# Vendor Technical Document

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#### **Purpose**

The Vendor document is used to store information about businesses or other entities with whom the library has done or plans to do business with, including foreign vendors. It maintains information such as Vendor details - General, Corporate information, Transmission format for POs, Contact, Shipping special conditions, Phone numbers and Accounts. They also allow the institution libraries to maintain information required to be maintained for regulatory purposes such as Supplier Diversity, Tax numbers, DUNS numbers, Commodity code, etc. The Vendors created through this document are available for use on various purchasing documents such as Requisition, Purchase Order and Disbursement Voucher Documents.

This document discusses about the various technical aspects involved in the Vendor documents.

### **Dependencies (db tables)**

Tables used for maintaining Vendor information

ole_vndr_acc_info_t	Vendor Account Information
ole_vndr_alias_typ_t	Vendor Alias Type
ole_vndr_association_t	Vendor Association
ole_vndr_role_t	Vendor Role
ole_vndr_trans_frmt_t	Vendor Transmission Format
ole_vndr_trans_frmt_typ_int_t	Vendor Transmission Format Type
ole_vndr_trans_typ_t	Vendor Transmission Type
vndr_evnt_log_t	Vendor Event Log
pur_vndr_addr_t	Vendor Address
pur_vndr_alias_t	Vendor Alias
pur_vndr_cntct_phn_nbr_t	Vendor Contact Phone Number
pur_vndr_cntct_t	Vendor Contact

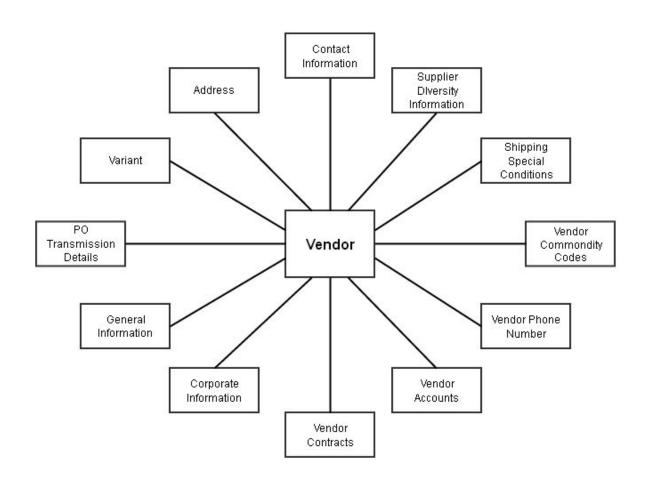
pur_vndr_comm_t	Vendor Communication
pur_vndr_contr_org_t	Vendor Contract Organization
pur_vndr_contr_t	Vendor Contract
pur_vndr_cust_nbr_t	Vendor Customer Number
pur_vndr_dflt_addr_t	Vendor Default Address
pur_vndr_dtl_t	Vendor Detail
pur_vndr_excl_mtch_t	Debarred Vendor Match
pur_vndr_hdr_t	Vendor Header
pur_vndr_inactv_reas_t	Vendor Inactive Reason
pur_vndr_phn_nbr_t	Vendor Phone Number
pur_vndr_shp_spcl_cond_t	Vendor Shipping Special Condition
pur_vndr_stpltn_t	Vendor Stipulation
pur_vndr_supp_dvrst_t	Vendor Supplier Diversity
pur_vndr_tax_chg_t	Vendor Tax Charge
pur_vndr_typ_t	Vendor Type

#### Significant tables that use Vendor information

ap_crdt_memo_t	Credit Memo
ap_pmt_rqst_t	Payment Request
ca_account_t	Account
ole_ap_inv_t	Invoice
ole_pltfrm_t	Platform
pur_blk_rcvng_t	Bulk Receiving

pur_po_itm_t	Purchase Order Item
pur_po_t	Purchase Order
pur_po_vndr_qt_t	Vendor Quantity
pur_rcvng_ln_t	Receiving Line Item
pur_reqs_itm_t	Requisition Line Item
pur_reqs_t	Requisition
pur_thrshld_t	Threshold

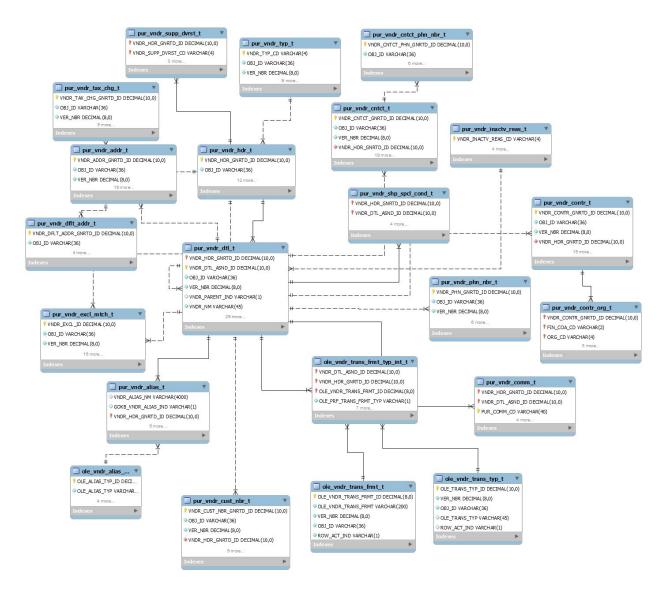
## **Logical Data Model (Class Structure)**



The vendor document is a massive maintenance document that persists data relevant to vendors. The data includes the vendor's contact information - address, phone numbers, PO transmission details, other general and corporate details such as tax numbers, DUNS number, etc. Federal information such as Supplier diversity info, contracts, accounts and other special conditions.

