OpenAir

Database Guide

April 14, 2018

ORACLE NETSUITE

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Introduction

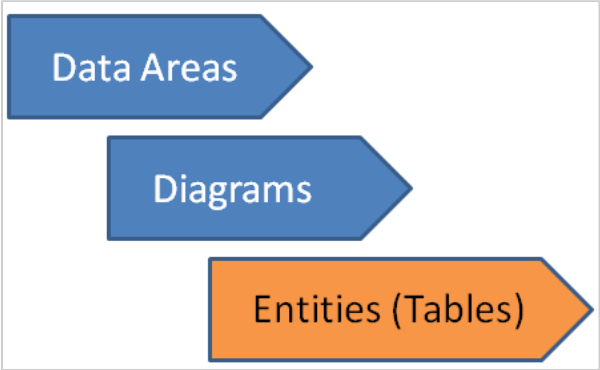
Overview

This guide provides a visual representation of the OpenAir database as viewed through the SOAP/XML API.

Important: This guide does not describe the physical database, and does not describe the features provided to protect the security, privacy, and integrity of our customers' data.

The diagrams in this guide provide an overview and you will need to refer to the OpenAir Data Dictionary for the details. Links to the data dictionary are provided as appropriate throughout the guide for this purpose.

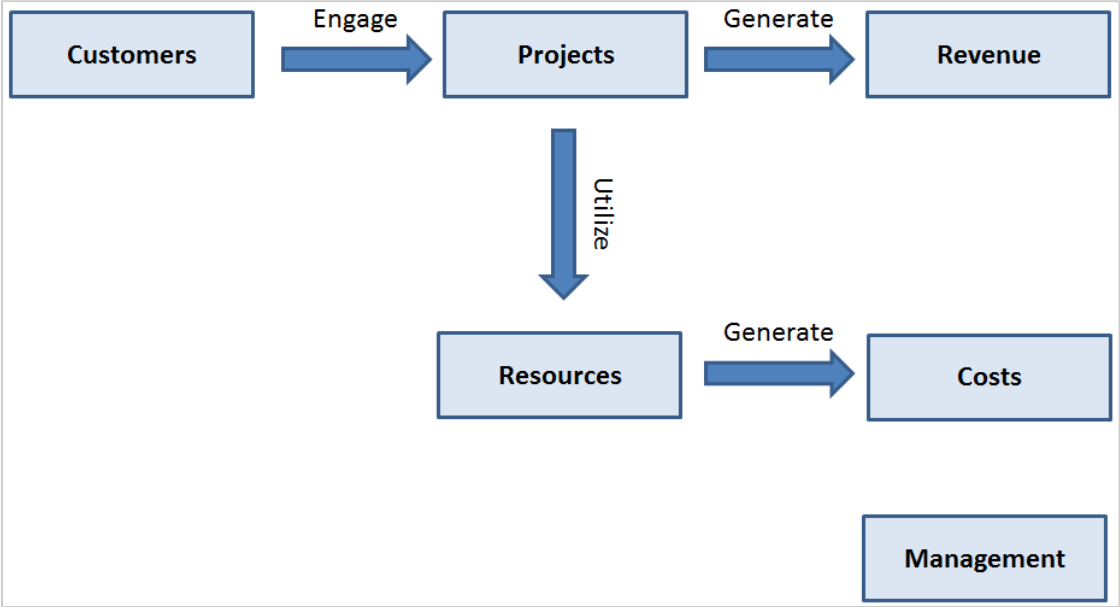
Note: Diagrams do not show all the fields for large entities (tables) nor do they show all the relationships, refer to the OpenAir Data Dictionary for the details.



The guide is organized into three levels:

1. Data Areas are used to categorize the diagrams by business area. This is intended to give a high-level overview of the database.
2. Diagrams are Entity Relationship Diagrams (ERD) using **Crow's foot notation**. A table is provided at the bottom of each diagram with links to the OpenAir Data Dictionary and links to related diagrams.
3. The final chapter contains an Index mapping each entity (table) to its diagram and data dictionary entry.

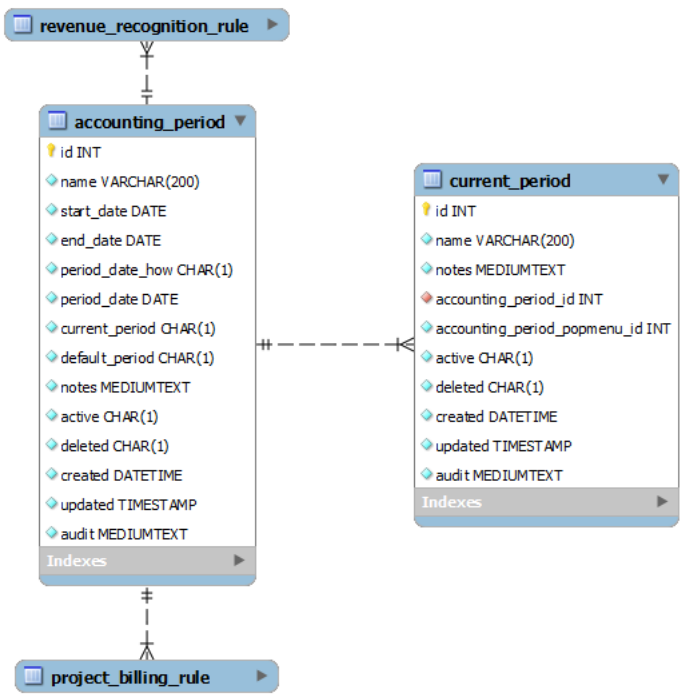
Data Areas



Customers Agreement, Category, Customer, Deal, Proposal	**Projects** Issue, Project, Project Group, Project Pricing, Project Task	**Revenue** Revenue Container, Revenue Recognition
Resources Attachment, Booking, Leave Accrual, Resource Profile, Resource Request, Schedule User	**Costs** Accounting Period, Billing, Budget, Cost, Envelope, Estimate, Expense Policy, Invoice, Item, Job Rate, Payment, Purchase Item, Purchase Order, Request Item, Slip, Task, Time, Workhour	**Management** Approval Process, Authorization, Custom Field, Filter, Miscellaneous, Product, Role Reporting, Script, Switch, Tag, Tax, Workspace

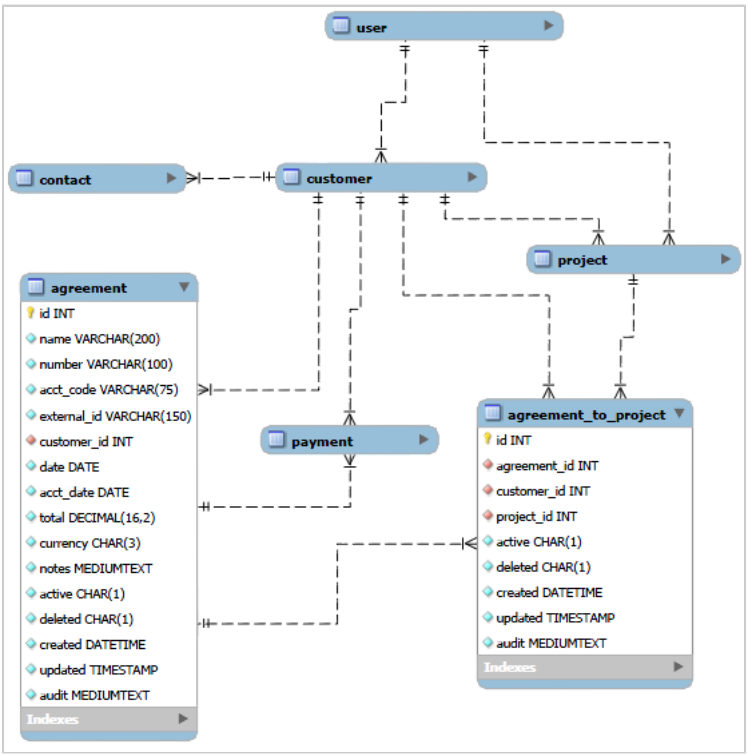
Diagrams

Accounting Period



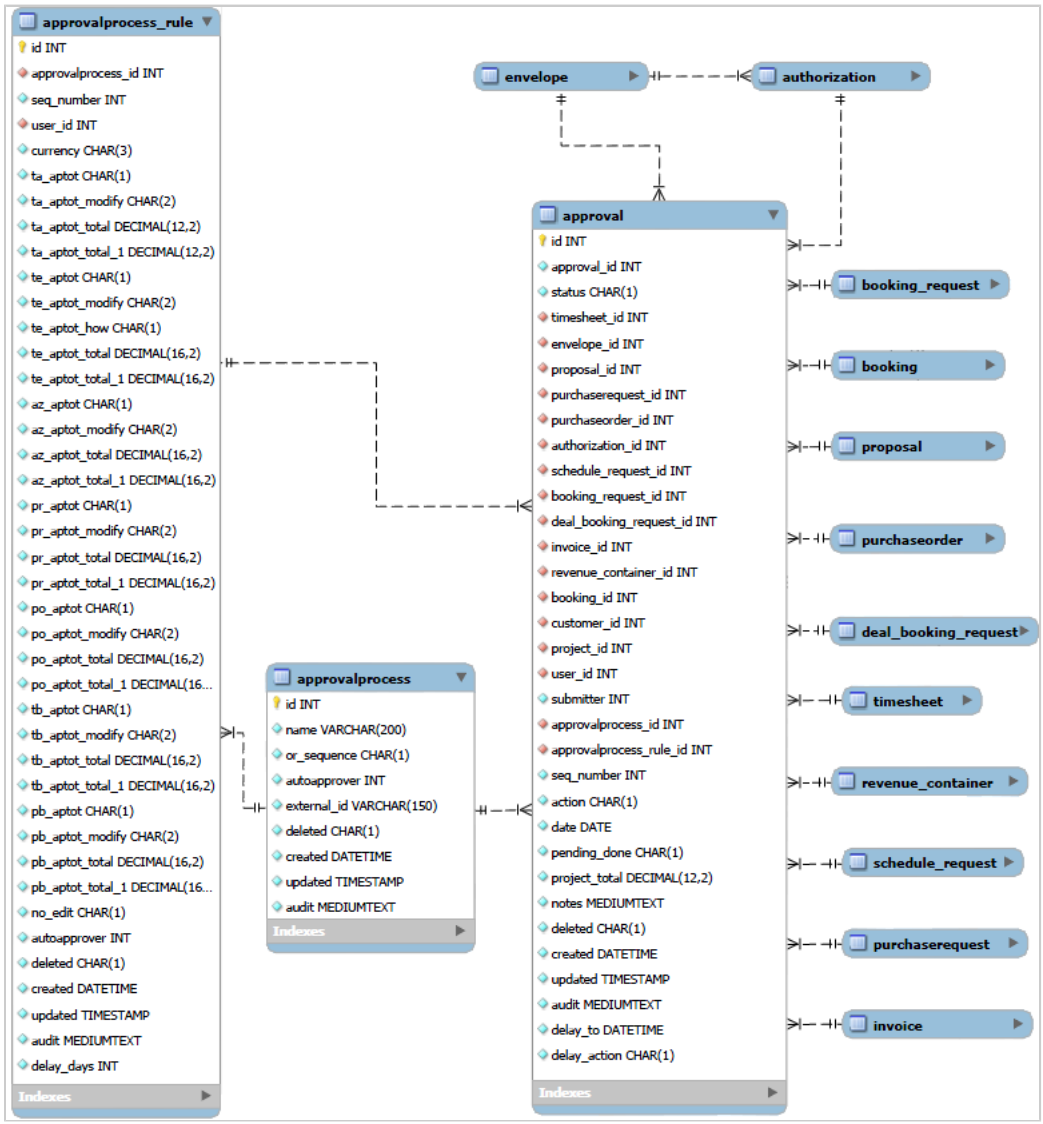
Data Dictionary	Related Diagrams
accounting_period, current_period	Billing, Revenue Recognition

Agreement



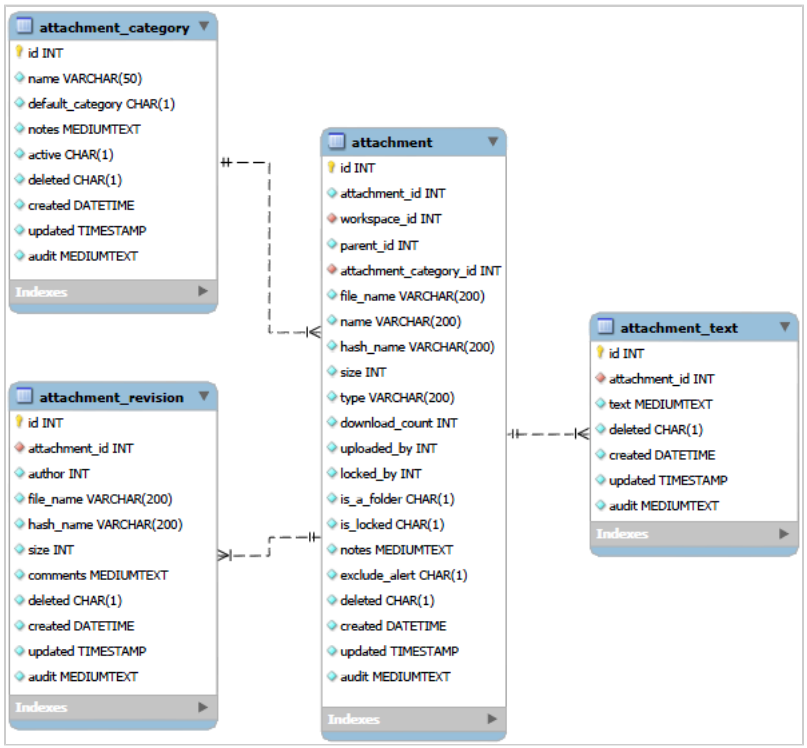
Data Dictionary	Related Diagrams
agreement, agreement_to_project	Billing, Project, Revenue Container

Approval Process



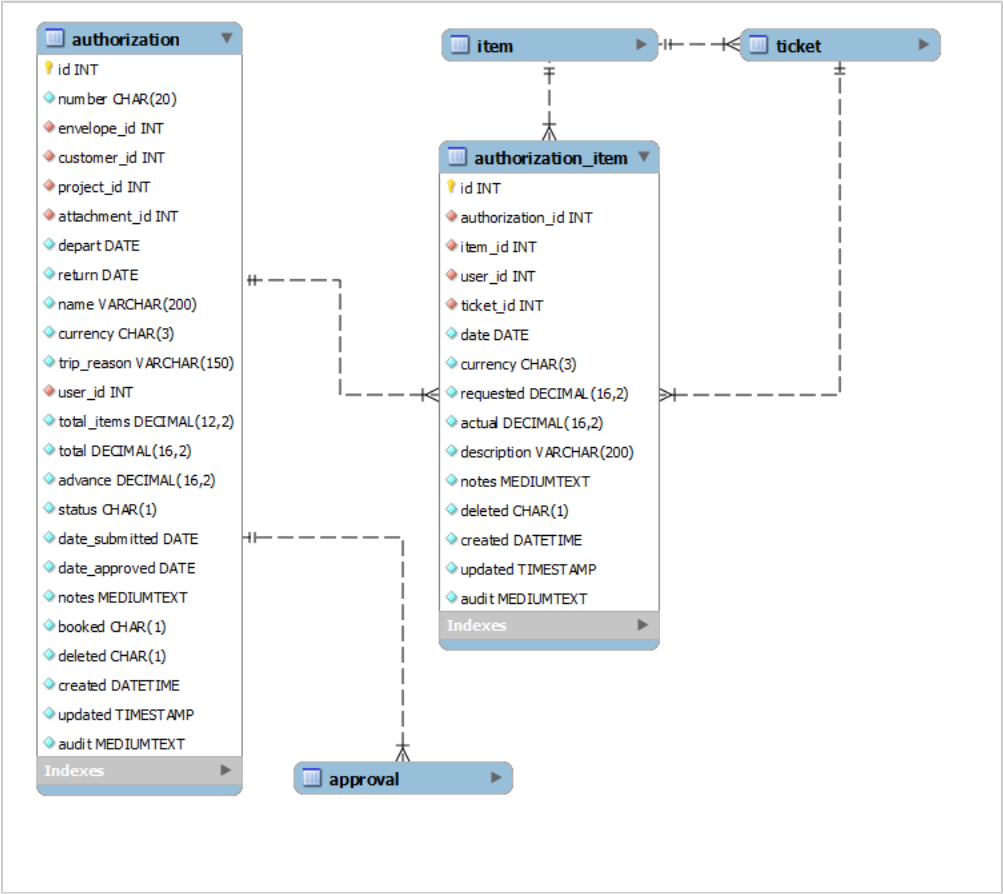
Data Dictionary	Related Diagrams
issue, issue_category, issue_severity, issue_source, issue_stage, issue_status	Authorization, Booking, Deal, Invoice, Proposal, Purchase Order, Revenue Container, Schedule, Time

