

FOLIO

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FOLIO Acquisitions

Data Dictionary

Updated

01/29/2018

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Document Change Log			
Date	Change	Changed by	Changed Model?
07/28/2017	Added 'Item' table; added item_id as a foreign key in the POLine table; added Change Log	Leah Elzinga	Y
07/28/2017	Added apsystem_no to the LibraryVendorAccount table.	Leah Elzinga	Y
07/28/2017	Added payment_due to the Invoice table.	Leah Elzinga	Y
07/28/2017	Added payment_temps to the Invoice table.	Leah Elzinga	Y
08/21/17	Add possible values to vendor_status	Leah Elzinga	N
08/21/17	Change 'language' to 'default_language' for vendor	Leah Elzinga	Y
08/21/17	Allow for multiple currencies for a vendor	Leah Elzinga	Y
08/21/17	Add vendor_currency table as intersection between vendor and currency	Leah Elzinga	Y
08/21/17	Add default_language and claiming_interval to library_vendor_acct	Leah Elzinga	Y
08/21/17	Change item_id to codex_record_id	Leah Elzinga	Y
08/21/17	Add source_record_id to po_line	Leah Elzinga	Y
08/22/17	Add fields to the transaction_type	Leah Elzinga	Y
08/22/17	Update the fund_transaction table	Leah Elzinga	Y
08/23/17	Remove the access_provider table; link access_provider to vendor	Leah Elzinga	Y
08/23/17	Remove 'account' table; this is a duplicate of the library_ven_acct table	Leah Elzinga	N
08/23/17	Remove the account_status table; this is a duplicate of the lib_vend_acct_status table	Leah Elzinga	N
08/23/17	Remove the explicit_ratio table; as per Jasen "it's best to use an external API to get the current rate instead of storing a rate in the database"	Leah Elzinga	N
08/23/17	Update fund table	Leah Elzinga	Y
08/23/17	Update fund_attachment table	Leah Elzinga	Y
08/23/17	Update fund_transaction table	Leah Elzinga	Y
08/23/17	Prefixed all 'interface' tables with 'vendor' for specificity	Leah Elzinga	Y
08/23/17	Remove location table	Leah Elzinga	N
08/23/17	Update material_type table	Leah Elzinga	Y

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08/23/17	Remove patron_group table	Leah Elzinga	N
08/23/17	Update payment table	Leah Elzinga	N
08/23/17	Remove po_fund_distrib table; fund_distrib is set at the po_line level. Even if the user can set it through the front-end at the po level, it will be APPLIED to each po_line	Leah Elzinga	Y
08/23/17	Add po_line_item table	Leah Elzinga	Y
08/23/17	Major changes to po_line table	Leah Elzinga	Y
08/23/17	Updated the po_line_alert and po_line_alerts tables	Leah Elzinga	Y
08/24/17	Sorted entities according to their association with a FOLIO module	Leah Elzinga	N
08/24/17	Rework of the funds distribution structure. This is now wholly contained within Funds. It accepts any id as a string so many objects can repurpose the fund_distrib table.	Leah Elzinga	Y
08/25/17	Update Funds to support fiscal year rollover and ledgers	Leah Elzinga	Y
08/30/17	Updated Vendor tables to mirror recommended UI changes	Leah Elzinga	Y
09/25/17	Minor updates to field data types to better reflect back-end implementation	JD Benito	Y
10/21/17	Minor updates to field data types to better reflect back-end implementation	JD Benito	Y
11/12/17	Minor updates to field data types to better reflect back-end implementation	Dennis Bridges	Y
11/18/17	Minor updates to field data types to better reflect back-end implementation	JD Benito	Y
01/29/18	Updates to external entities and orders module entities, Also, changed Note to Comment for consistency	Dennis Bridges	Y
02/02/18	Updates to po_line and purchase order statuses	Dennis Bridges	Y
02/08/18	Created two new tables for po_receipt_status and po_payment_status. Also updated po_workflow_status	Dennis Bridges	Y
02/28/18	Added table for payment type and defined values for payment type vs. method. Add external account field to payment and Fund	Dennis Bridges	Y

Orders Module Entities

acquisition_method			
Notes	<p>Default Values: Purchase, Purchase at Vendor System, Approval, Depository, Exchange, Gift, Technical.</p> <p>Purchase: Resource is order either via an email to the vendor or via EDI. List and Fund are required.</p> <p>Purchase at Vendor System: The purchase is handled through an external vendor system. PO lines are NOT sent directly to the vendor: they are packaged into POs and marked as sent. List and Fund are required.</p> <p>Approval: An agreement is in place that the vendor sends whatever the vendor determines is necessary to the institution, in EOD format. These PO lines are not sent to the vendor, but are packaged into POs and marked as sent. List and Fund are required.</p> <p>Depository: The institution agrees to host gov't publications and make them freely available. List price and fund are optional.</p> <p>Exchange: Exchange of resources with another institution. List price and fund are optional.</p> <p>Gift: The resource is granted as a gift to the institution.</p> <p>Technical: Use for service subscription orders without inventory, or items that have migrated from an external system. List Price and Fund are optional.</p> <p>Note: Ideally configurable by institution.</p>		
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

activation_status			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

adjustments			
Notes	Models the additional charges associated to an invoice if <i>prorata</i> is set to FALSE. If <i>prorata</i> is TRUE, then the cost in the invoice_lines already account for the additional charges		
Columns	Relates to:	Data type	Notes
id		uuid	
shipment		decimal	
insurance		decimal	
overhead		decimal	
Tax		decimal	
discount		decimal	
use_pro_rate		bool	
invoice_id	invoice .id	uuid	

alert			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

claim			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
date		date	Claim date is based on subscription pattern
sent		date	
po_line_id	po_line .id	uuid	

item_request			
Notes	Depending on the institution, requests may be placed by patrons, library administrators, or both. In some institutions, once an item has either been ordered, received, or activated, the requestor would then receive a notification, typically through email.		
Columns	Relates to:	Data type	Notes
id		uuid	
Assigned_to	user	string	Which user is responsible for actioning this request?
Citation_type		String	
Cost		Decimal	
Created		Date	
Email		String	The body text for the email which should be sent to the requestor
Hold_item		Bool	Should the system automatically trigger a hold process for this item for this user?
comment		String	
Notify		Bool	Should the requestor be notified when the item is ordered?
Patron_request		Bool	Did this request originate with a patron?
Requested_for	user	String	IF this request was made by a library administrator, was it made on behalf of a specific patron? Which patron? This could be configured to link to a specific patron id, or could simply be free text, depending on the library's needs. Alternatively, this could be used to identify a department, group, branch, etc.
Requester	user	String	The name of the individual that places the request
Request_status	Request_status	String	

