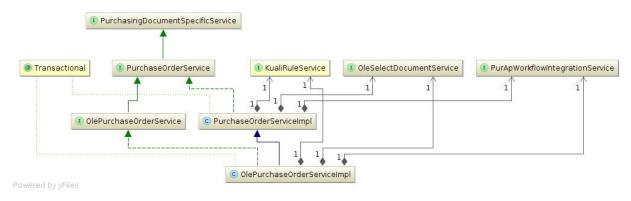
## Requisition



The requisition document was inherited from Kuali Financial System (KFS) where it was used to make purchase orders for more generic office resources. This requisition document has been overridden in OLE to cater to the specific purpose of generating purchase orders for library resources. The OleRequisitionAction class which extends the <u>RequisitionAction</u> class of KFS overrides most methods to implement the OLE version. The *createDocument* method initializes

the Requisition screen in OLE. The *calculate* method is called as a standalone function or as part of the blanket approval or submit buttons to calculate the total funds that are to be utilized for purchasing. It calculates the total value of funds across multiple items. Multiple item addition is handled through the *addItem* method. The *route* method is where the data in the document is validated and the *calculate* method is called. The *addDonor* and *deleteDonor* methods take care of adding and deleting donor information linked to library resources.

#### Purchase Order



The Purchase Order document in not manually initiated by the initiator like the Requisition document. Purchase orders in OLE are automatically generated from approved requisitions. If the requisition is not approved, the PO is not created. The

createAutomaticPurchaseOrderDocument method of the OlePurchaseOrderServiceImpl class takes care of creating the purchase order document. It takes in the Requisition document object and retrieves data from it to build the purchase order. The

generatePurchaseOrderFromRequisition method is used to generate a purchase order object from the requisition document. Finally, the *createPurchaseOrderDocument* method of the OlePurchaseOrderServiceImpl class creates the purchase order.

Purchase orders are transmitted as PDF or EDI.

## **Order Holding Queue**

The Order Holding Queue has a few special functions which act at a global level across requisition documents. Most of the work is handled through the OleOrderQueueAction class. The class individual methods to handle multiple tasks. *massApprove* method helps the user to approve multiple requisition documents provided the user has the necessary permissions, the *assign* method helps in assigning requisition documents to specific users, the *delete* method helps in deleting requisitions and the *totalSelectedItems* method helps in summing up the prices of all the requisitions that have been selected.

For more information, Javadocs can be found here.

## Service Interface Design (REST if applicable)

There are no REST services currently available for Requisition or Purchase order document creation.

## **User Interface Design**

The Requisition and Purchase Order documents use KRAD's UIF (User Interface Framework). A very good guide on this can be found <a href="https://example.com/here">here</a>. The Spring Beans XML used in the case of Requisition is the RequisitionDocument.xml and Purchase Order is the PurchaseOrderDocument.xml under the datadictionary folder.

## **Data Importing**

The Purchase order can be bulk loaded into OLE as part of the Batch Process. The batch processes are discussed in more detail here.

## **Data Exporting (if applicable)**

OLE uses a RDBMS backend and hence any data can be exported using simple SQL queries.

## **Workflow**

The Requisition document workflow is defined under olefs-> src-> main-> resources-> org.kuali-> workflows under the file name, *RequestorSimpleMaintenanceDocument.xml*. The purchase order document is generated automatically and hence has no workflow.

# **System Parameters**

Namespace Code	Parameter Name	Description
OLE-SELECT	CHART_OF_ACC_CD	This parameter is used for populating Chart of Accounts Code in the Requisition document by default.
OLE-SELECT	COPY_NO	This parameter is to get the default copy number for Requisition document

		<del> </del>
OLE-SELECT	EXCLUDE_ITEM_STATUS	This parameter is for configuring the list of item statuses that are to be restricted from displaying in REQS doc
OLE-SELECT	FUND_SRC_CD	This parameter is for populating Funding Source Code
OLE-SELECT	ITEM_LOCATION_APPROV AL	This parameter is to get the default item location for Approval type Requisition document
OLE-SELECT	ITEM_LOCATION_FIRM_FIX D	This parameter is to get the default item location for Firm fixed type Requisition document
OLE-SELECT	ITEM_STATUS_APPROVAL	This parameter is to get the default item status for Approval type Requisition document
OLE-SELECT	ITEM_STATUS_FIRM_FIXD	This parameter is to get the default item status for Firm Fixed type Requisition document
OLE-SELECT	LIST_PRICE	This parameter is for populating List Price
OLE-SELECT	METHOD_OF_PO_TRANSM ISSION	This is for configuring the default method of po transmission while creating the PO
OLE-SELECT	NO_OF_PARTS	This is for configuring the default no of parts while creating the PO
OLE-SELECT	ORG_CODE	This parameter is for populating Organization Code
OLE-SELECT	ORG_PO_LMT	This parameter is for populating Organization Purchase Order Limit
OLE-SELECT	QTY	This parameter is for populating Quantity
OLE-SELECT	REQ_DESC	This parameter is for populating requisition document description, the value within the braces are pre-defined functions which returns a value based on the input value
OLE-SELECT	REQUESTOR_PERSON_EM AIL_ADDRESS	This parameter is for populating requestor person email address through order import
OLE-SELECT	SYSTEM_USER	Default System User

OLE-SELECT	USE_TAX_IND	This parameter is for populating Use Tax Indicator
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# **Roles and Permissions**

Permissions are linked to roles which are in turn linked to Users to give them access to screens and functions.

Permission ID	Permission Name	
OLE80510	Approve OLE_REQS	
OLE92	Initiate Document REQS	
OLE94	Initiate Document PO	

Role ID	Role Name	Permissions
OLE10028	Acquisitions-AQ3	OLE80510, OLE92, OLE94
OLE10029	Acquisitions-AQ4	OLE80510, OLE92, OLE94
OLE10030	Acquisitions-AQ5	OLE80510, OLE92, OLE94
63	Technical Administrator	OLE92
OLE32	Active Faculty or Staff	OLE92
OLE54	User	OLE92
OLE10027	Acquisitions-AQ2	OLE92, OLE94