Attachment



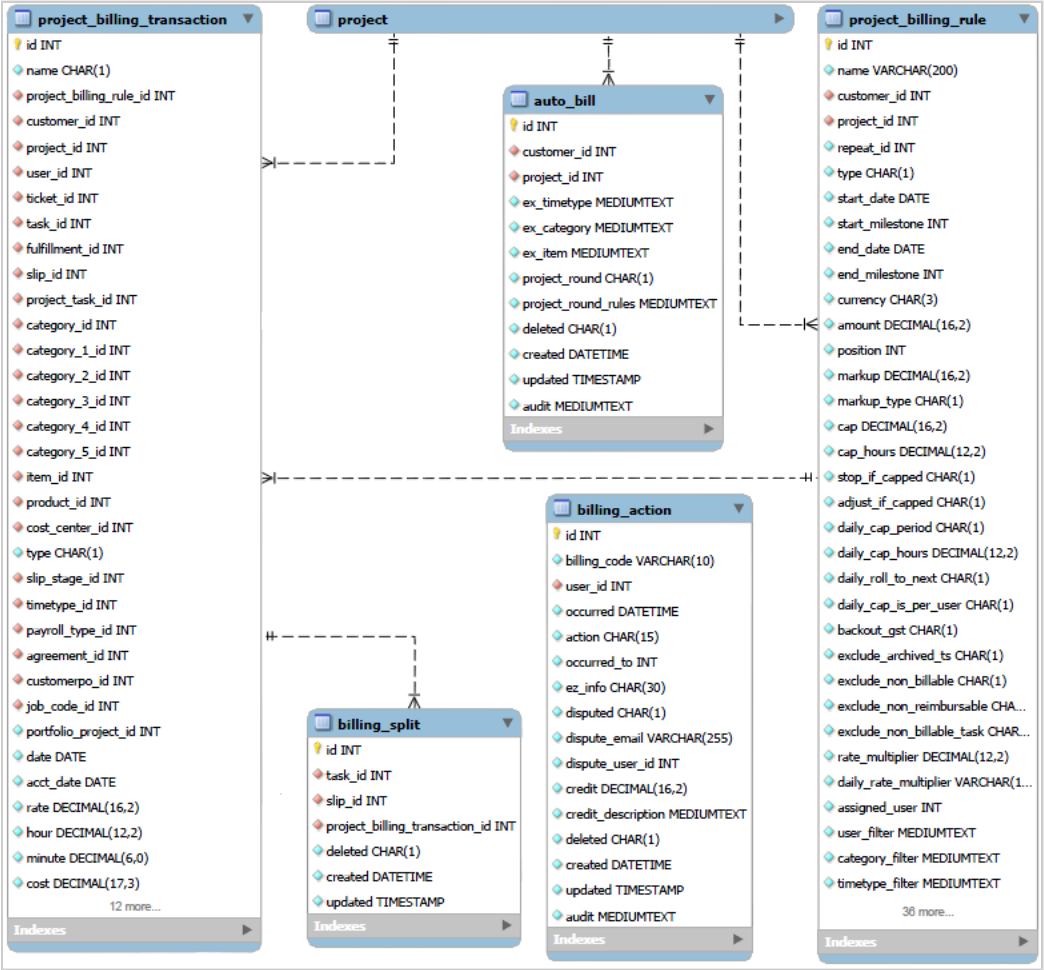
Data Dictionary	Related Diagrams
attachment, attachment_category, attachment_revision, attachment_text	Issue, Script, Time, Workspace

Authorization



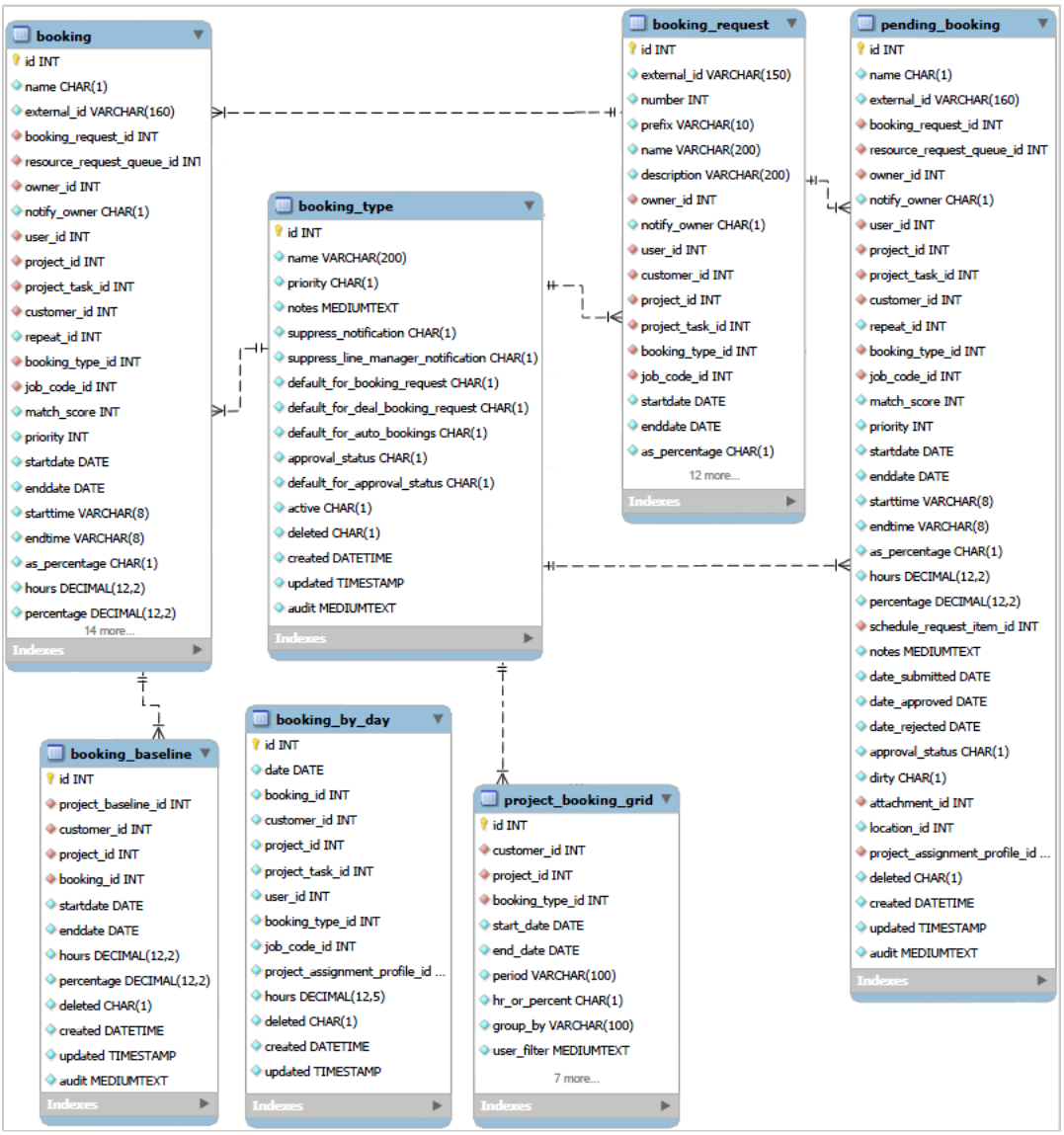
Data Dictionary	Related Diagrams
authorization, authorization_item	Approval Process

Billing



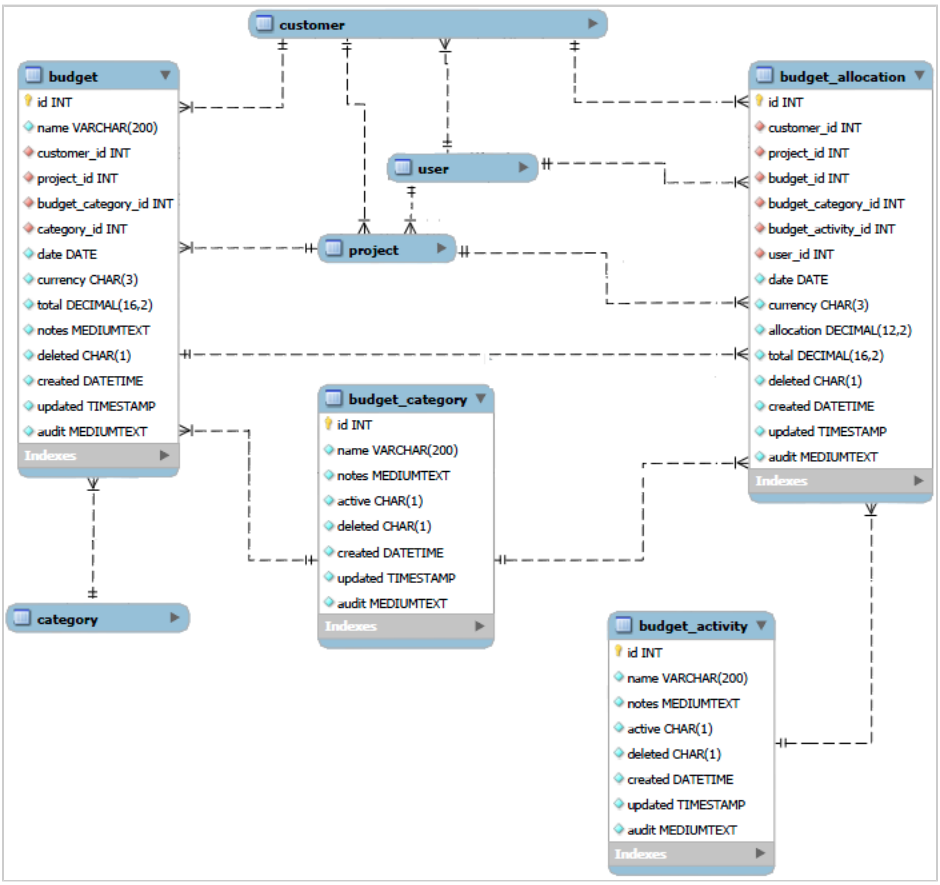
Data Dictionary	Related Diagrams
auto_bill, billing_action, billing_split, project_billing_rule, project_billing_transaction	Accounting Period

Booking



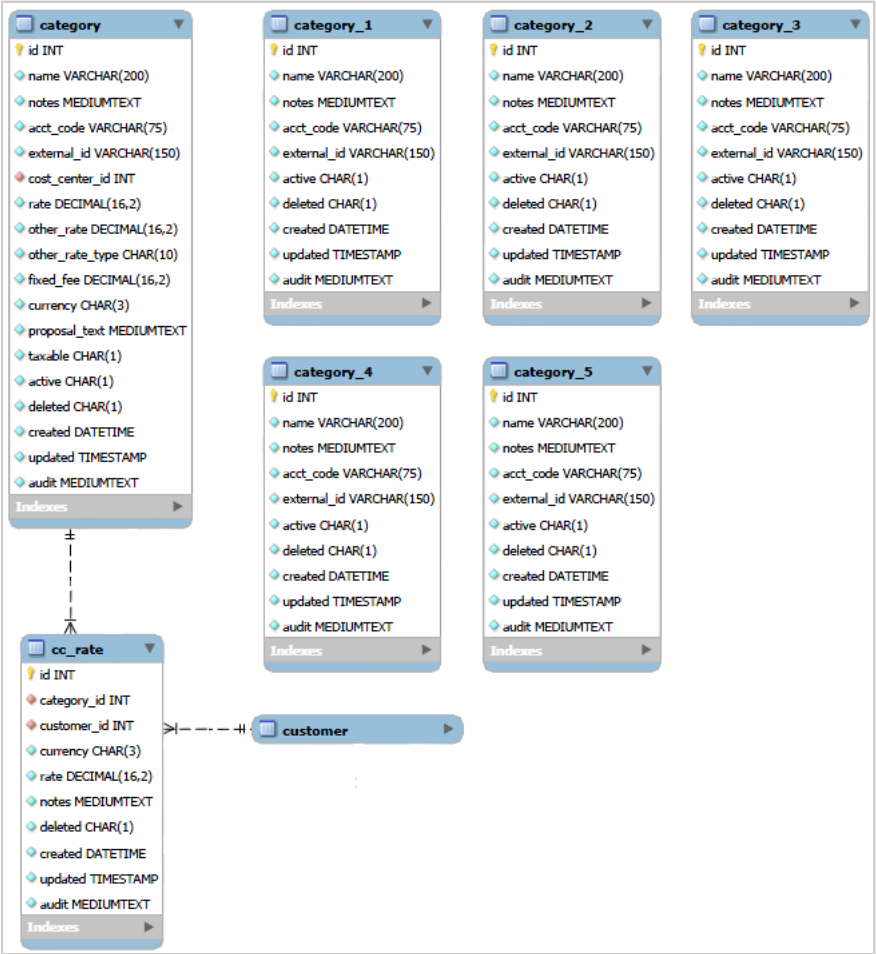
Data Dictionary	Related Diagrams
booking, booking_baseline, booking_by_day, booking_request, booking_type, pending_booking, project_booking_grid	Approval Process, Deal, Resource Profile, Resource Request

Budget



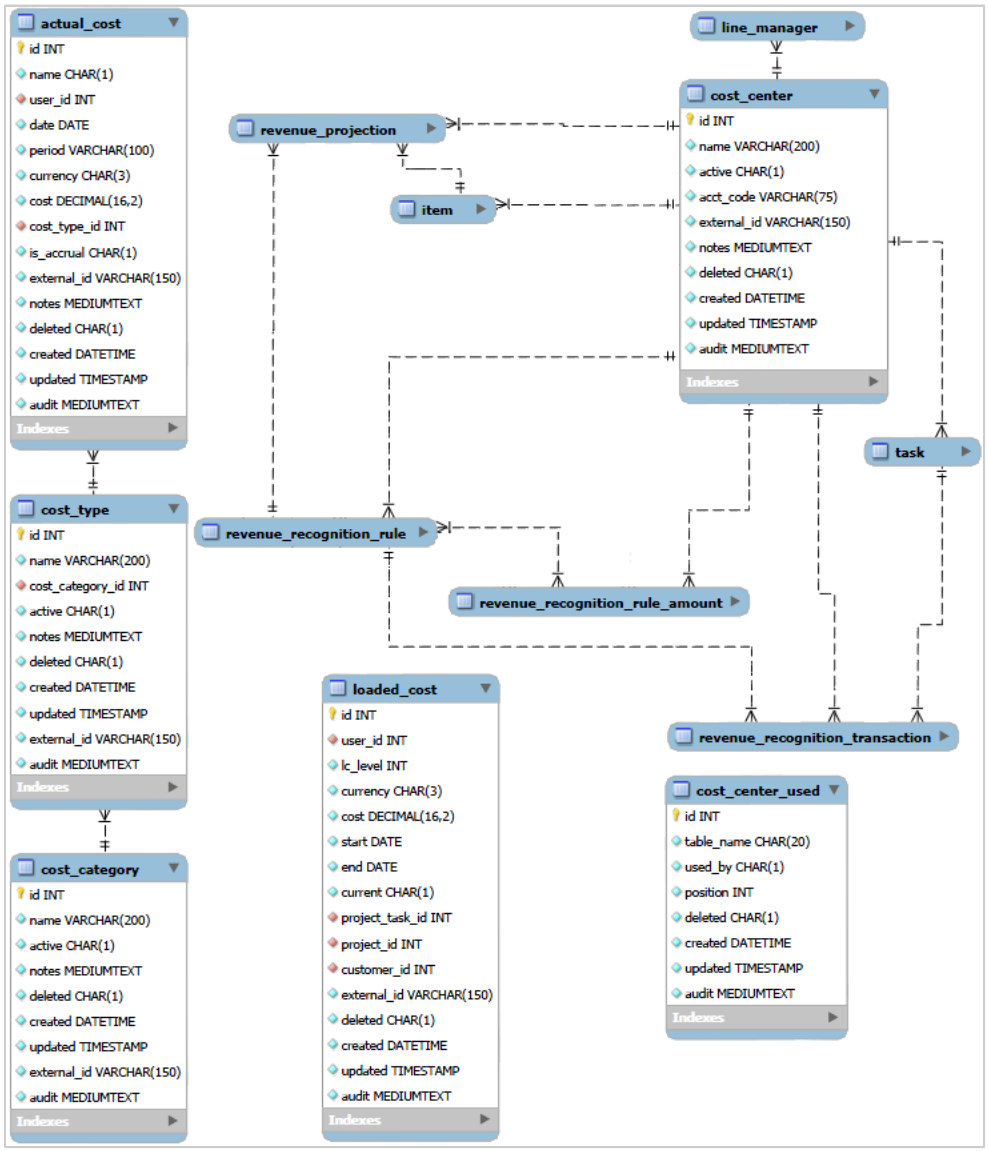
Data Dictionary	Related Diagrams
budget, budget_activity, budget_allocation, budget_category	Customer, Project, User