Send_email		Bool	Send an email notification?
Updated		Date	The date that this request record was last adjusted.
Po_line_id	po_line.id	string	

license			
Notes	This is out of scope of acquisitions work as it has been deemed ERM functionality.		
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	
reference		string	Where the complete information regarding this license is kept. This could be a url, a file location, or just a description. This allows the librarian to access the full information without storing it in FOLIO

location			
Notes	<p>This is the location(s) that the titles should finally end up at. This CAN be different from 'Owner'. For example, the owner may be the main branch, however 8 copies were ordered. Each of the copies will end up at a different location, one of which may or may not be the original 'owner'.</p> <p>Note: The intention is for Location to be drawn from another module</p>		
Columns	Relates to:	Data type	Notes
id		uuid	
po_line_id	po_line.id	string	
library_id	library.id	string	

material_type

Notes	<p>This is directly tied to PurchaseType. A PurchaseType will dictate the available MaterialTypes.</p> <p>A MaterialType may belong to one or more PurchaseType.</p> <p>Changing the MaterialType associated with a POLine does not affect the Purchasing wokflow.</p> <p>Eg. print book, e-book, microform, manuscript, etc. Related to PurchaseType. Eg. For a journal subscription, the material type will be issue.</p>		
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Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

comment			
Columns	Relates to:	Data type	Notes
id		uuid	
commenttext		string	
po_line_id	po_line .id	uuid	

po_approval_status			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	Values - Approved, Pending, On Hold, Not approved,
description		string	

po_line			
Notes			
Columns	Relates to:	Data type	Notes

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id		uuid	
Acquisition_method	acquisition_method	string	Eg. Approval Plan, Depository, Exchange, Gift, Legal Deposit, Technical, Purchase at Vendor System
barcode		string	
cancellation_restriction		boolean	Some orders can not be cancelled once they're placed. This flag indicates as much.
cancellation_restriction_comment		string	Could be used to display to users if they try to cancel the order that contains this PO.
receipt_date		date	Will be populated based on a toggle triggered during the receiving workflow. Ongoing would need multiple receipt dates. Will also need partially received dates.
claim_grace		date	the period PAST the expected receipt date. Claims should not be processed before the end of this period. Calculated based on expected vendor grace period.
claim_sent		date	IF this field is populated it is a flag that a claim was sent
collection		bool	IF true, this po_line will likely have multiple po_line_items associated with it
currency	currency	string	
po_line_description		string	helpful when identifying POLines
list_price		Decimal	This is the price that was listed during discovery or when supplied by the vendor
estimate_price		Decimal	The list price x quantity ordered of the POLine. Calculated in UI not stored in Database
manual_po		bool	IF this is checked, this POLine will be excluded from any automated job that gathers POLines into POs. Instead the user will have to add this PO to an order themselves.
manual_renewal		bool	If this is checked this POLine will require someone to manually renew/reorder it.

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owner	library	string	Which acquisitions unit is responsible for this order line
po_line_no		string	This number can be reused time and again. Some libraries have been using the same po_line_no for DECADES! It's important to note that while this po_line_no can be reused, there will always be the UID to identify this specific po_line. By default for ongoing order the line number would stay the same. By default for one-time orders it will generate new numbers
po_line_workflow_status	po_line_workflow_status	String	Pending, in review, approved, not approved update required, declined, (cancelled, fulfilled - These statuses will be replaced by "Closed" and allow the user to select a reason)
po_line_receipt_status	po_line_receipt_status	string	Pending, awaiting receipt, partially received, fully received, receipt not required, cancelled.
po_line_payment_status	po_line_payment_status	string	Pending, awaiting payment, partially paid, fully paid, payment not required, cancelled.
Po_line_order_format	po_line_format	String	Physical Resource, Electronic Resource, P/E Mix. Note: This should dictate the material type.
po_line_order_type	Order_type	String	One-Time, On-Going, On-Going Re-encumber
quantity		int	Ideally has an expanded view for detailed numbers
created_date		datetime	The timestamp that the po_line was recorded into FOLIO
reporting_code		string	Allow for multiple codes (multi-character would be helpful) No defined limit so open to interpretation - 4 at minimum
renewal_cycle		string	Eg. descriptive renewal cycle
renewal_date		date	Date on which this will re order
renewal_interval		Int	Number of days before renewal we will need to reorder
supress_in_discovery		bool	Will toggle the same flag on the Instance Record created for this order in inventory
rush		bool	Is this a rush order?