This information is extensively used for processing by other documents. The PO transmission details are retrieved for vendors and the purchase order prepared based on the format in the Requisition/PO document. The address, contact details and shipping special conditions are also used. The Vendor Accounts is used to process Credit memos. General information on the Vendor hold information on Vendor's nationality which is again used in the PO documents to process item prices in foreign or local currency.

#### Physical Data Model (Database Schema)

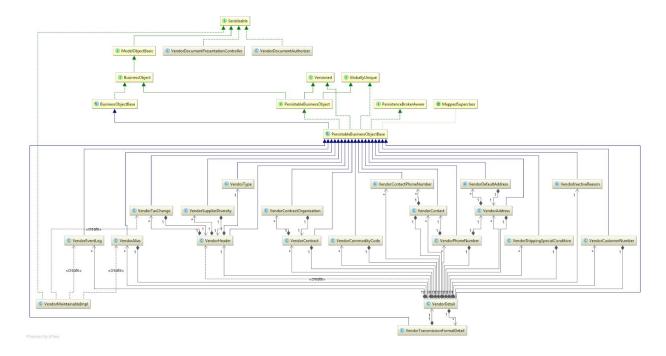


The Vendor documents holds a lot of document and hence uses a lot of tables to maintain this document. Many copies of information can be maintained for a vendor. For example, vendors might have multiple addresses and the system needs to maintain all addresses. Hence, they reside in a different tables linked by a foreign key. However, only one address remains the active address and this is reflected in the data.

The <code>pur\_vndr\_dtl\_t</code> table holds most of the general information about the <code>vendor</code> and the <code>pur\_vndr\_hdr\_t</code> holds the vendor name and lends the primary key for the vendor. Contact information, addresses and phone numbers are persisted in the <code>pur\_vndr\_cntct\_t</code>, <code>pur\_vndr\_addr\_t</code> and <code>pur\_vndr\_phn\_nbr\_t</code>. Shipping special conditions are stored in their own table, <code>pur\_vndr\_shp\_spcl\_cond\_t</code>, with the vendor id as a foreign key. The

ole\_vndr\_trans\_frmt\_t table holds information on the type of PO transmission and the pur\_vndr\_contr\_t table holds the vendor contracts.

## **Service Interface Design (Java)**



Vendor detail comprises of trivial details such as vendor's alias name to important details such as contracts. Most of the details are captured as business objects and get their own table where the record is stored. Since more than one record can occur for a single vendor, it is necessary to have independent tables for each of the record. All the records are connected to the Vendor detail table through the primary key.

The business object classes include VendorAlias, VendorSupplierDiversity, VendorHeader, VendorType, VendorContract, VendorCommodityCode, VendorContact, VendorPhoneNumber, VendorAddress, VendorInactiveReason and VendorCustomerNumber. The VendorMaintainableImpl class takes care of most of the business object persisting work and manipulation of vendor related data. The VendorServiceImpl class does most of the retrieving data from the business object classes for various purposes.

For more information, Javadocs can be found here.

#### **Service Interface Design (SOAP)**

Not Available

#### **User Interface Design**

The Vendor document uses KRAD's UIF (User Interface Framework). A very good guide on this can be found here. The *VendorDetail.xml* file is the Spring Beans XML used in the case of Vendor under the data dictionary folder.

#### **Data Importing**

Not Applicable

#### **Data Exporting**

OLE uses a RDBMS backend and hence any data can be exported using simple SQL queries. Currently there is no direct way in which receiving data can be exported directly from OLE.

#### **Workflow**

Workflow details relevant to the Vendor documents are found in the *VendorDocuments.xml* file under the workflows folder.

## **System Parameters**

Namespace Code	Parameter Name	Description
OLE-VND	DEFAULT_TAX_NUMBER_DIGITS	The number of digits in a valid tax number
OLE-VND	EXCLUSION_AND_DEBARRED_VENDOR_TYPES	This parameter identifies the

		vendor types available as search criteria on the Vendor Exclusion and Debarred Unmatched Vendor lookups.
OLE-VND	FEIN_OWNERSHIP_TYPES	Ownership types that are allowed when the vendor tax id is of type "FEIN"
OLE-VND	FOREIGN_VENDOR_PHONE_NUMBER_FORMAT S	Java Regular expressions that describe the acceptable formats for Foriegn vendor phone numbers which allows series of numerics with combination of either "-" or " "
OLE-VND	GENERIC_DEFAULT_PHONE_NUMBER_LENGTH	The number of digits in a phone number, for formatting.
OLE-VND	GENERIC_PHONE_NUMBER_FORMATS	Java Regular expressions that describe the acceptable formats for standard phone numbers which allows for the normal 3 digit area code, 3 digit exchange and 4 digit phone number.