Category



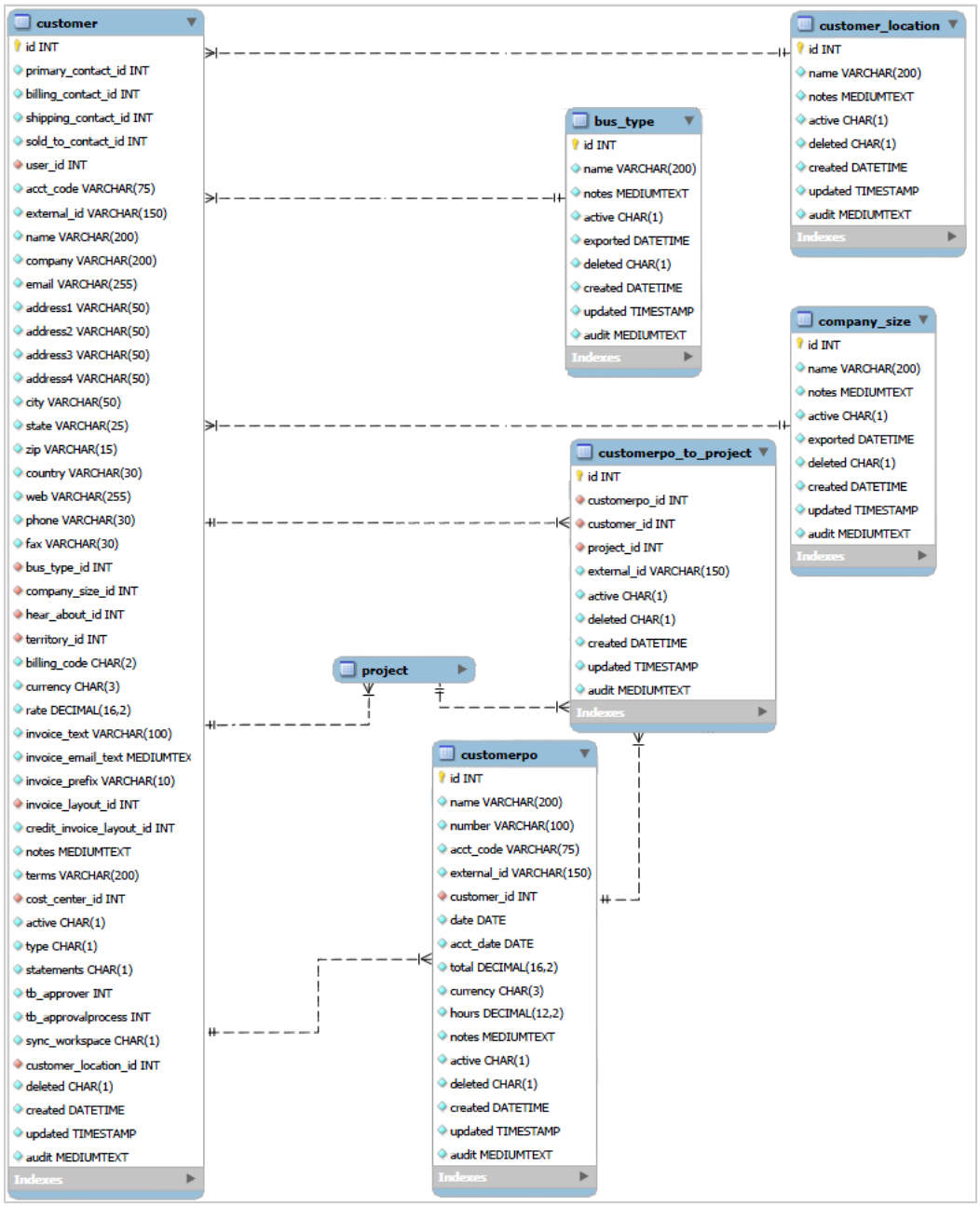
Data Dictionary	Related Diagrams
category, category_1, category_2, category_3, category_4, category_5, cc_rate	Customer

Cost



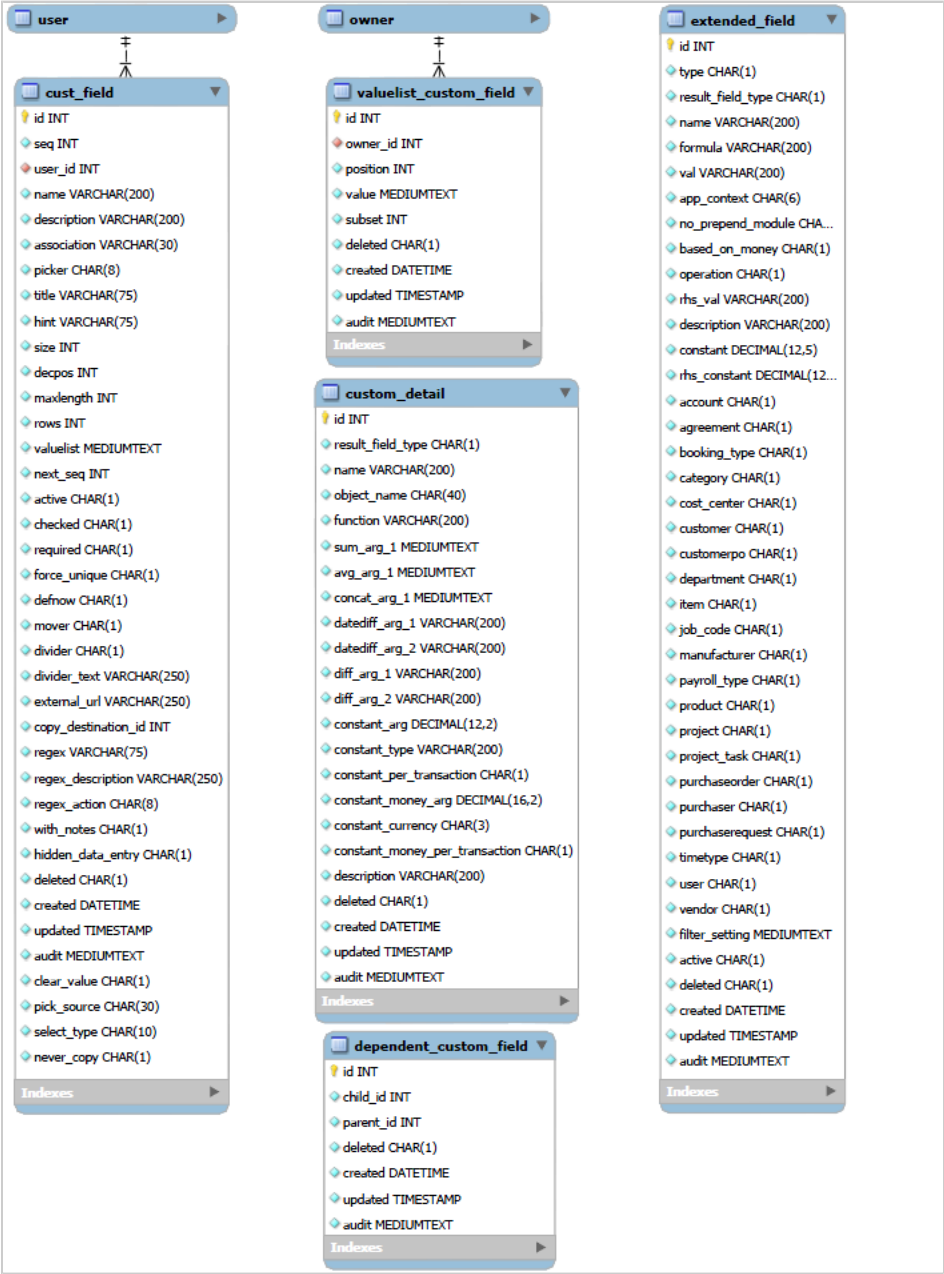
Data Dictionary	Related Diagrams
actual_cost, cost_category, cost_center, cost_center_used, cost_type, loaded_cost	Estimate, Item, Revenue Recognition

Customer



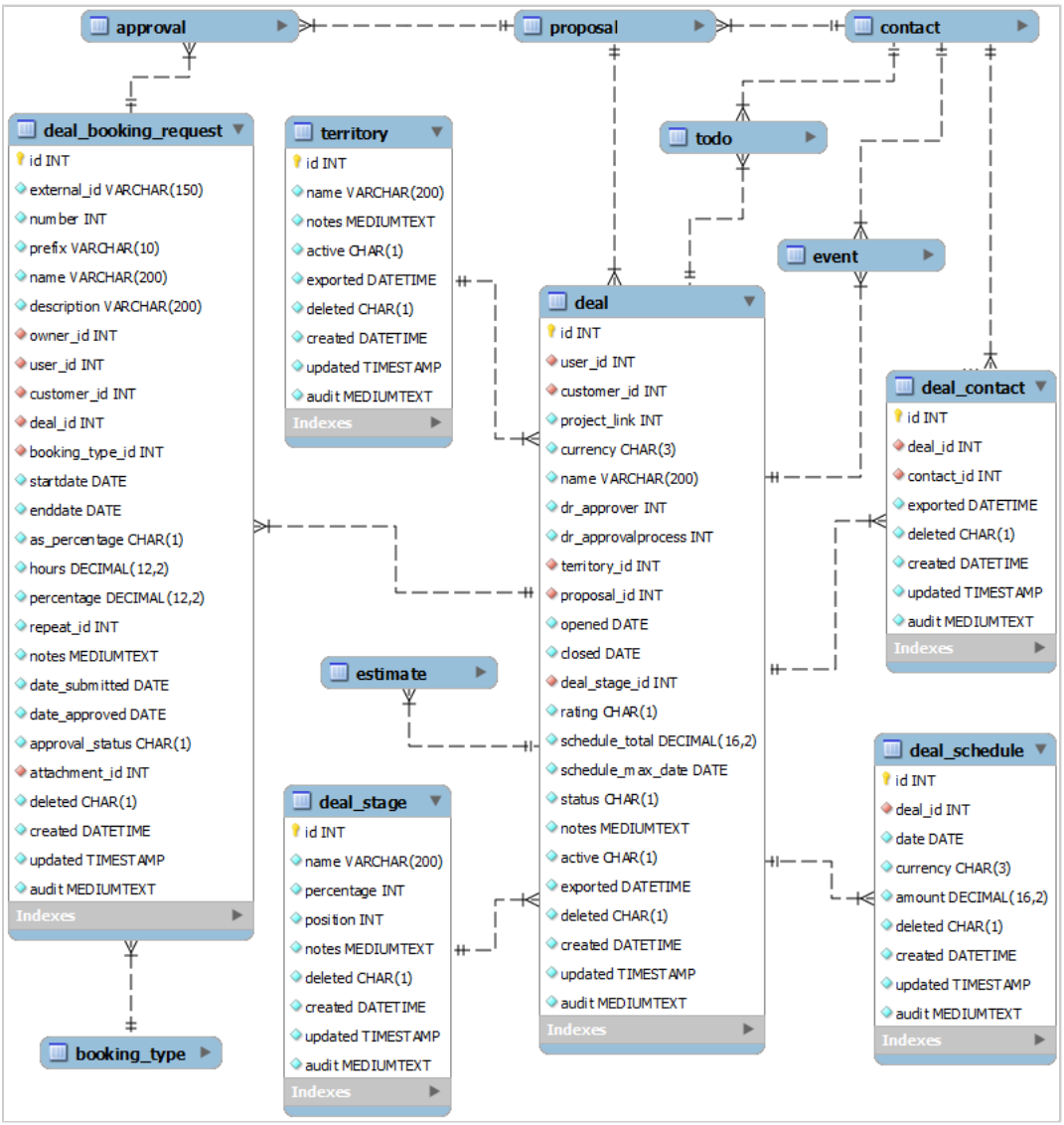
Data Dictionary	Related Diagrams
bus_type, company_size, customer, customer_location, customerpo, customerpo_to_project	Agreement, Budget, Category, Expense Policy, Invoice, Issue, Item, Payment, Project Pricing, Project Task, Reporting, Resource Request, Tag

Custom Field



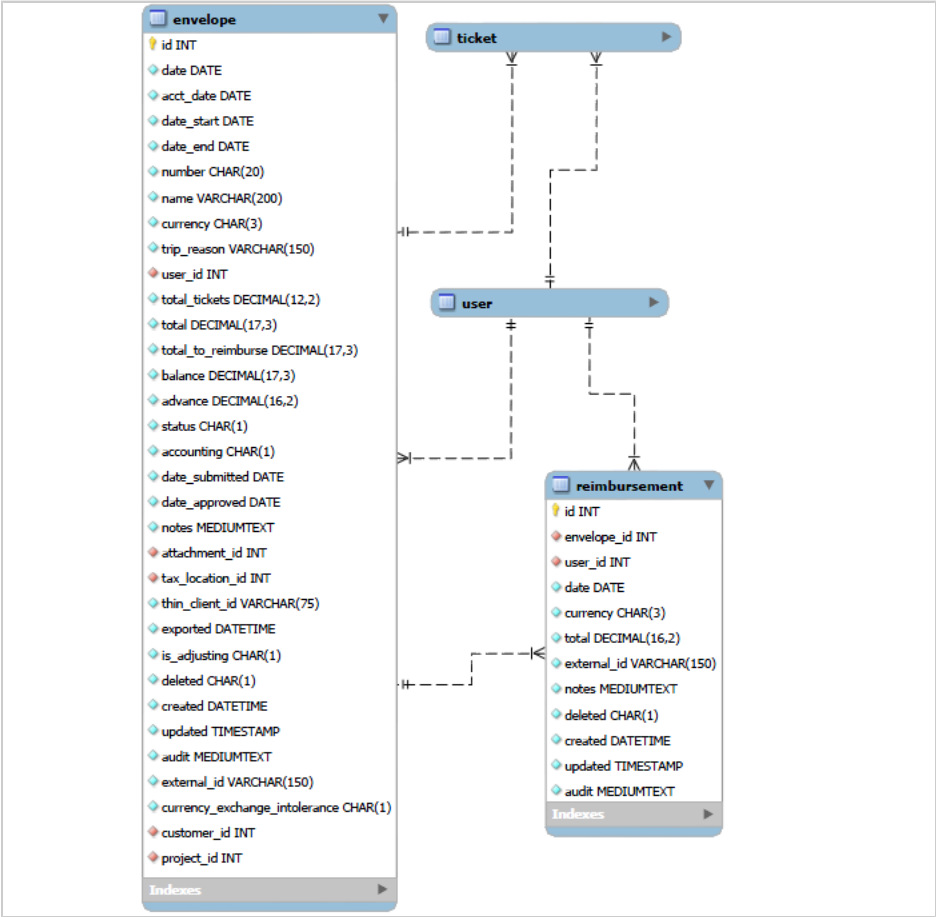
Data Dictionary	Related Diagrams
cust_field, custom_detail, dependent_custom_field, valuelist_custom_field	