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source	po_line_source	String	How did FOLIO receive this item? ftp? Email? Manual entry?
vendor	vendor	uuid	
vendor_ref_no		string	The reference given to this po line by the vendor
comment_from_vendor		string	Note from the vendor
instruction_to_vendor		string	Note to the vendor
vendor_ref_no_type	vendor_ref_no_type	string	Eg. Supplier's continuation order; Supplier's unique order line reference number, agent's unique subscription reference number, library's continuation order number, internal vendor number
po_id	purchase_order.id	uuid	The purchase order that contains this po_line
item_name		string	The name or Title of the resource. Ideally not manually populated.
item_description		string	The description on the resource.
access_provider	vendor	string	For e-resources, this is the name of vendor that will actually provider access to the title. By default it should be the same as the vendor.
activation_due		int	the number of days after ordering that the resource MUST be activated; pg. 41
activation_status	activation_status	string	ONLY for e-resources;pg.. 40
create_inventory		bool	bool; IF this is unchecked, do not trigger the creation of inventory records
codex_id	codex.id	string	
discoverable		bool	pg.92, IF true, make this resource discoverable
expected_activation_date		date	pg. 41
expected_activation_interval		int	int; the number of days after the order is placed; pg. 41
expected_receipt_date		date	
expected_receipt_interval		int	Could be valuable for the system to calculate this based on the activation due and expected activation.
quantity_received		decimal	

product_identifier		string	This identifier field indicates the id of the item to be ordered. By default, this field is populated by the first identifier listed in the bibliographic/imported record's ISBN/ISSN (020/022) field. The product identifier type will be used in conjunction with this field to add context for inventory and other apps and functions
product_identifier_type		string	ISBN, ISSN, Other Standard Identifier, Standard Technical Report Number, Publisher Number, CODEN, GPO Item Number Control Number (001) LCCN System Control Number Locally-defined identifiers
material_supplier	vendor	string	The material supplier is a reference to the Vendor record. This is the vendor who actually provides the ordered item.
material_type	material_type	string	
metadata_source		string	The url for the original metadata reference for this item
line_item_status		string	Access Confirmed Check Access Not Yet Online Binding Cataloging
receipt_due		date	pg. 75; this is the date the item should be received by. It can be edited.
receiving_note		string	IF this field is populated it's message will be presented to the user during the receiving process
subscription_from_date		date	
subscription_interval		int	pg. 58; int; number of days
subscription_to_date		date	
trial		bool	Pg. 41
License	license.id	string	
Donor			Individual or group contributing to the acquisition of the item
requester			Person asking for the item
selector			Librarian making the choice
account_number		string	Number could have a descriptor Eg. Order - West

			Campus, Order - South Campus, Serials, No Process, eBook
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po_line_alert			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
alert	alert	string	
po_line_id	po_line .id	uuid	

po_line_license			
Columns	Relates to:	Data type	Notes
id		uuid	
po_line_item_id	po_line_item .id	uuid	
license_id	license .id	uuid	

po_line_workflow_status			
Notes	Values: Pending, awaiting receipt, partially received, fully received, receipt not required, cancelled.		
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

po_line_receipt_status			
Notes	Values: Pending, awaiting receipt, partially received, fully received, receipt not required, cancelled.		
Columns	Relates to:	Data type	Notes
id		uuid	

code		string	
description		string	

po_line_payment_status			
Notes	Values: Pending, awaiting payment, partially paid, fully paid, payment not required, cancelled.		
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

po_line_source			
Notes	Values: EDI, Manual Entry, Vendor API		
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

po_line_order_format			
Notes	This will determine the available material types and what item fields are displayed in the order record. The order types are Physical Resource, Electronic Resource, P/E Mix		
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

po_line_order_type	
Notes	There are 3 order formats: One-Time, On-Going, On-Going Re-encumber

Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

po_workflow_status			
Columns	Relates to:	Data type	Notes
Notes	Values: Pending, in review, approved, not approved update required, declined, cancelled, fulfilled.		
id		uuid	
code		string	
description		string	

purchase_order			
Columns	Relates to:	Data type	Notes
id		uuid	
po_number		string	May be generated by FOLIO (by default) or manually entered
created		date	Set by system at time of creation
comments		string	For library staff
total_items		int	Added up from line items
total_estimated_price		decimal	Added up from line items in selected currency
adjustments	additional_charges.id	string	Set by system and allow user to see breakdown
assigned_to	user.id	uuid	The user currently associated with this PO and generally responsible for its workflow status

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created_by	user.id	uuid	The user who originally created the PO; this may be the system, in the case of auto-imports.
transmission_date		string	
transmission_method		string	Not sent, EDI, email
po_workflow_status_id	po_workflow_status.id	uuid	Pending, in review, approved, not approved, update required, declined, (cancelled, fulfilled - These statuses will be replaced by "Closed" and allow the user to select a reason
po_receipt_status	po_receipt_status.id	string	Pending, awaiting receipt, partially received, fully received, receipt not required, cancelled
po_payment_status	po_payment_status.id	string	Pending, awaiting payment, partially paid, fully paid, payment not required, cancelled, payment not required, cancelled.

po_receipt_status			
Columns	Relates to:	Data type	Notes
Notes	Values: Pending, awaiting receipt, partially received, fully received, receipt not required, cancelled.		
id		uuid	
code		string	
description		string	

po_payment_status			
Columns	Relates to:	Data type	Notes
Notes	Values: Pending, awaiting payment, partially paid, fully paid, payment not required, cancelled.		
id		uuid	

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code		string	
description		string	

request_status			
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

supported_libraries			
Columns	Relates to:	Data type	Notes
id		uuid	
library	library	string	
po_line_id	po_line.id	uuid	

Contacts Module Entities

address			
Columns	Relates to:	Data type	Notes
id		uuid	
address_line_1		string(255)	
address_line_2		string(255)	
city		string(100)	
region		string(100)	State/Province/Region
postal_code		string(100)	
country		string(100)	
address_type_id	AddressType.id	uuid	Values: Customer Service, Payments, Returns, Shipments (Allows Multiple)

person			
Columns	Relates to:	Data type	Notes
id		uuid	
prefix		string(100)	
first_name		string(255)	
last_name		string(255)	
language	language	string(255)	
comments		string	
phone_number_id	phone_number.id	uuid	
email_id	email.id	uuid	
address_id	address.id	uuid	

email			
Columns	Relates to:	Data type	Notes
id		uuid	

value		string	
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phone_number			
Columns	Relates to:	Data type	Notes
id		uuid	
country_code		string(25)	
area_code		string(25)	
phone_number		string(25)	
country	country.id?	string	

Credits Module Entities

credit			
Notes	Relates to Credits Record ANY credit against a fund, whether it's tied to a PO or not. This could include an allocation of funds (credit).		
Columns	Relates to:	Data type	Notes
id		uuid	
amount		decimal	
credit_type*	Credit_type	string	Values: allocation, gift, donation, credit, etc.
currency*		string	
description		string	
comment		string	
Credit ID		string	The id of the credit document received from the vendor
po_id	purchase_order.id	uuid	A credit may or may not be tied directly to a PO

credit_type	
Notes	References Credits Values: allocation, gift, donation, credit, etc.