OLE-VND	LOOKUP_MINIMUM_NAME_LENGTH	The minimum number of characters required in the name field to limit or filter the vendor search.
OLE-VND	LOOKUP_MINIMUM_NUMBER_OF_CRITERIA	The minimum number of criteria required as input for a search or lookup. (More criteria returns smaller sets of results.)
OLE-VND	MIN_ORDER_AMOUNT	This amount is treated as the maximum that a vendor may have as a minimum order amount.
OLE-VND	OLTP_LOCKOUT_ACTIVE_IND	Y/N indicator showing if the vendor module is currently unavailable for Online Transaction Processing (OLTP). Y means the module is currently locked and cannot be used. N means the module is unlocked and available for use.
OLE-VND	OVERRIDE_DOCUMENT_TITLE_IND	Indicator related default document titles. Set to "N" if accepting the Kuali

		default document title, related to Vendor Detail, as listed in the Document Search results.
OLE-VND	PAYMENT_TERMS_DUE_TYPE_DESC	This parameter returns the list of vendor net due type descriptions used in the Payment Term Type maintenance table.
OLE-VND	SSN_OWNERSHIP_TYPES	Ownership types that are allowed when the vendor tax id is of type "SSN".
OLE-VND	TAX_FEIN_NUMBER_FORMATS	Java Regular expressions that describe the acceptable formats for tax (FEIN) numbers which allows 9 digit numbers with last 4 digits not 0000 and the first 2 digits not 00.
OLE-VND	TAX_NUMBERS	Tax IDs that are identified as not being allowable when creating a new vendor.
OLE-VND	TAX_SSN_NUMBER_FORMATS	Java Regular expressions that

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for tax (SS	-
numbers whi	
allows 9 di	igit
numbers with last	t 4
digits not 0000 a	nd
the first 2 digits r	not
00.	

## **Roles, Permissions and Responsibilities**

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

Permission ID	Permission Name	
OLE136	Initiate Document PVEN	
OLE137	Full Unmask Field VendorDetail vendorHeader.vendorTaxNumber	
OLE138	Modify Maintenance Document Field VendorDetail vendorHeader.vendorTaxNumber	
OLE139	Modify Maintenance Document Section VendorDetail vendorContracts	
OLE1501	Inactivate Vendor	
OLE184	Modify Maintenance Document Section VendorDetail vendorCommodities	
OLE335	Modify Maintenance Document Field VendorDetail vendorHeader.vendorTaxTypeCode	
OLE364	Full Unmask Field VendorDetail vendorHeader.vendorTaxTypeCode	
OLE80141	Create Vendor Division	
OLE80142	Deactivate Vendor	

OLE80163	Edit Vendor Linking Number
OLE10015	Create Vendor
OLE10016	Vendor Approval
OLE10017	Edit Vendor
OLE10021	Edit Discounts in Vendor
OLE10029	New Vendor
OLE10036	Open Document
OLE10042	Initiate Vendor Document
OLE10043	Edit Vendor Document
OLE10121	Blanket Approve Vendor Document

Role Id	Role Name	Permissions
OLE62	System User	OLE136
OLE49	Tax Identification Number User	OLE335, OLE364, OLE137, OLE138
OLE26	Purchasing Processor	OLE1501, OLE139, OLE184
OLE10028	Acquisitions-AQ3	OLE10042, OLE10043, OLE80141, OLE80142, OLE80163
OLE10029	Acquisitions-AQ4	OLE10042, OLE10043, OLE80141, OLE80142, OLE80163
OLE10030	Acquisitions-AQ5	OLE10042, OLE10043, OLE80141, OLE80142, OLE80163
OLE10006	OLE_Acquisitions	OLE10015, OLE10017
OLE10014	OLE_ERMS	OLE10015, OLE10017, OLE10021, OLE10042

OLE10017	OLE_License-Mgr	OLE10015, OLE10017, OLE10021, OLE10042
OLE10012	OLE_ACQ-Mgr	OLE10015, OLE10017, OLE10021, OLE10043
OLE10023	OLE_Acquisitions-serial	OLE10015, OLE10017, OLE10042
OLE10024	OLE_ACQ-Mgr-serial	OLE10015, OLE10017, OLE10021, OLE10043
OLE10020	OLE-Invoicing	OLE10015, OLE10017, OLE10042, OLE10043
OLE10044	OLE_Prepayment	OLE10015, OLE10017

Responsibility ID	Responsibility Name
OLE990009	Review OLE_PVEN ForInformation [sic]
OLE990019	Review OLE_REQS NewVendor [sic]
OLE990023	Review OLE_REQS NoVendor [sic]