Deal



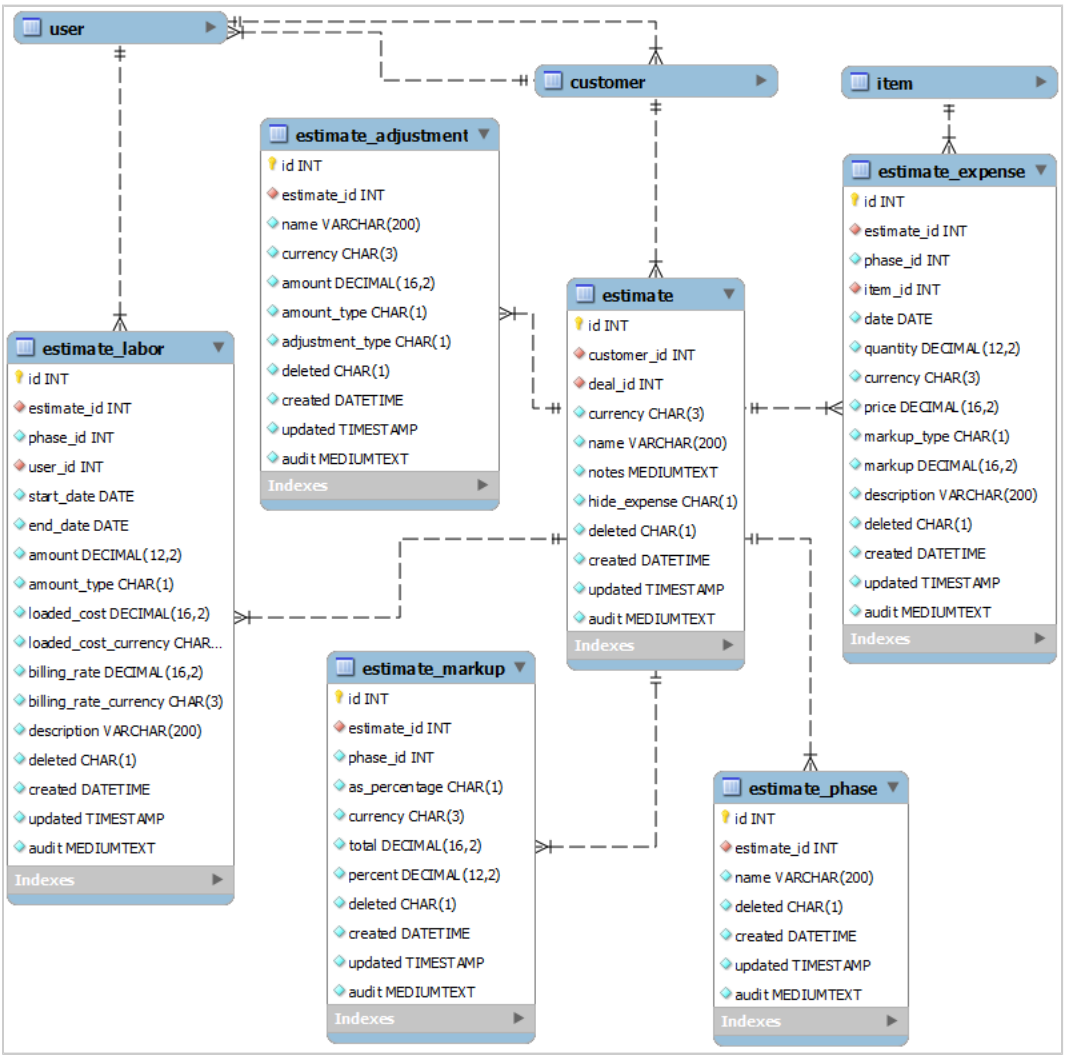
Data Dictionary	Related Diagrams
deal, deal_booking_request, deal_contact, deal_schedule, deal_stage, territory	Approval Process, Proposal

Envelope



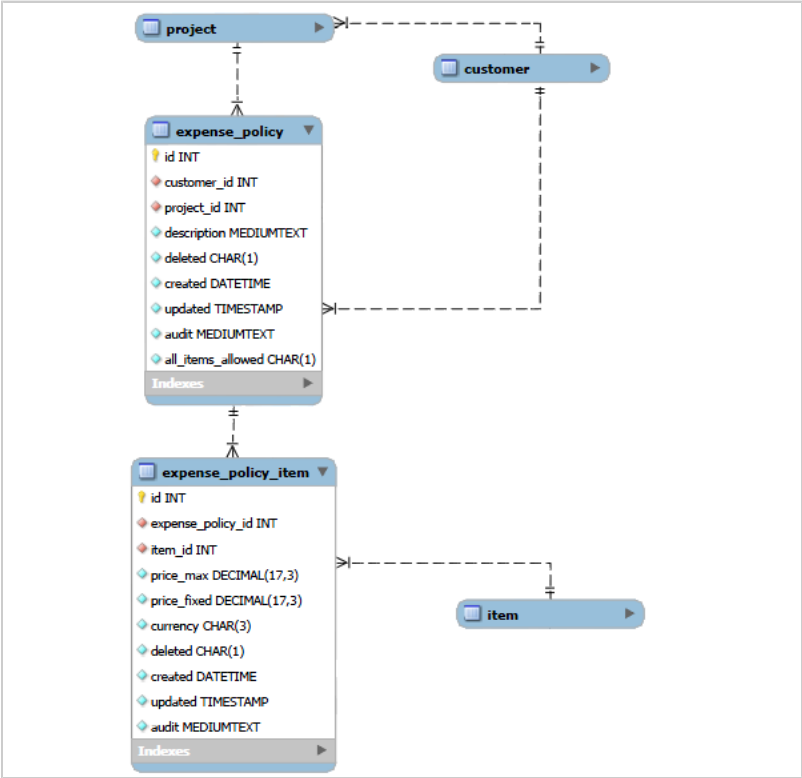
Data Dictionary	Related Diagrams
envelope, reimbursement	Approval Process, Authorization, Customer, Project, Tax, Ticket, User

Estimate



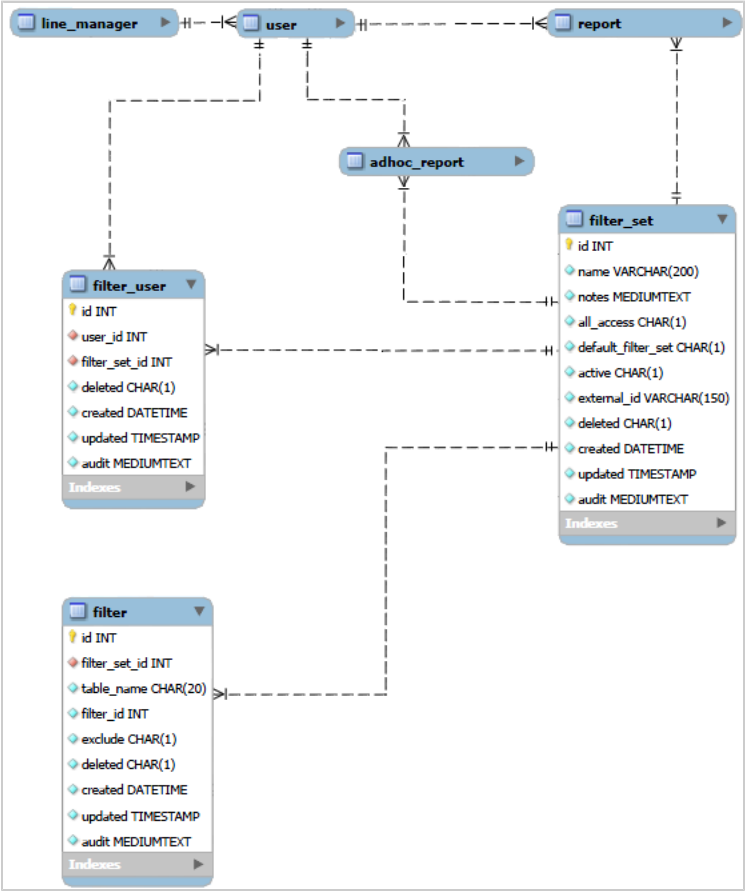
Data Dictionary	Related Diagrams
estimate, estimate_adjustment, estimate_expense, estimate_labor, estimate_markup, estimate_phase	Deal

Expense Policy



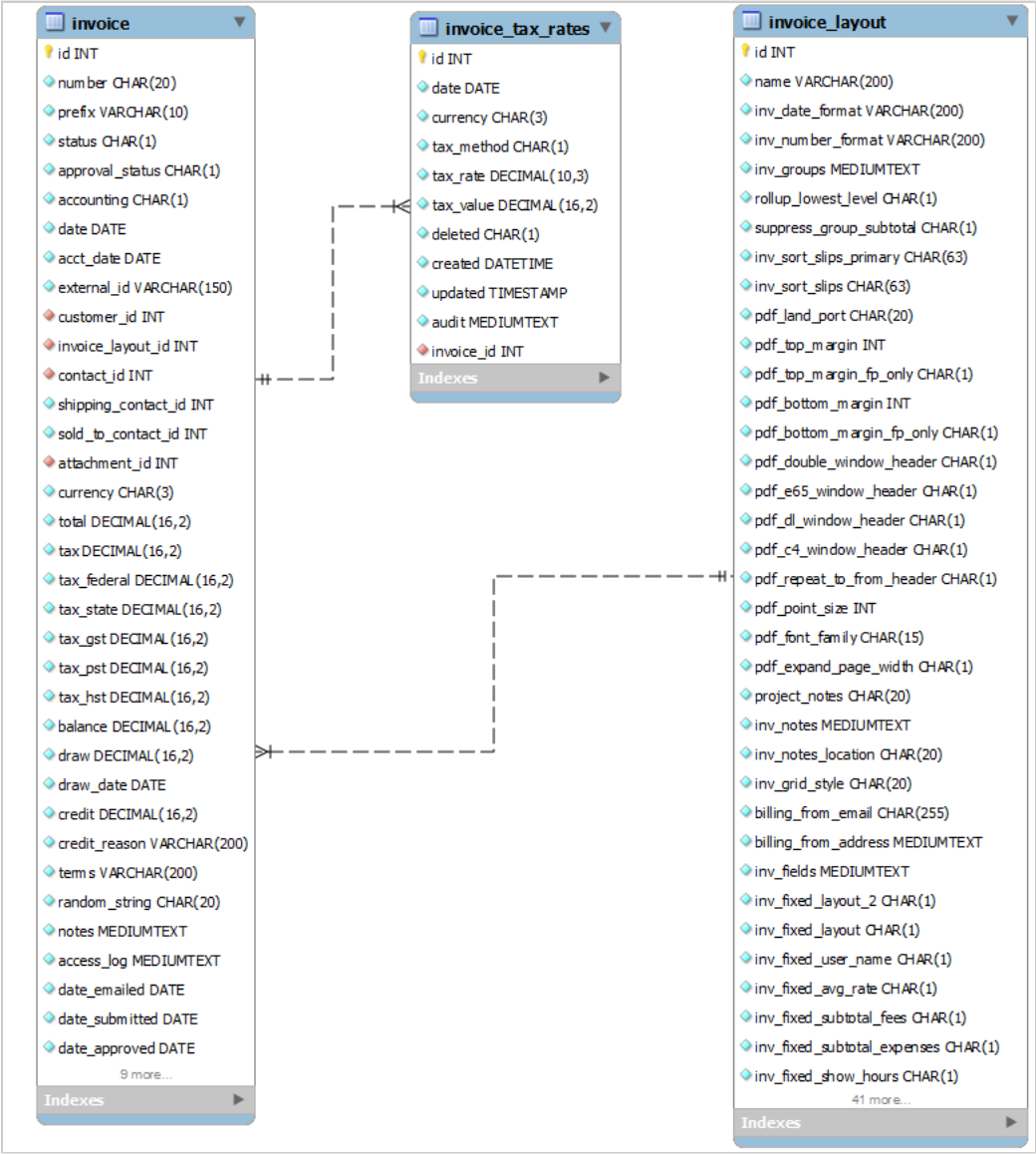
Data Dictionary	Related Diagrams
expense_policy, expense_policy_item	Customer, Item, Project

Filter



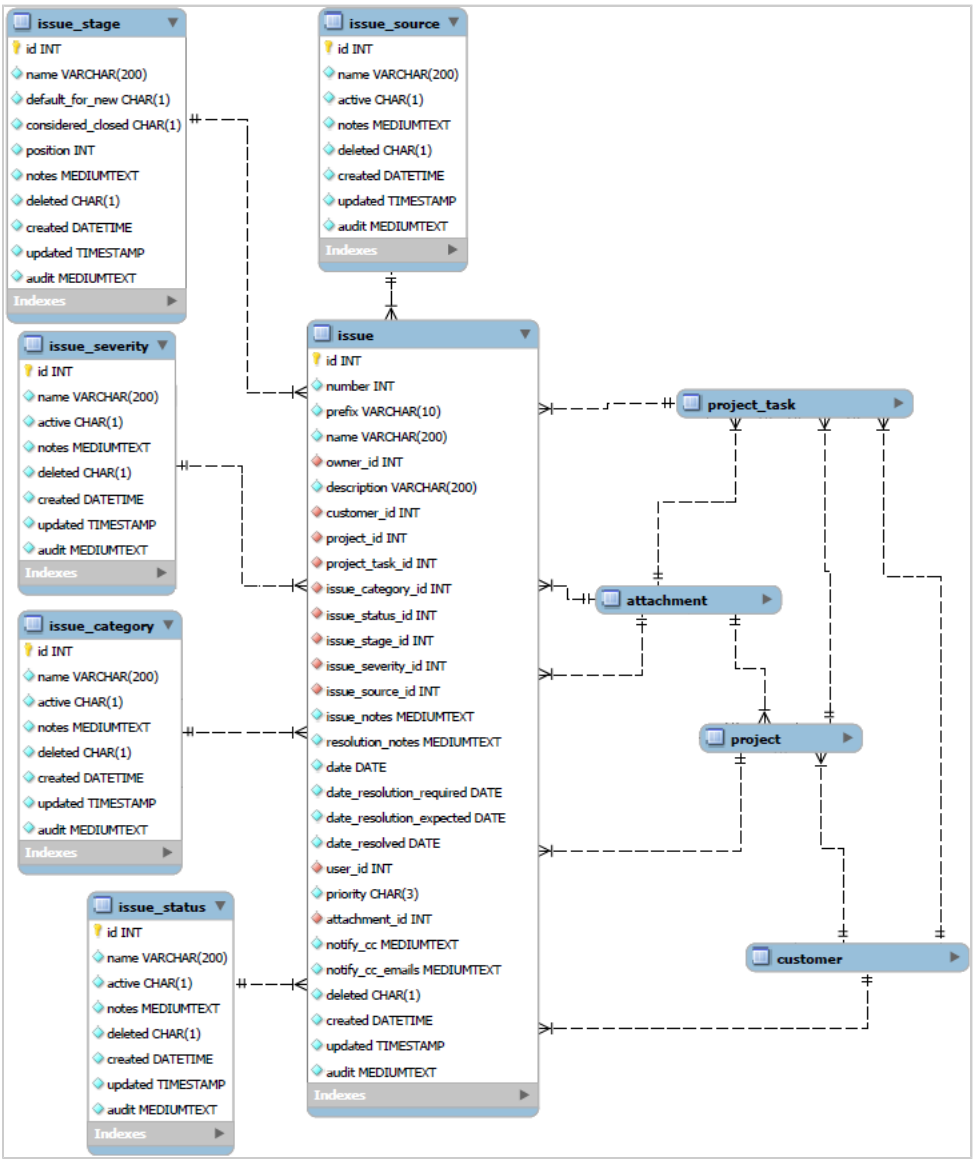
Data Dictionary	Related Diagrams
filter, filter_set, filter_user	Reporting, User