Finance Module Entities

budget			
Notes	This is associated to a specific fund and a specific fiscal year		
Columns	Relates to:	Data type	Notes
id		string	
name		string	
budget_status	budget_status	string	
code		string	
limit_enc		decimal	
limit_enc_percent		decimal	
limit_exp		decimal	
limit_exp_percent		decimal	
allocation		decimal	Running total of all the allocation transactions against the budget.
awaiting_payment		decimal	Running total of all the invoiced amounts (i.e. waiting to be paid)
available		decimal	Allocation - awaiting_payment - encumbered - expenditures
encumbered		decimal	Running total of money set aside for purchases
expenditures		decimal	Running total of all the payments recorded by the fund
over_encumbrance		decimal	Setting; ideally an amount that will be used to flag if the fund is close to going over the total allocation within the fund
fund_id	fund	uuid	
fiscal_year_id	fiscal_year	uuid	
tags	array of tag	array	to-many; all the tags associated to the budget

fiscal_year			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
name		string	
code		integer	Will store the year (i.e. an integer) that represents the start-range of the fiscal year
description		string	

fund			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
name		string	
code		string	A unique code associated with the fund -- will be used alot in the display
created_date		date	Date when the fund was created
currency	currency	string	Working currency associated with the fund
fund_status	fund_status	string	
external_account		string	Corresponding account in the financial system. Will be recorded in payment generated as well.
description		string	Arbitrary string/notes for fund
ledger_id	ledger.id	string	The ledger this fund belongs to
allocation_from	array of fund	array	to-many; all the funds that this fund is allowed

			to receive money from
allocation_to	array of fund	array	to-many; all the funds that this fund is allowed to send money to
tags	array of tag	array	to-many; all the tags associated to the fund

fund_distrib

Notes	<p>When a transaction (i.e. an order is placed, a refund is made, an allocation is made, etc.) is recorded, this is how the associated moneys will be distributed between the funds</p> <p>Valid transactions are noted in Fund Transactions</p>
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Columns	Relates to:	Data type	Notes
id		uuid	
amount		decimal	
currency*		string	
percent		string	
source_type*	source_type .id	String	The type of object that created this fund_distrib record. Eg. Po_line, credit, payment, invoice, donation etc.
fiscal_year_id	fiscal_year .id	uuid	
Source_id		string	The id of the object that created this fund_distrib record. Eg. Po_line, credit, payment, invoice, etc.

ledger

Notes	<p>Relates to Funds</p> <p>A collection of funds; used for reporting.</p>
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Columns	Relates to:	Data type	Notes
id		string	
name		string	
description		string	

tags	array of tag	array	to-many; all the tags associated to the fund
period_start		date	
period_end		date	

tag

Notes	Used to virtually group either funds ledgers, budgets and transactions There will now be a global tags module where the tags will be managed and we will allow users to assign those tags to certain records in acquisitions.
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Columns	Relates to:	Data type	Notes
id		uuid	
code		string	

budget_status

Notes	<p>References budget</p> <p>Will model if a budget is enabled/available</p> <p>** Could be expanded into a table, if required</p> <p>Possible Values:</p> <ul style="list-style-type: none"> ● Active ● Closed ● Frozen
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fund_status

Notes	<p>References Funds</p> <p>Will model if a fund is enabled/available</p> <p>** Could be expanded into a table, if required</p> <p>Possible Values:</p> <ul style="list-style-type: none"> ● Active ● Closed ● Frozen
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source_type

References Funds

Values: po_line, payment, invoice, credit, allocation, donation, gift, transfer etc.

transaction			
Columns	Relates to:	Data type	Notes
id		uuid	
allocated		decimal	the change this transaction will have on this balance
amount		decimal	
awaiting_payment		decimal	the change this transaction will have on this balance
encumbered		decimal	the change this transaction will have on this balance
expenditures		Decimal	the change this transaction will have on this balance
state		string	Encumbered, Awaiting Payment, Expended, cancel, closed
comment		string	
timestamp		datetime	
transaction_source_id	Po_line .id OR payment .id OR credit .id OR invoice .id	string	This is the source object for the transaction. There could be many other types of financial transactions associated with many other types of objects.
transaction_type_id	transaction_type .id	string	This object contains a lot of the info the system will need to deploy the business logic.
user_id		uuid	Potentially need to capture a user id when possible.
budget_id	budget .id	string	The budget this

			transaction will be recorded against.
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transaction_type	
Notes	<p>Potential values: record payment, record invoice, record credit, record donation, allocate funds, etc.</p> <p>This table records the expected behavior of each transaction type. Eg. For a 'Record Payment' transaction_type, the following string would be the value stored in transaction_type.awaiting_payment: 'awaiting_payment = fund.awaiting_payment - payment.amount'</p> <p>It's possible that these formulas don't belong in the DB.</p> <p>At its most basic level, it's a bucket for a collection of transactions associated with a specific workflow.</p>

Invoicing Module Entities

additional_charges			
Notes	Models the additional charges associated to an invoice , if <i>prorata</i> is set to FALSE. If <i>prorata</i> is TRUE, then the cost in the invoice_lines already account for the additional charges		
Columns	Relates to:	Data type	Notes
id		uuid	
shipment		decimal	
insurance		decimal	
overhead		decimal	
discount		decimal	
use_pro_rate		bool	
invoice_id	invoice .id	uuid	

alert	
Notes	

charge_note_type			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
code		string	
description		string	

charge_note			
Notes			
Columns	Relates to:	Data type	Notes
id		uuid	
note_text		string	
charge_note_type	charge_note_type	string	

charge_id	additional_charges.id	string	FK
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invoice

Notes: An invoice has a 1-many relationship with [invoice lines](#).