Invoice



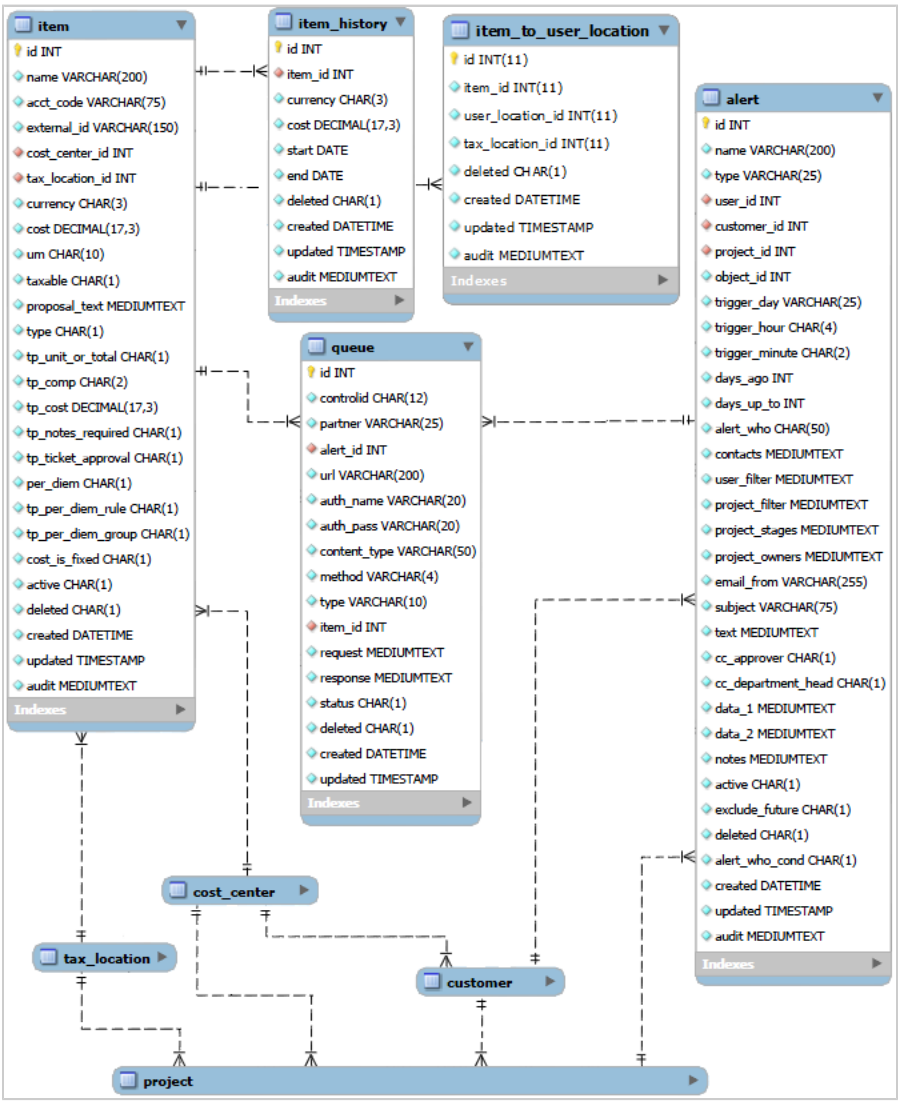
Data Dictionary	Related Diagrams
invoice, invoice_layout, invoice_tax_rates	Approval Process

Issue



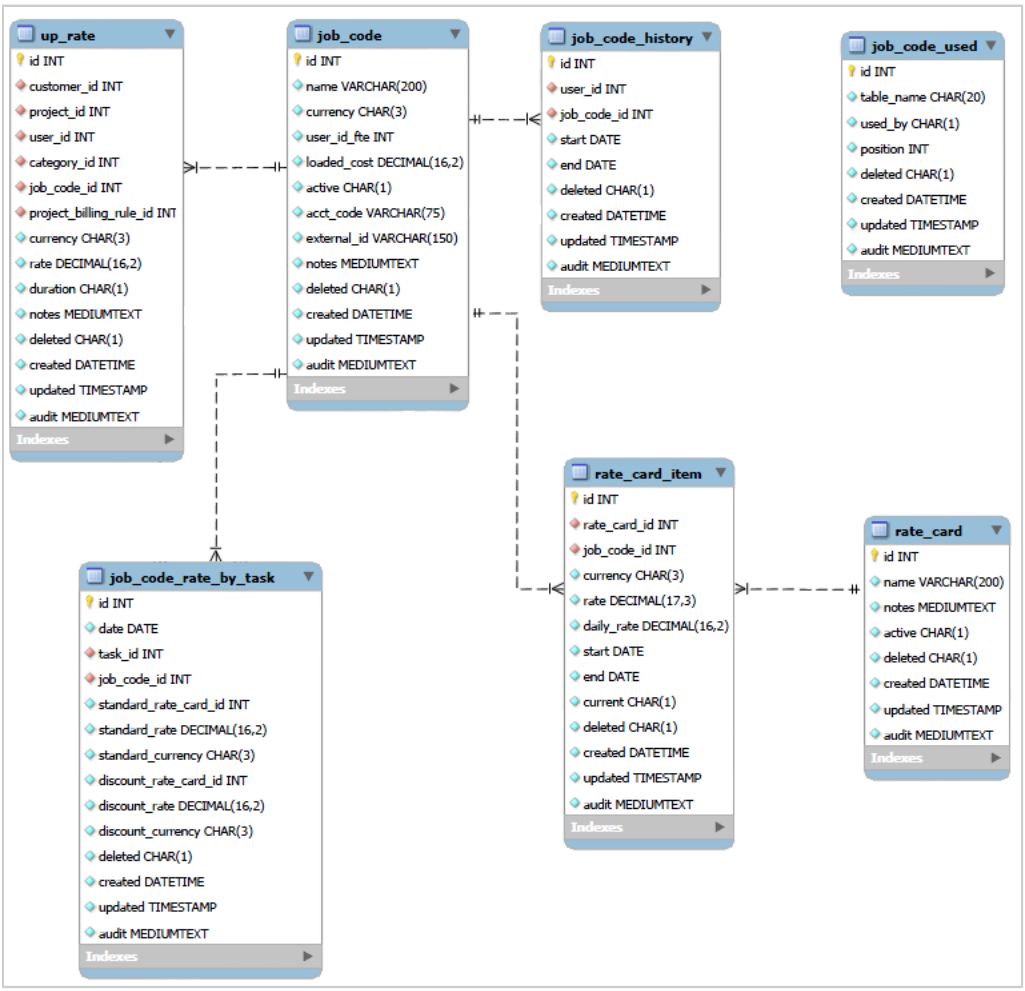
Data Dictionary	Related Diagrams
issue, issue_category, issue_severity, issue_source, issue_stage, issue_status	

Item



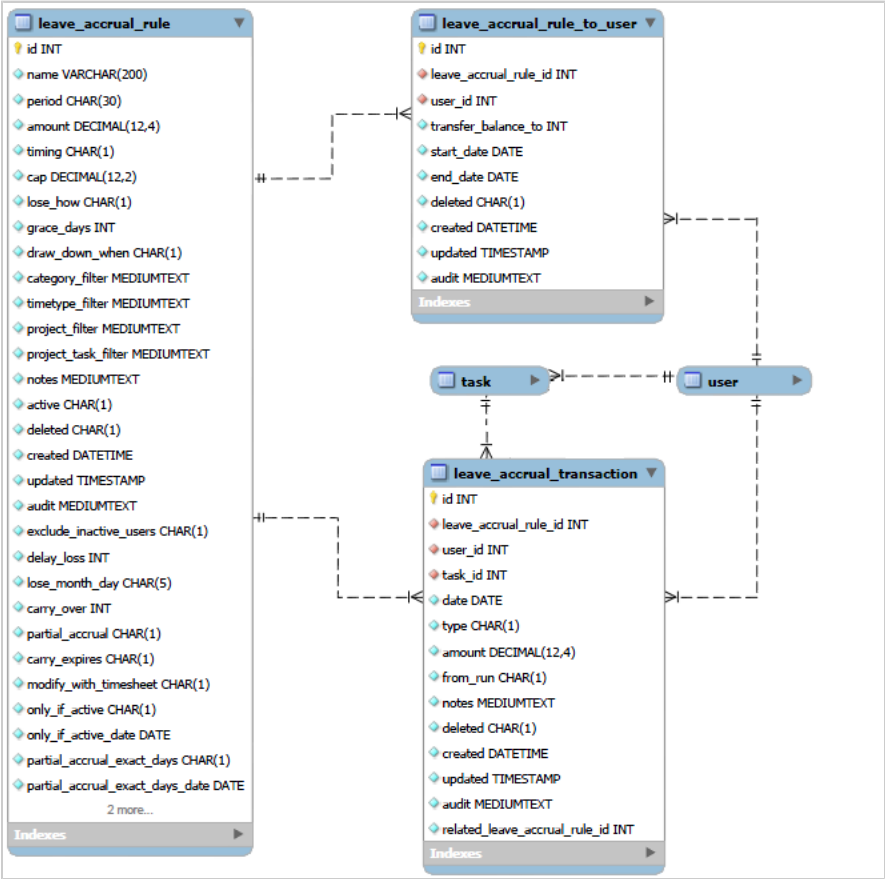
Data Dictionary	Related Diagrams
alert, item, item_to_user_location, item_history, queue	Cost, Estimate, Expense Policy, Proposal

Job Rate



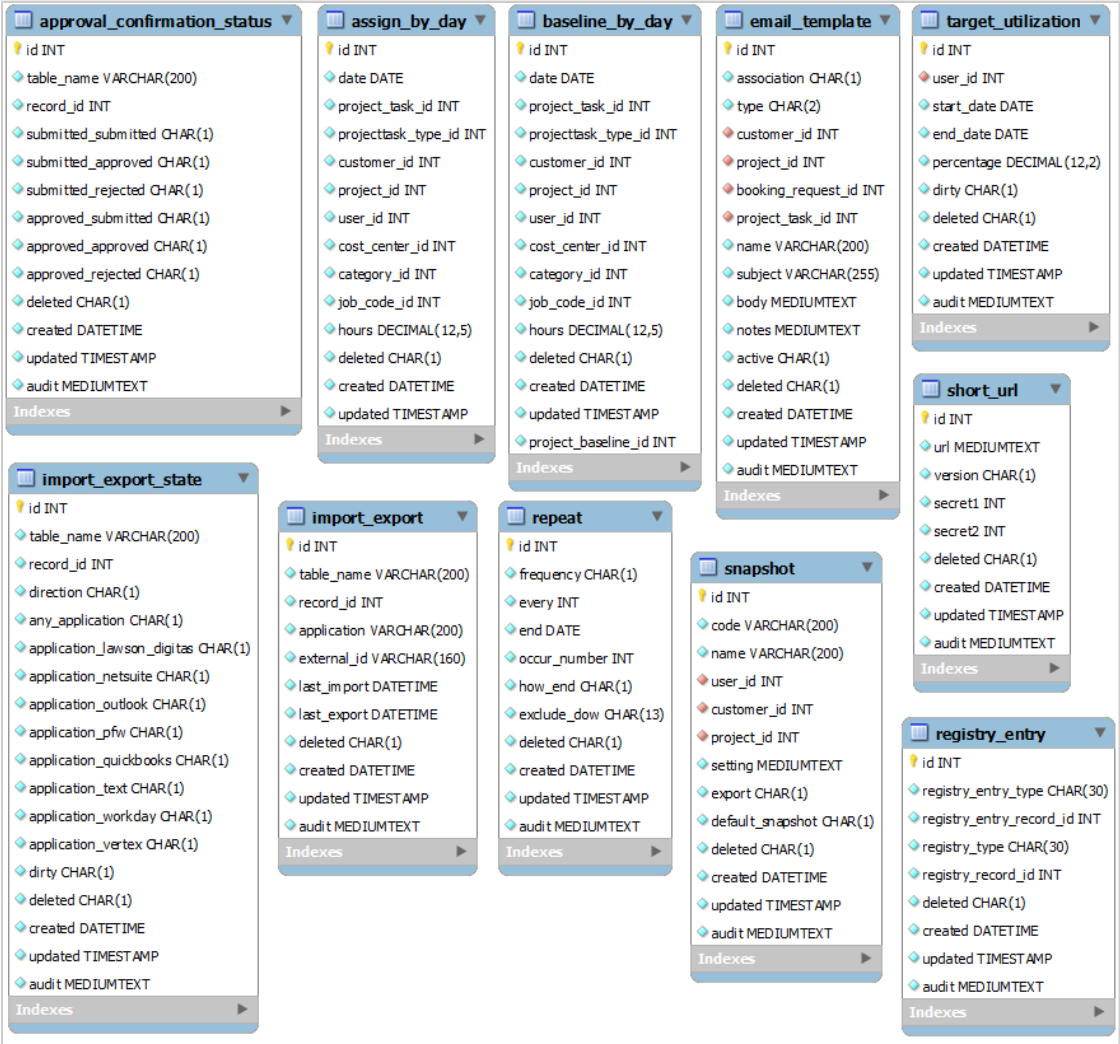
Data Dictionary	Related Diagrams
job_code, job_code_history, job_code_rate_by_task, job_code_used, rate_card, rate_card_item, up_rate	Project Pricing

Leave Accrual



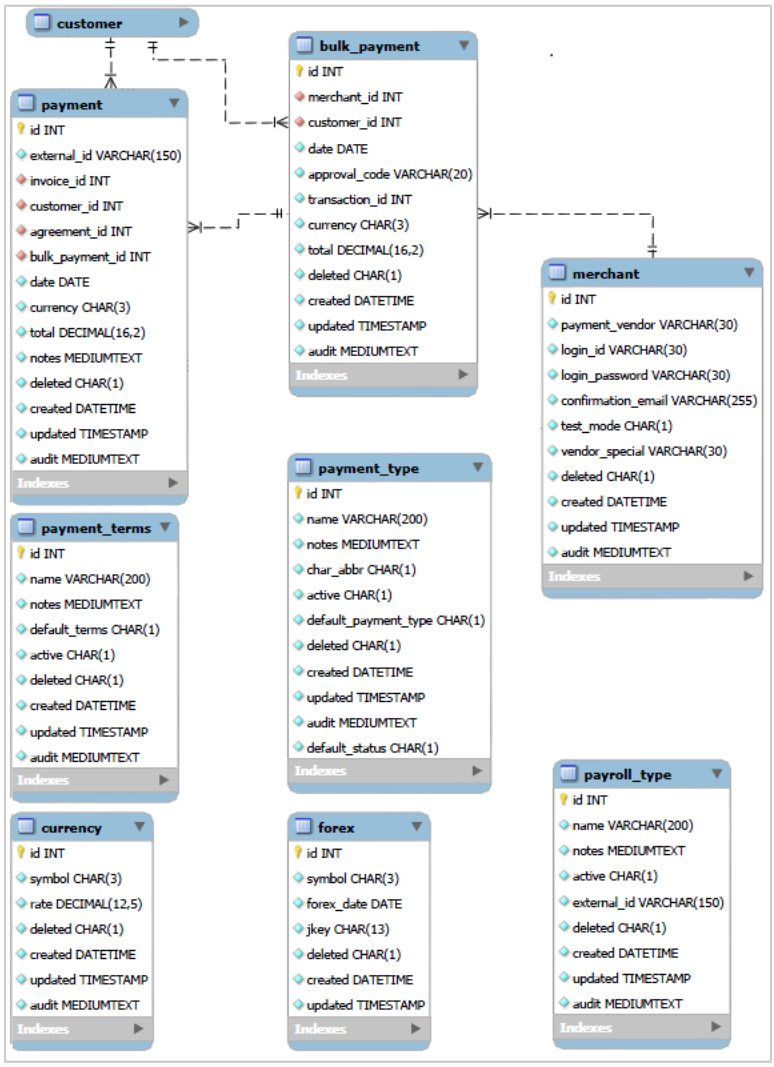
Data Dictionary	Related Diagrams
leave_accrual_rule, leave_accrual_rule_to_user, leave_accrual_transaction	