Columns	Relates to:	Data type	Notes
id		uuid	
approved_by	user.id	string	
chk_subscription_overlap		bool	IF TRUE the system will check if there is another invoice for this subscription and whether the dates overlap. IF the dates overlap, the system should issue an alert.
created		date	
created_by	user.id	string	
currency	currency	string	
invoice_no		string	
invoice_date		date	
note		string	
owner	library.id	string	The location/branch/division etc that's responsible for this invoice. This may or may not be the same as the PO. ie. North Branch
payment_due		date	
payment_terms		string	
payment_method	payment_method_id	string	Inherited from vendor
prepaid		bool	Reference: pg. 134: FOLIO Plan of Attack
prorata		bool	IF TRUE the additional charges will be applied to each line item and reflected in the total. IF FALSE each charge will be added to the invoice

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			as it's own line item.
sent		date	Remove from model
status	invoice_status	string	Open, processed, closed, cancelled. Note: invoices are never partially paid.
totalAmount		decimal	Source: folio-org/mod-acquisitions
vat_per_invoice_line		bool	IF some of the invoice lines require vat, but others do not, this should be set to TRUE. (Remove)
vendor_invoice_no		string	this is the number from the vendor's invoice this may or may not be the same as the invoice_no
vendor_ref_no		string	This is the number used to match POs created by import to invoices created by import
workflow_status	workflow_status	string	pending, in review, reviewed, approved, not approved update required, declined, cancelled.
check_number		string	The identifier for the physical transaction corresponding to a payment (Eg. Check #, EFT # etc.) Brought in from external source
voucher_id		string	Number generated by folio that will eventually identify the payment request sent out to external financial system.
expenditure_date		date	Date payment was made from financial system (eg. corresponding check date)
po_id	po_line.id	uuid	May or may not be

			provided; references the PO associated to the invoice
vendor_contact_id	contact_info.id	uuid	THIS seems iffy. Should be reviewed.
vendor_id	vendor.id	string	

invoice_alerts			
Columns	Relates to:	Data type	Notes
id	alert	uuid	
alert	invoice_alert	string	
invoice_id	Invoice.id	uuid	

invoice_status	
Notes	<p>Values: Open, Processed, Closed, Canceled.</p> <p>Open: Invoice has been created and requires approval</p> <p>Processed: Invoice has been approved and processed or invoice does not require approval and has been processed by the system.</p> <p>Closed: Invoice has been processed and payment has been generated</p> <p>Canceled: Invoice will not be processed</p> <p>** Could be expanded to a table if required.</p>

invoice_line			
Columns	Relates to:	Data type	Notes
id		uuid	
invoice_line_no		string	The number that identifies this specific invoice line.
invoice_line_status	invoice_line_status	string	In Review, approved, canceled Note: canceled will null associated values

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invoice_line_vat		decimal	
note		string	
price		decimal	
quantity		string	
currency	currency	string	
release_encumbrance		bool	IF TRUE and the invoice line amount is less than the amount of the PO Line, the remaining encumbered funds will be released WITHOUT incurring a corresponding expenditure
report_vat_tax		Bool	
subscription_end		date	date; this should reflect what's on the INVOICE. It may or may not be what was entered with the related PO Line. pg. 139
subscription_info		string	the user should use this field to provide info on the subscription (eg. which volumes are being invoiced). It is MANDATORY if the chk_subscription_overlap is FALSE AND there is no start date provided. pg: 139
subscription_start		date	date; this should reflect what's on the INVOICE. It may or may not be what was entered with the related PO Line. pg. 139
vat_amount		decimal	
vat_expended_from		bool	Default = true; IF TRUE, this amount will be expended from each invoice line's fund; if FALSE the amount will be recorded as it's own invoice line (type= adjustment). No fund will be expensed for the tax.

vat_note		string	
vat_percent		decimal	
tax_type	tax_type	string	
invoice_id	invoice.id	uuid	
po_line_id	po_line.id	uuid	

invoice_line_status	
Notes	<p>Values: in review, approved, canceled.</p> <p>** Could be expanded into a table, if required</p>

comment			
Notes	Has a many-to-1 relationship with the invoice		
Columns	Relates to:	Data type	Notes
id		uuid	
comment		string	
created		date	When the note was recorded
invoice_id	invoice.id	uuid	

payment			
Notes	When a new payment record is created it triggers the creation of a fund_transaction record.		
Columns	Relates to:	Data type	Notes
id		uuid	
currency	currency	string	The currency in which the voucher was paid
export_to_ERP		bool	Export this payment record to a financial system?
internal_copy		bool	

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payment_method	payment_method	string	
payment_type	payment_type	string	Indicates type of payment to account for potential "pre-payments"
payment_status	payment_status	string	
external_account_number		string	
voucher_amount		decimal	The amount that was actually paid
voucher_date		date	The date of the payment
voucher_no		string	A reference no, most likely from the vendor, to indicate that the invoice was paid
invoice_id	invoice.id	uuid	There might be many payments against a single invoice

payment_method	
Notes	Values: Accounting Department, Cash, Credit Card, EFT, Deposit Account, Check, Bank Draft ** Could be expanded to a table, if required

payment_type	
Notes	Values: Payment, Pre-Payment, Voucher ** Could be expanded to a table, if required

payment_status	
Notes	Values: Paid, Invoiced, Awaiting Payment ** Could be expanded to a table, if required

tax_type	
Notes	Values: inclusive, exclusive, line exclusive Inclusive: the default VAT type; any taxes are already included in the Total amount.

	Exclusive: the tax needs to be added to the invoice total amount Line Exclusive: the tax is included in the total invoice amount but is NOT recorded for each line. In other words, the amounts you see per line are pre-tax, but the total is post-tax		
Columns	Relates to:	Data type	Notes
id		uuid	
description		string	

workflow_status	
Notes	Related to Invoicing: invoice Values: No Invoice, Partially Invoiced, Fully Invoiced, Waiting for Payment ** Could be expanded to a table, if required

Receiving Module Entities

receipt			
Columns	Relates to:	Data type	Notes
id		uuid	
barcode		string	
receipt_date		date	
invoice	invoice	string	
department	department	string	Department that received the item

received_item			
Columns	Relates to:	Data type	Notes
Notes		Models individual line items in a receipt	
id		uuid	
barcode		string	
item_id		string	This identifies the specific item received. It could be a Codex record id, an ISBN/ISSN, a bib record id, etc.
po_line	po_Line	string	The item that was actually purchased
quantity		int	How copies/versions/etc of this item did we receive? We should be able to compare this to the invoice and/or original PO to identify extra items, or items to claim.
received_by_owner		date	
receipt_id	receipt.id	uuid	

Vendors Module Entities

agreement			
Notes	Relates to vendor Has a many-to-one relationship with vendor. This is generally just a reference to a block of text on the vendor's interface.		
Columns	Relates to:	Data type	Notes
id		uuid	
discount		decimal	
name		string	
notes		string	
reference_url		string	Reference to the documentation re: this agreement.
vendor_id	vendor .id	uuid	

category	
Notes	Relates to vendor_address , vendor_phone , vendor_email Values: <ul style="list-style-type: none">• Accounting• Books• Customer Service• Databases• Ebooks• Econtent• General• Journals• Licenses• Primary• Sales• Serials Has a many-to-many relationship with all the related tables.

contact_category	
Notes	Relates to vendor_contact Values: <ul style="list-style-type: none">• Accounting• Books• Customer Service• Databases

	<ul style="list-style-type: none"> • Ebooks • Econtent • General • Journals • Licenses • Primary • Sales • Serials <p>Has a many-to-many relationship with all the related tables.</p>
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delivery_method	
Notes	<p>Relates to vendor_interface</p> <p>VALUES:</p> <ul style="list-style-type: none"> • Online • FTP • Email <p>** Can be expanded to a table, if required</p>

edi_info			
Notes	<p>Relates to vendor</p> <p>Has a one-to-one relationship with vendor; encapsulates the EDI settings for a vendor.</p> <p>The fields are organized into 3 general areas of concern:</p> <ul style="list-style-type: none"> • EDI Basic information • FTP information • Notification-related settings <p>Most of the information entered here will be shared when handling the various EDI messages supported by the vendor.</p>		
Columns	Relates to:	Data type	Notes
id		uuid	
vendor_edi_code		string	
vendor_edi_type		string	Pulls the value from edi_type
lib_edi_code		string	
lib_edi_type		string	Pulls the value from edi_type ; Library EDI type
edi_naming_convention	edi_naming_convention	string	The naming code for the edi. eg. standard, blackwell, ebSCO, ingram,

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			harrassowitz, brodart, etc.
prorate_tax		bool	
prorate_fees		bool	
send_acct_num		bool	If TRUE, the account number will always be included in the payload when an order is sent
support_order		bool	Vendor supports order messaging (specifically EDI?)
support_invoice		bool	Vendor supports invoice messaging (specifically EDI?)
notes			EDI basic notes
ftp_format	ftp_format	string	SFTP or FTP
ftp_mode	ftp_mode	string	Eg. ASCII, Binary, etc.
ftp_conn_mode	ftp_conn_mode	string	E.g. Passive, Active
ftp_port		string	E.g. 21 (FTP), 22 (SFTP)
server_address		string	
username		string	The username for logging onto the FTP server
password		string	The password for logging onto the FTP server
order_directory		string	The relative path in the FTP server where orders will be placed.
invoice_directory		string	The relative path in the FTP server where invoices will be read from.
send_to_emails		string	A comma-separated list of emails to send vendor-edi-notifications to
notify_all_edi		bool	If TRUE, an email will be sent corresponding to each EDI transaction
notify_invoice_only		bool	If TRUE, an email will be sent for each invoice

			transaction
notify_error_only		bool	If TRUE, an email will be sent for each error transaction

edi_naming_convention	
Notes	Relates to edi_info Values: Standard ** To be determined; unsure if this will be regex based

edi_type	
Notes	Relates to edi_info VALUES: <ul style="list-style-type: none">• 014/EAN• 31B/US-SAN• 091/Vendor-assigned• 092/Customer-assigned

ftp_conn_mode	
Notes	VALUES: <ul style="list-style-type: none">• Active• Passive

ftp_format	
Notes	VALUES: <ul style="list-style-type: none">• SFTP• FTP

ftp_mode	
Notes	VALUES: <ul style="list-style-type: none">• ASCII• Binary

job

Notes	Encapsulates scheduling information for background tasks associated to a vendor. For VI, the background tasks are all about EDI messaging (i.e. order + invoice)		
Columns	Relates to:	Data type	Notes
id		uuid	
is_scheduled		bool	If TRUE, overrides the scheduling of the background jobs for the vendor
start_date		datetime	Used in conjunction with is_scheduled; indicates when the override will take effect
time		time	Used in conjunction with is_scheduled; indicates when the background jobs will run
is_monday		bool	Used in conjunction with is_scheduled; indicates if a job will run on a Monday
is_tuesday		bool	Used in conjunction with is_scheduled; indicates if a job will run on a Tuesday
is_wednesday		bool	Used in conjunction with is_scheduled; indicates if a job will run on a Wednesday
is_thursday		bool	Used in conjunction with is_scheduled; indicates if a job will run on a Thursday
is_friday		bool	Used in conjunction with is_scheduled; indicates if a job will run on a Friday
is_saturday		bool	Used in conjunction with is_scheduled; indicates if a job will run on a Saturday
is_sunday		bool	Used in conjunction with is_scheduled; indicates if a job will run on a Sunday
scheduling_notes		string	