Miscellaneous



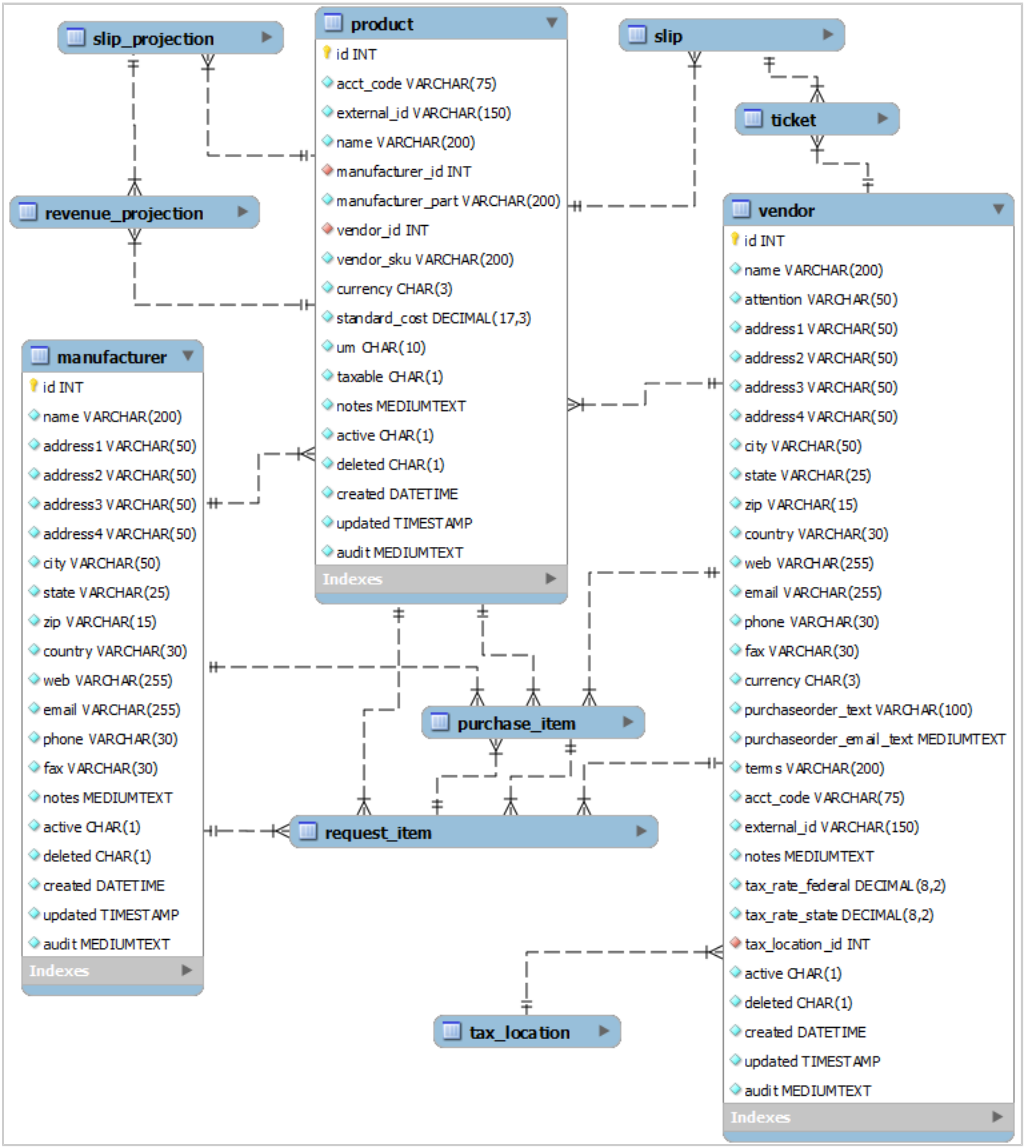
Data Dictionary	Related Diagrams
approval_confirmation_status, assign_by_day, baseline_by_day, email_template, import_export, import_export_state, repeat, short_url, snapshot, registry_entrytarget_utilization	

Payment



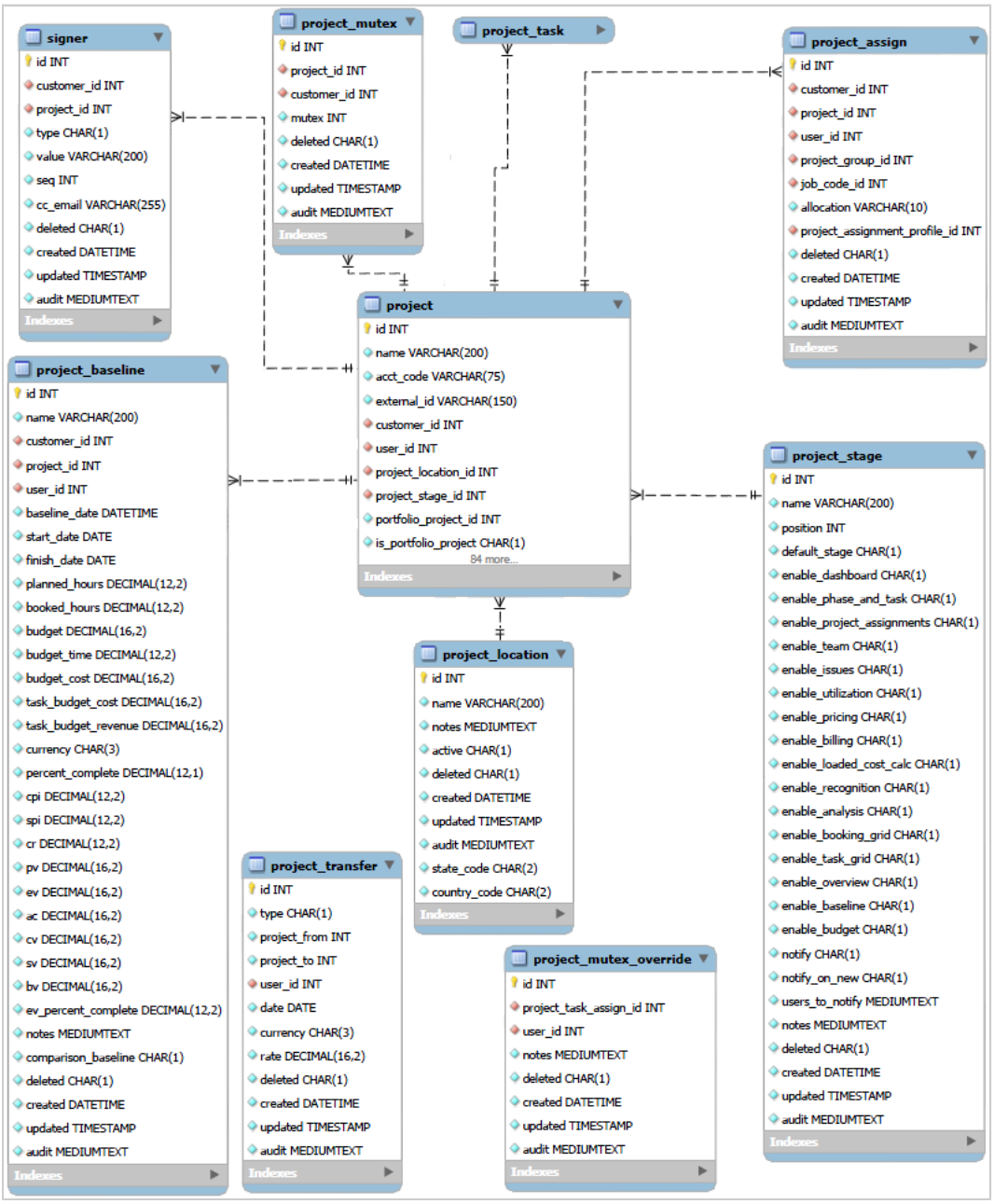
Data Dictionary	Related Diagrams
bulk_payment, currency, forex, merchant, payment, payment_terms, payment_type, payroll_type	Billing Customer, Slip, Ticket

Product



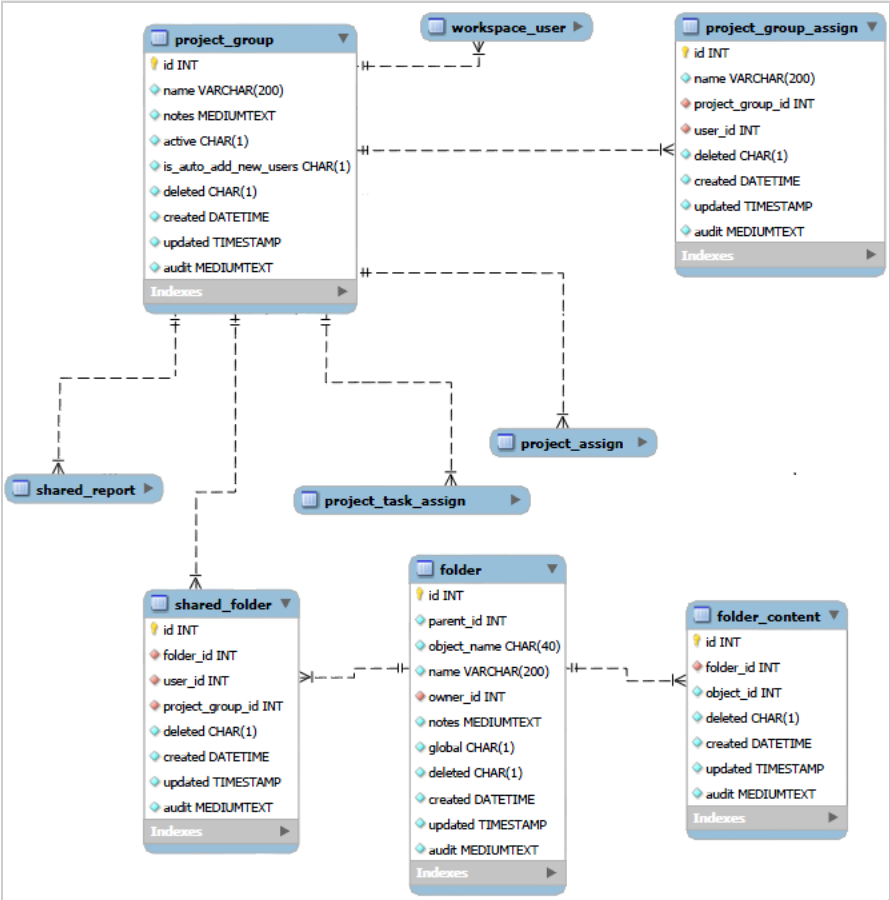
Data Dictionary	Related Diagrams
manufacturer, product, vendor	Purchase Item, Slip, Tax, Ticket

Project



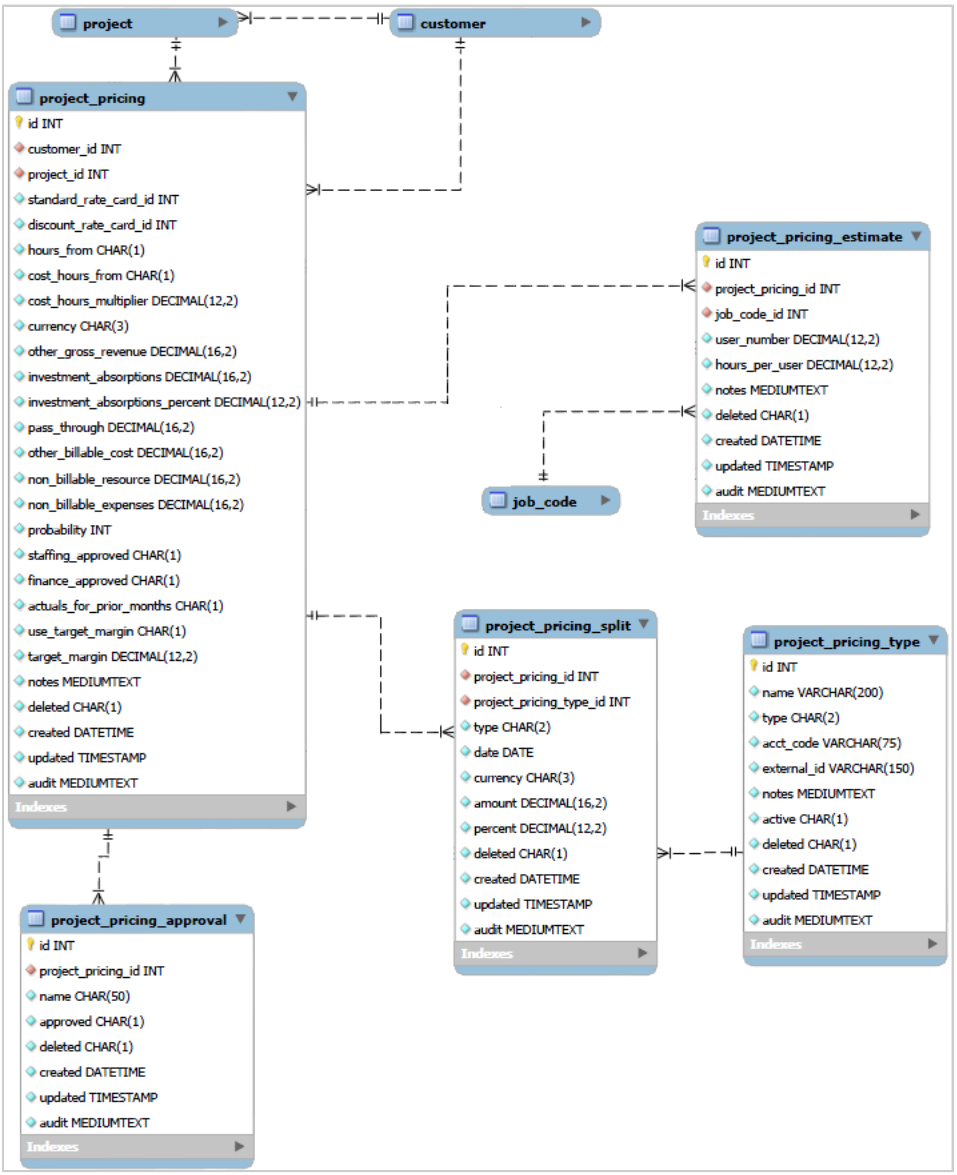
Data Dictionary	Related Diagrams
product, project_assign, project_baseline, project_location, project_mutex, project_mutex_override, project_stage, project_transfer, signer	Customer, Project Group, Project Pricing, Project Task