vendor_id	vendor.id	uuid	
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language	
Notes	Values: Enumerated type based on ISO-639-1

library_vendor_acct			
Notes	Encapsulates the account information for a vendor; has a many-to-one relationship with a vendor. The <i>library_code</i> -field could also map to a specific branch of a library (TBD).		
Columns	Relates to:	Data type	Notes
id		uuid	
name		string	
payment_method	payment_method	string	
account_no		string	
lib_ven_acct_status	lib_ven_acct_status	string	
description		string	
contact_info		string	
apsystem_no		string	The corresponding account number in the Accounts Payable System
notes		string	
library_code		string	Library Code; this could also denote an ID for a library/branch in a consortia?
library_edi_code		string	Library EDI Code
vendor_id	vendor.id	uuid	

lib_ven_acct_status	
Notes	VALUES: <ul style="list-style-type: none"> • Active • Inactive • Pending

	** Could be expanded into a table if required
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note			
Notes	Relates to vendor Has a many-to-one relationship with vendor; could be used as a history log for notes and/or as an audit log.		
Columns	Relates to:	Data type	Notes
id		uuid	
description		string	
timestamp		datetime	
user_id	user.id	uuid	
vendor_id	vendor.id	uuid	

payment_method	
Notes	Relates to vendor , library_vendor_acct Values: <ul style="list-style-type: none">• EFT• Bank Draft• Paper Check• Credit Card/P-Card• Deposit Account• Cash ** Could be expanded to a table, if required

statistics_format	
Notes	Relates to vendor_interface Values: <ul style="list-style-type: none">• Delimited• Excel• CSV• PDF• ASCII• HTML

	<ul style="list-style-type: none"> • Other <p>** Could be expanded to a table, if required</p>
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vendor				
Columns	Relates to:	Data type	Req?	Notes
id		uuid		
access_provider		bool	N	Is an access provider
claiming_interval		string	N	# of days before a claim can be created
code		string	N	Unique code for the Vendor
description		string	N	Arbitrary length text; general description field
discount_percent		decimal	N	
edi_info_id	edi_info.id	uuid		
erp_code		string	N	Financial system code
expected_activation_interval		int	N	# of days before this vendor activates an e-resource
expected_invoice_interval		int	N	# of days before this vendor sends an invoice
governmental		bool	N	With Alma, if true, then material_supplier, access_provider, and licensor must all be false. When true, the tax is paid directly to the gov't RATHER than to the vendor.
language	language	string	N	
liable_for_vat		bool	N	If true, invoices must be paid with

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				VAT included.
licensor		bool	N	Indicates that the vendor is a licensor?
material_supplier		bool	N	In ALMA, must have one or more vendor accounts associated with the vendor; eg. one account for approval and one for firm orders; used in PO lines to indicate who will receive the order and payment for the resource being ordered.
name		string	Y	Proper name for the vendor
payment_method	payment_method	string	Y	
renewal_activation_interval		int	N	
subscription_interval		int	N	
tax_id		string	N	
tax_percentage		decimal	N	The numerical value of the tax percentage to be applied for governmental vendors.
contact_info_id	contact_info.id	uuid		
interface_id	interface.id	uuid		
vendor_status	vendor_status	uuid		

vendor_address			
Notes	The addresses associated with the vendor		
Columns	Relates to:	Data type	Notes
id		uuid	
language	language	string(255)	

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san_code		string(255)	
currency	currency	string	
vendor_id	vendor.id	uuid	

vendor_address_category			
Notes	Join table that relates vendor addresses to categories to create a many-to-many relationship		
Columns	Relates to:	Data type	Notes
vendor_address_id	vendor_address	uuid	
category_id	category	uuid	

vendor_contact			
Notes	Encapsulates the contact persons associated to a vendor		
Columns	Relates to:	Data type	Notes
id		uuid	
contact_person_id	person.id	uuid	
language	language	string	
vendor_id	vendor.id	uuid	

vendor_contact_category			
Notes	Join table that relates vendor-contacts to contact-categories to create a many-to-many relationship		
Columns	Relates to:	Data type	Notes
vendor_contact_id	vendor_contact.id	string	
contact_category_id	contact_category.id	string	

vendor_currency			
Notes	The currencies that the vendor supports		
Columns	Relates to:	Data type	Notes
id		string	

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currency	currency	string	
vendor_id	vendor.id	uuid	

vendor_email			
Notes	The phone numbers associated with the vendor		
Columns	Relates to:	Data type	Notes
id		uuid	
language	language	string(255)	
email	email.id	uuid	
vendor_id	vendor.id	uuid	

vendor_email_category			
Notes	Join table that relates vendor emails to categories to create a many-to-many relationship		
Columns	Relates to:	Data type	Notes
vendor_email_id	vendor_email	uuid	
category_id	category	uuid	

vendor_phone			
Notes	The phone numbers associated with the vendor		
Columns	Relates to:	Data type	Notes
id		uuid	
language	language	string(255)	
phone_number	phone_number.id	uuid	
vendor_id	vendor.id	uuid	

vendor_phone_category			
Notes	Join table that relates vendor phone numbers to categories to create a many-to-many relationship		
Columns	Relates to:	Data type	Notes

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vendor_phone_id	vendor_phone	uuid	
category_id	category	uuid	

vendor_interface			
Notes	Relates to ERM Management; models the info required to access a vendor's store-front portal(s)		
Columns	Relates to:	Data type	Notes
id		uuid	
name		string	
uri		string	
username		string	
password		string	Salted-encryption?
notes		string	
available		bool	YES if the vendor provides statistics related to the usage of their store-front interface
delivery_method	delivery_method	string	
statistics_format	statistics_format	string	
locally_stored		string	File path -- where the statistics are stored
online_location		string	URL potentially pointing to the statistics data
statistics_notes		string	
vendor_id	vendor.id	uuid	

vendor_name			
Notes	This is a list of ALL of the names the vendor may go by. This could be helpful when building the search query for vendors. It might include old names or even acronyms. Eg. GOBI's vendor_names values might be YBP, or Yankee Book Peddler.		
Columns	Relates to:	Data type	Notes
id		uuid	
value		string(255)	

description		string(100)	
vendor_id	vendor.id	uuid	

vendor_status

Notes	Values: <ul style="list-style-type: none"> • Pending • Active • Inactive
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vendor_url

Notes	Intended for the various marketing URLs associated with a vendor		
Columns	Relates to:	Data type	Notes
id		uuid	
value		string(2000)	2000 is the de-facto length-limit of URLs
language		string(255)	
notes		string	
vendor_id	vendor.id	uuid	

vendor_url_category

Notes	Join table that relates vendor-urls to categories to create a many-to-many relationship		
Columns	Relates to:	Data type	Notes
vendor_email_id	vendor_email	uuid	
category_id	category	uuid	

External Entities

The following tables have been identified however they are either outside of the scope of the Acquisitions business activities or are too undefined to relate to a specific module. Wherever possible, their fields and values were sourced from the existing FOLIO documentation at the time.

codex			
Notes	THIS WAS SOURCED FROM THE DOCS PROVIDED BY VINCE. THIS IS NOT PART OF ACQUISITIONS. IT IS FOR REFERENCE ONLY!!		
Columns	Relates to:	Data type	Notes
id		string	
uri		string	<ul style="list-style-type: none"> - Persistent link/ID for this title that will not change - Auto-generated by FOLIO? Reference - Would a URI have a domain? - Are we expecting this to be persistent across tenants? - Discuss with Oliver what he had in mind with this Reference: Cate Boersma
source_record		string	An url that links to the original source record.
metadata_source		string	Eg. "Local"
metadata_source_format		string	Eg. MARC or EPKB
resource_name		string	<ul style="list-style-type: none"> "- Do we want to use "resource" in FOLIO to describe objects at this level? Or "instance"? "Title" seems too specific to work for museum items, room keys etc..." Source "- Even if name is untitled (e.g. with a work of art), you need a name" Source
resource_type		string	Discuss convo
date		date	<ul style="list-style-type: none"> "- Publication date or copyright date? For books/monographs Ask SIG if they are the same

			<p>and which should display here.</p> <ul style="list-style-type: none"> - For serials, this could be the the complete date range for the serial and there could be gaps so there need to be ranges - For books this could be publication date while, for serials, this could be coverage dates - Are coverage dates cataloged at the instance level for serials? In the EPKB, coverage is at the package/title level (not the title level). We could roll up the dates from the item level and search them here... - Need to decide if we have holdings records and, if so, some of these dates may be pushed down to that record” <p>Source</p>
subjects		array	<p>A list of subjects or taxonomy terms.</p> <ul style="list-style-type: none"> “- Need to have a discussion about subjects and taxonomies and how they will be supported - We know we need subjects, but it may be a separate object and not technically in the Codex record” “- Subjects are external objects because we want to support multiple taxonomies” <p>Source</p>
language_code		string	<p>“- Standard language codes should be used here”</p> <p>Source</p>
classification		string	<ul style="list-style-type: none"> “- For example, a call number - there are different schemes such as dewey, LC - Should this be like identifier(s) where classification is a repeatable field which has a classification type

			and a classification scheme? - Need to decide if we will have holdings records and, if so, might Call numbers reside at that level in addition/instead?" Source
Publisher		string	

currency	
Notes	Enumerated type based on the ISO 4217 standard ** Will expand to a table if required

department			
Notes	Relates to Library THIS IS NOT SPECIFIC TO ACQUISITIONS AND WILL BE DEFINED ITS SCOPE. THIS IS SIMPLY FOR REFERENCE. WHEN POSSIBLE IT SHOULD BE UPDATED TO MATCH THE TENANT/LIBRARY DEVELOPMENT.		
Columns	Relates to:	Data type	Notes
id		string	
code		string	
description		string	
library_id	library .id	string	

tags			
Notes	Relates to a global module THIS IS NOT SPECIFIC TO ACQUISITIONS AND WILL BE DEFINED ITS SCOPE. THIS IS SIMPLY FOR REFERENCE. WHEN POSSIBLE IT SHOULD BE UPDATED TO MATCH THE MOD-TAGS DEVELOPMENT.		
Columns	Relates to:	Data type	Notes
id		string	
label		string	Used to tag

			transactions, funds and other objects in acquisition modules for reference purposes
--	--	--	--

library			
Columns	Relates to:	Data type	Notes
id		string	THIS IS OUT OF THE SCOPE OF ACQUISITIONS BUT WE'LL NEED TO REFERENCE IT. ONCE THE DOCUMENTATION IS COMPLETE, IT SHOULD BE ADDED HERE.

user			
Columns	Relates to:	Data type	Notes
id		string	
active		bool	This was pulled from the RAML User Schema .
barcode		string	This was pulled from the RAML User Schema .
created_date		date	This was pulled from the RAML User Schema .
date_of_birth		date	This was pulled from the RAML User Schema .
enrollment_date		date	This was pulled from the RAML User Schema .
expiration_date		date	This was pulled from the RAML User Schema .
first_name		string	This was pulled from the RAML User Schema .
meta		object	This was pulled from the RAML User Schema . It doesn't describe how it should be used though.
middle_name		string	This was pulled from the RAML User Schema .
last_name		string	This was pulled from the RAML User Schema .
patron_group_id	patron_group.id	string	This was pulled from the RAML User Schema . Not all users would be patrons though.
updated_date		date	This was pulled from the RAML User Schema .
user_id		string	
username		string	
password		string	
type_id	user_type.id	string	This was pulled from the RAML User Schema .

contact_info_id	contact_info.id	string	
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user_type			
Columns	Relates to:	Data type	Notes
id		string	
code		string	
description		string	