Project Group



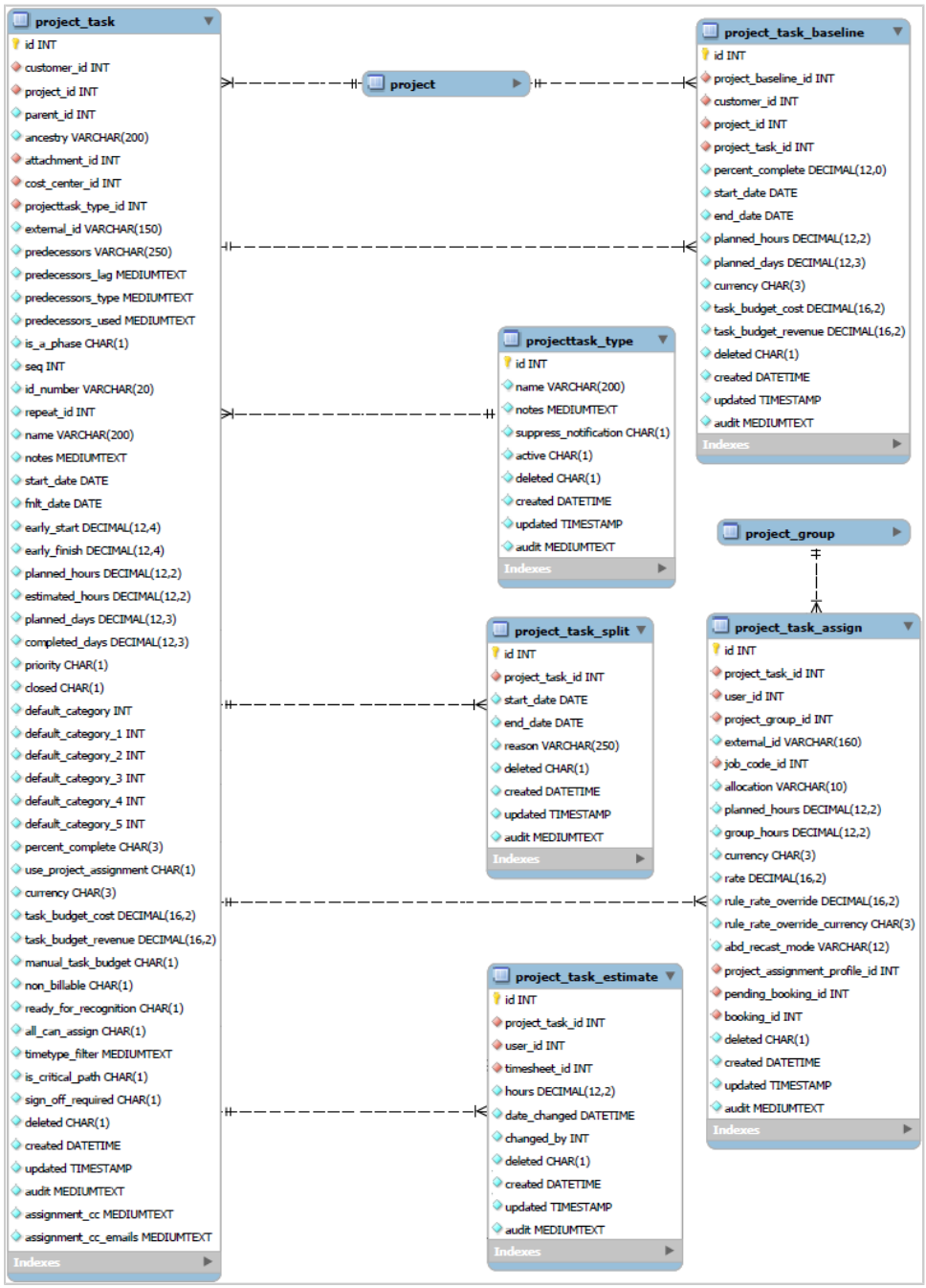
Data Dictionary	Related Diagrams
folder, folder_content, project_group, project_group_assign, shared_folder	Project Task, Reporting, Workspace

Project Pricing



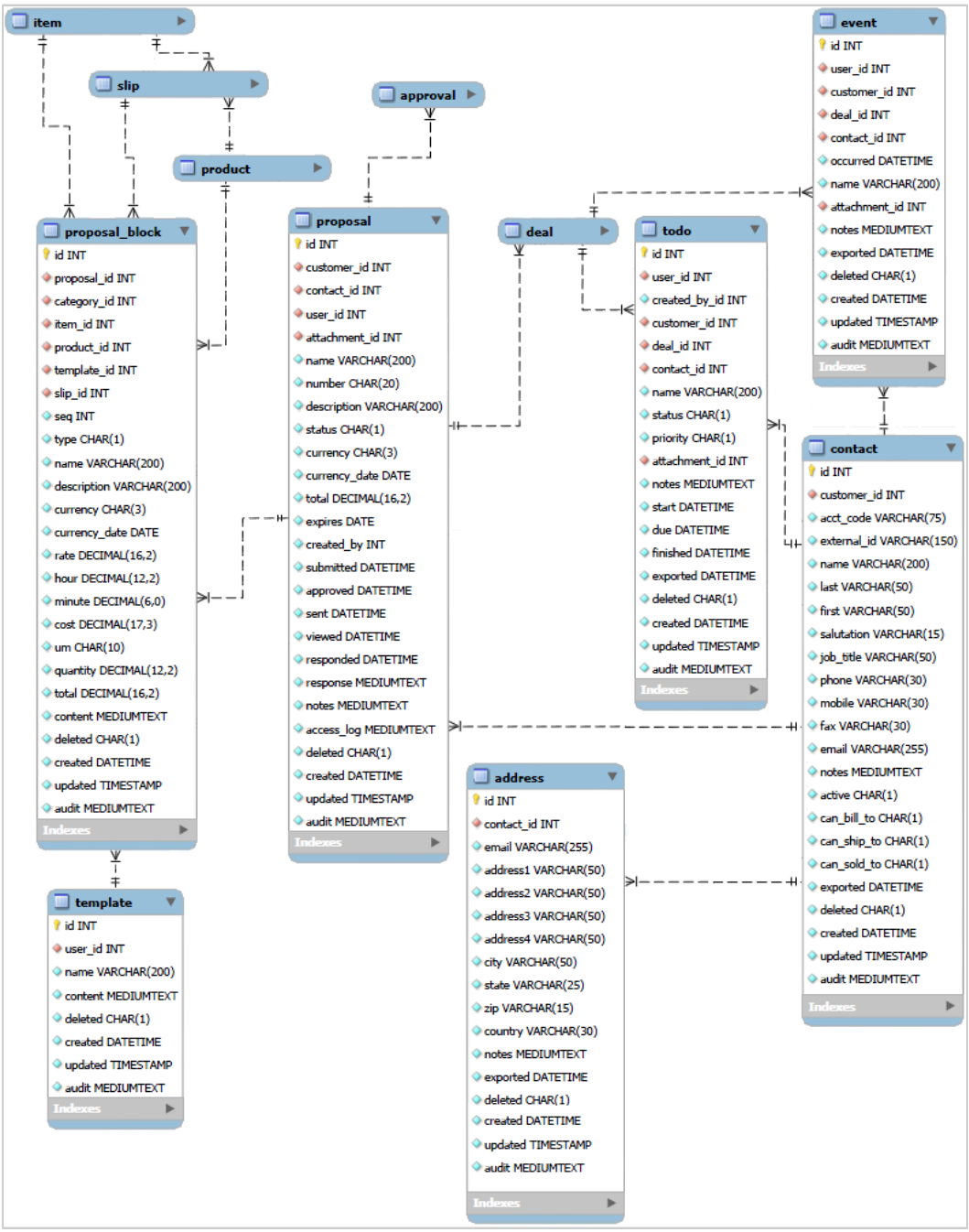
Data Dictionary	Related Diagrams
project_pricing, project_pricing_approval, project_pricing_estimate, project_pricing_split, project_pricing_type	

Project Task



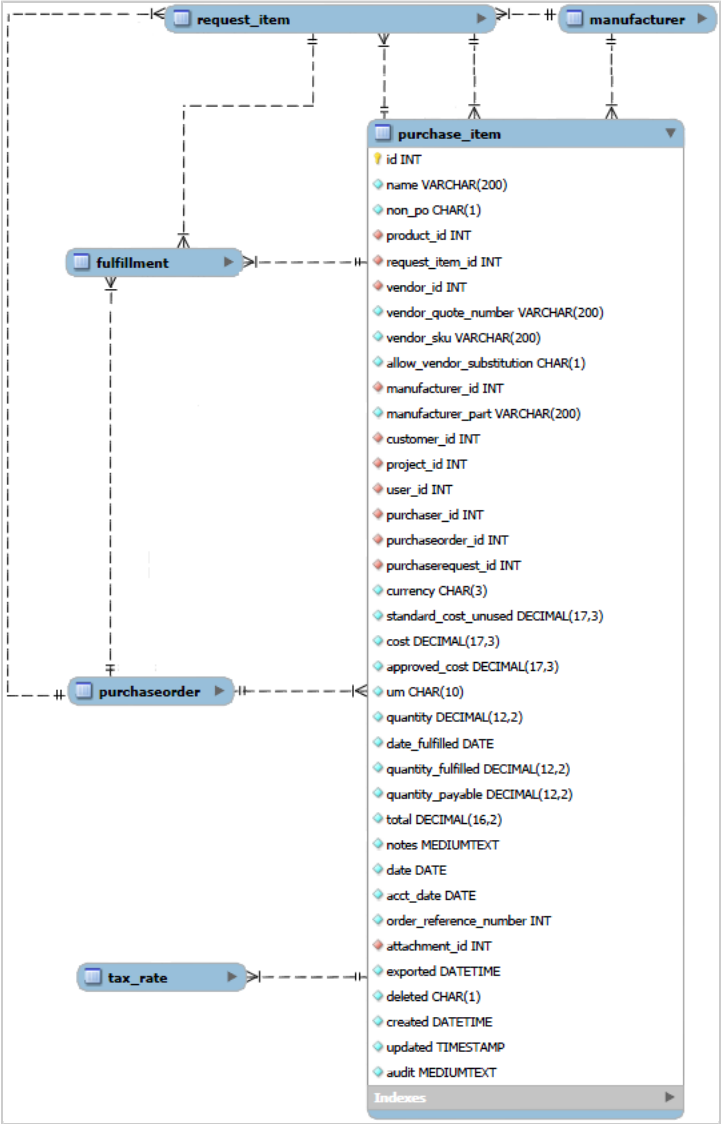
Data Dictionary	Related Diagrams
project_task, project_task_assign, project_task_baseline, project_task_estimate, project_task_split, projecttask_type	Issue, Project, Reporting, Resource Profile, Schedule, Slip, Time

Proposal



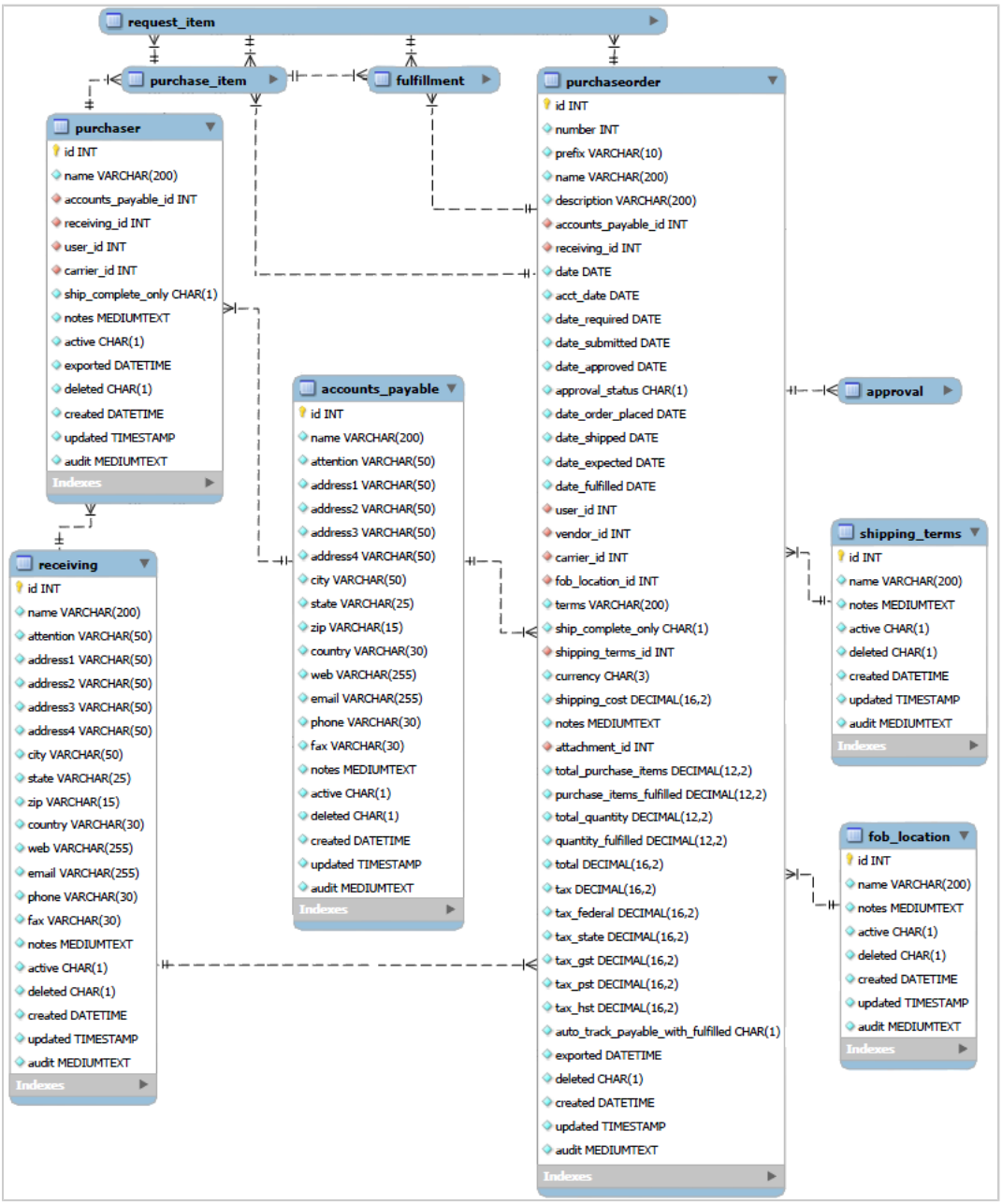
Data Dictionary	Related Diagrams
address, contact, event, template, todo, proposal, proposal_block	Approval Process, Deal, Item, Product, Slip

Purchase Item



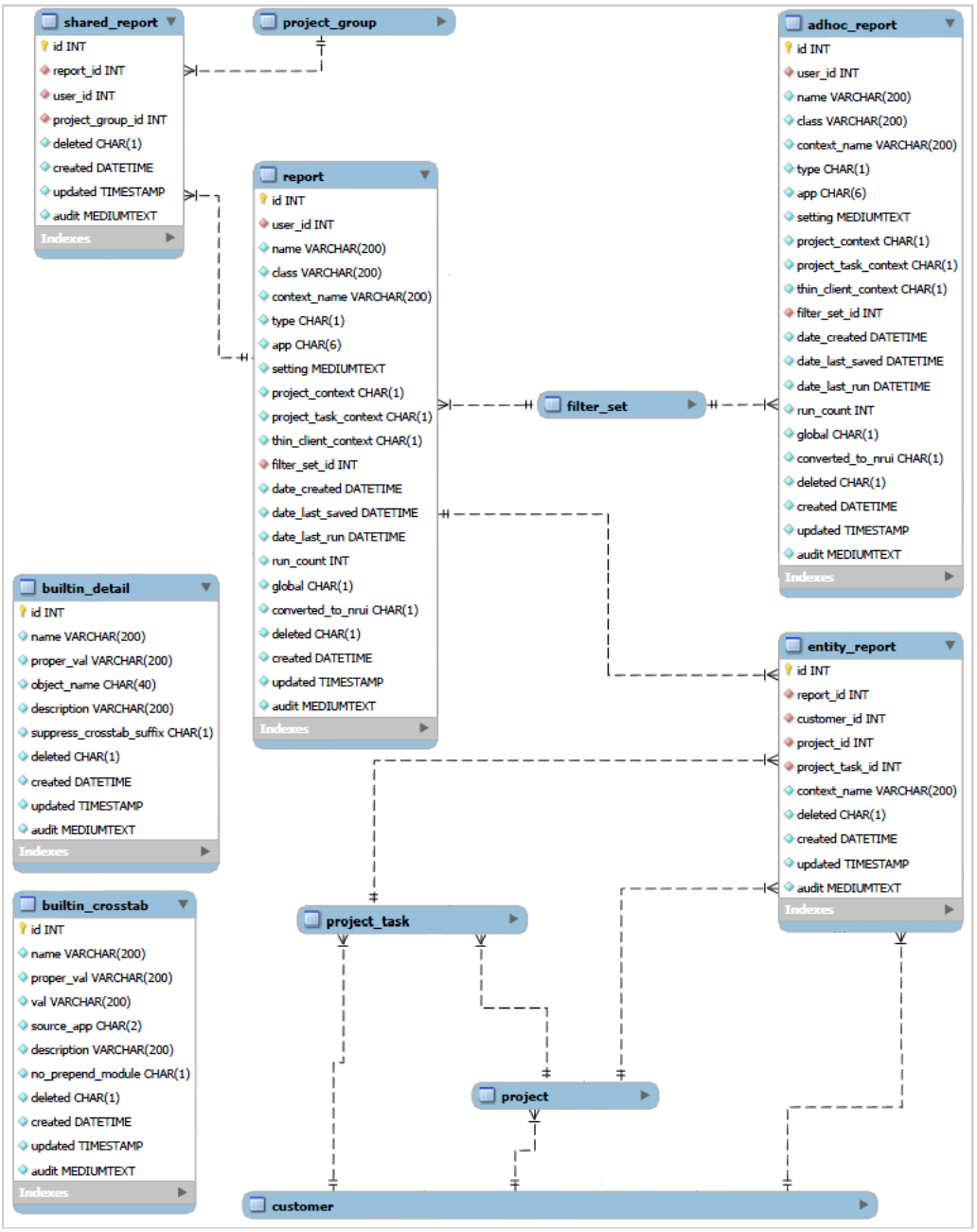
Data Dictionary	Related Diagrams
purchase_item	Customer, Project, Purchase Order, Request Item

Purchase Order



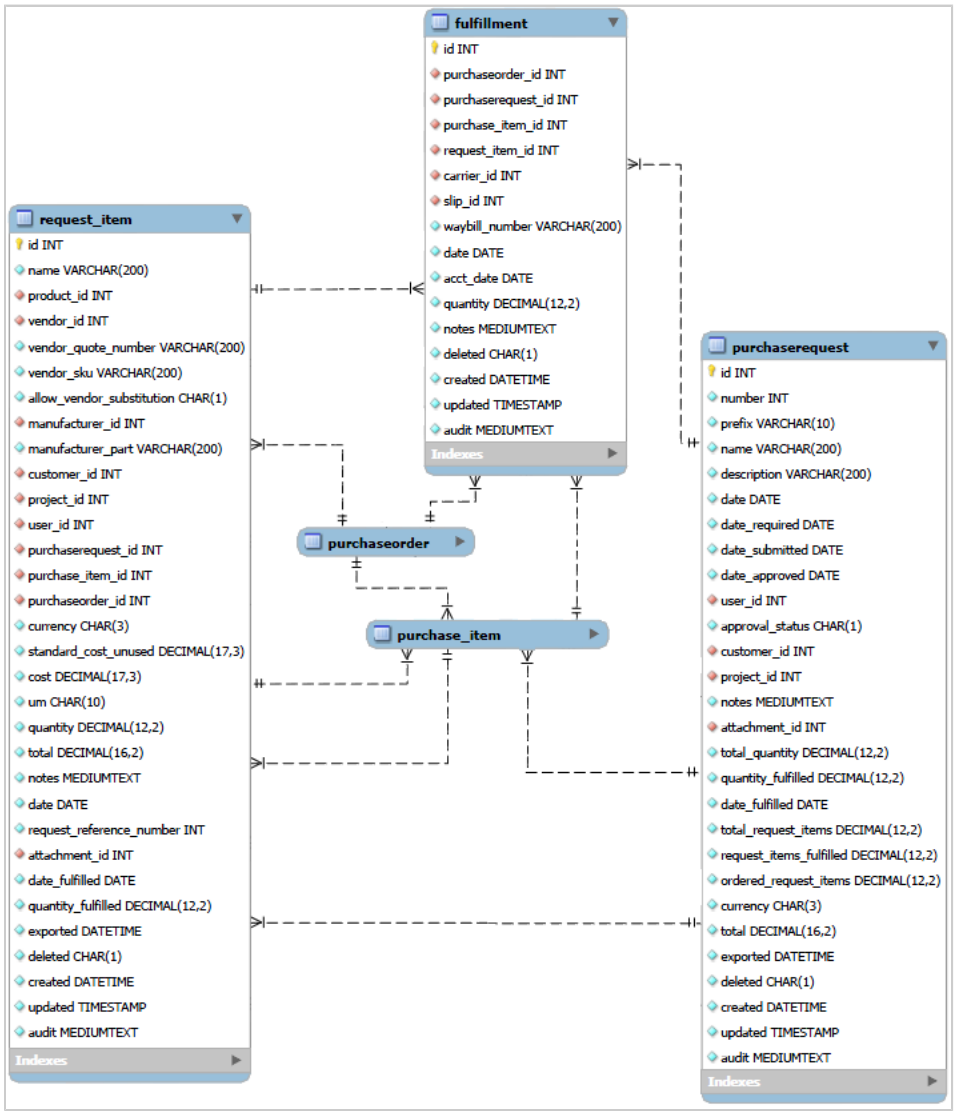
Data Dictionary	Related Diagrams
accounts_payable, fob_location, purchaseorder, purchaser, receiving, shipping_terms	Purchase Item, Request Item

Reporting



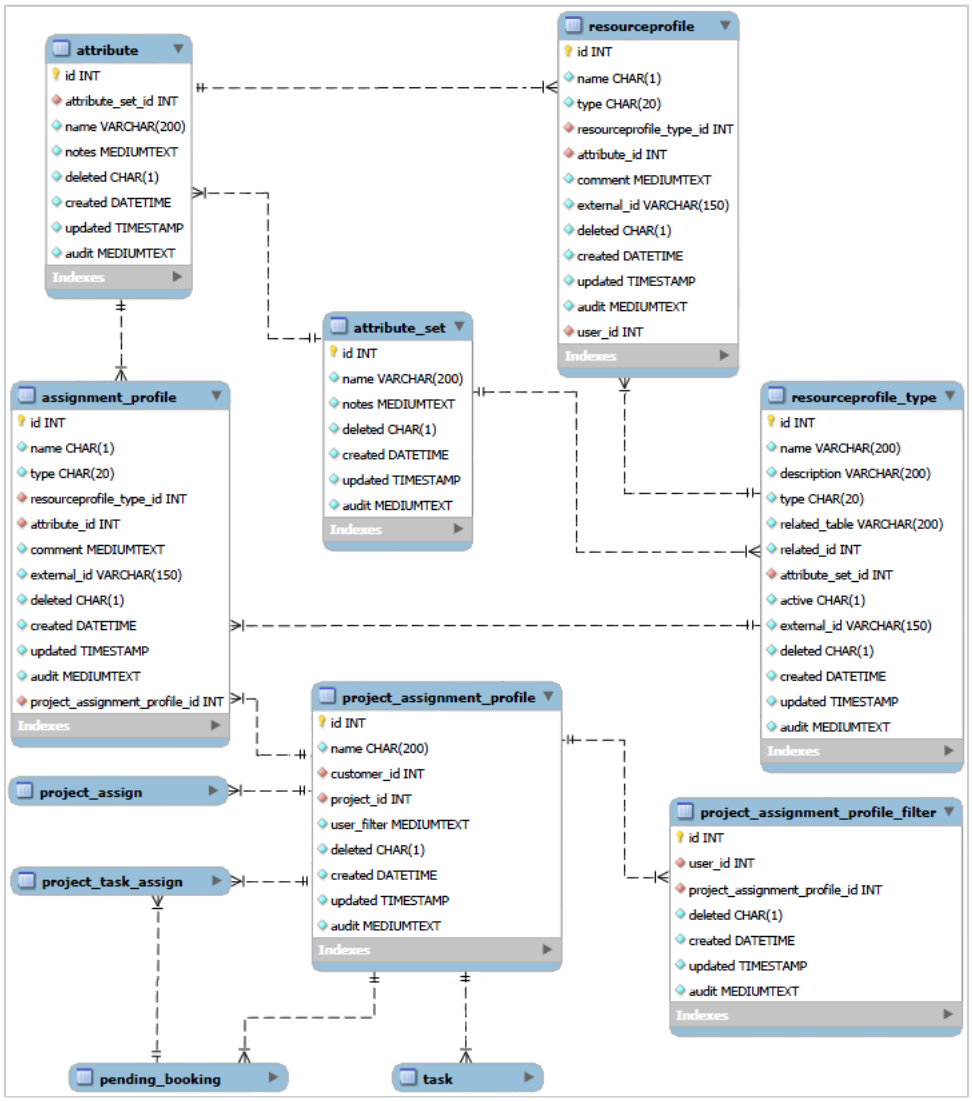
Data Dictionary	Related Diagrams
adhoc_report, builtin_crosstab, builtin_detail, entity_report, shared_report	

Request Item



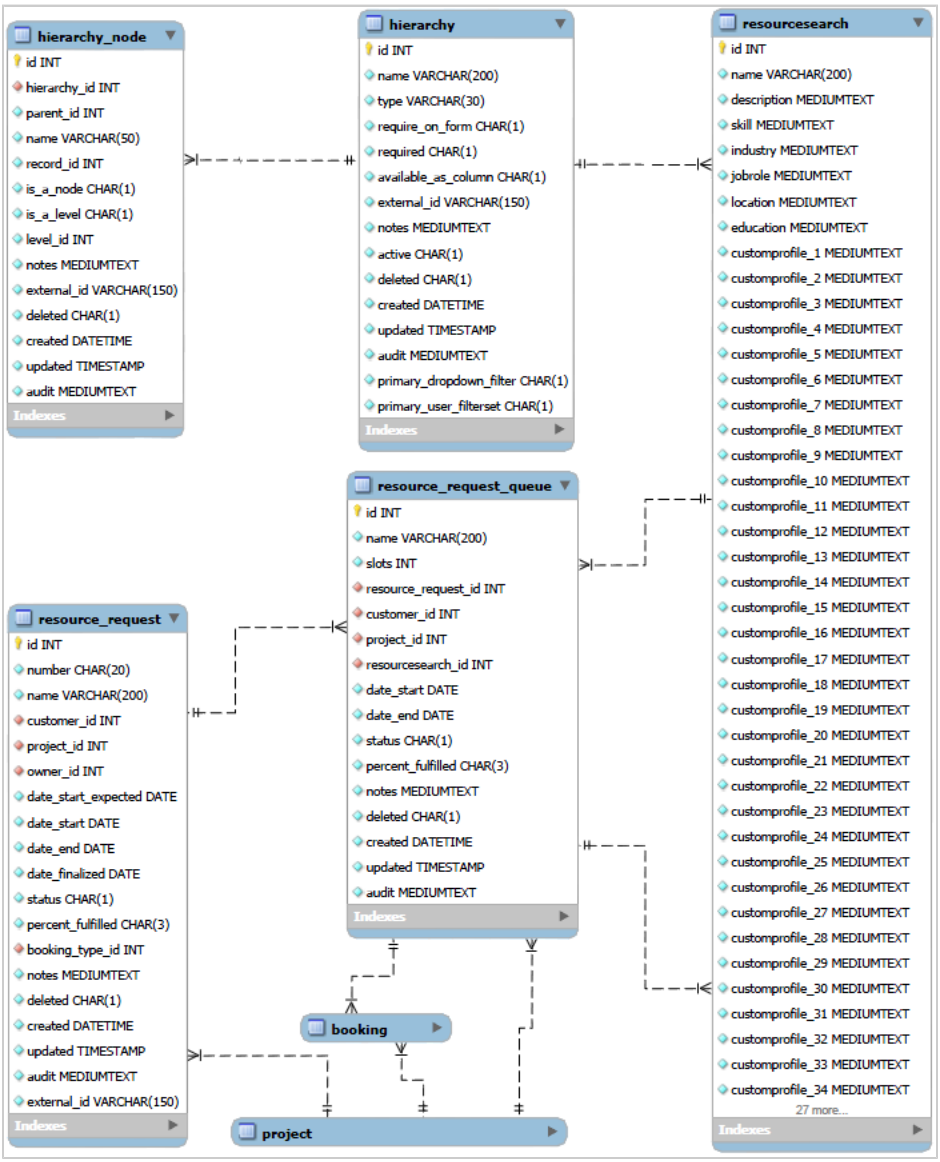
Data Dictionary	Related Diagrams
fulfillment, purchaserequest, request_item	Purchase Item, Purchase Order

Resource Profile



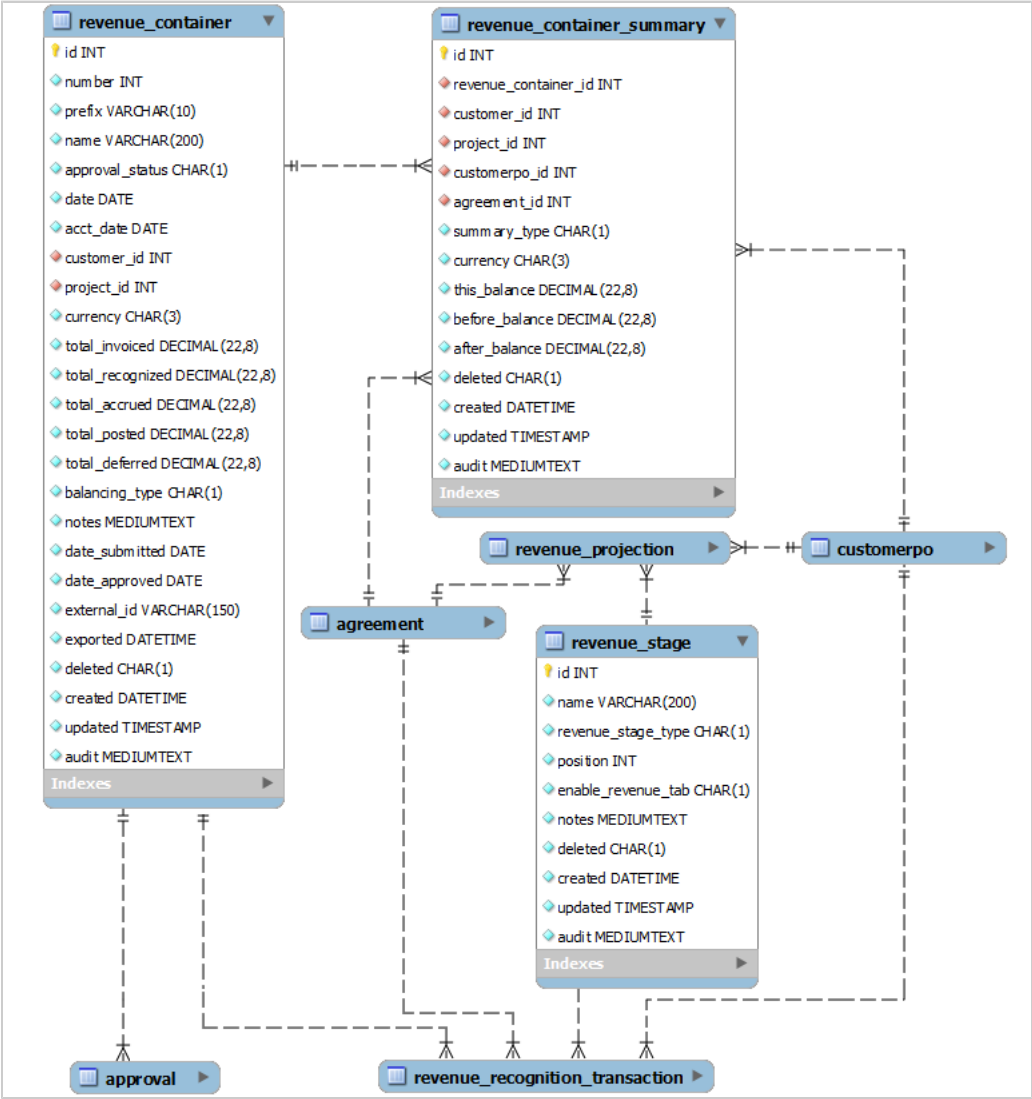
Data Dictionary	Related Diagrams
assignment_profile, attribute, attribute_set, project_assignment_profile, project_assignment_profile_filter, resourceprofile, resourceprofile_type	Booking, Customer, Project, Project Task

Resource Request



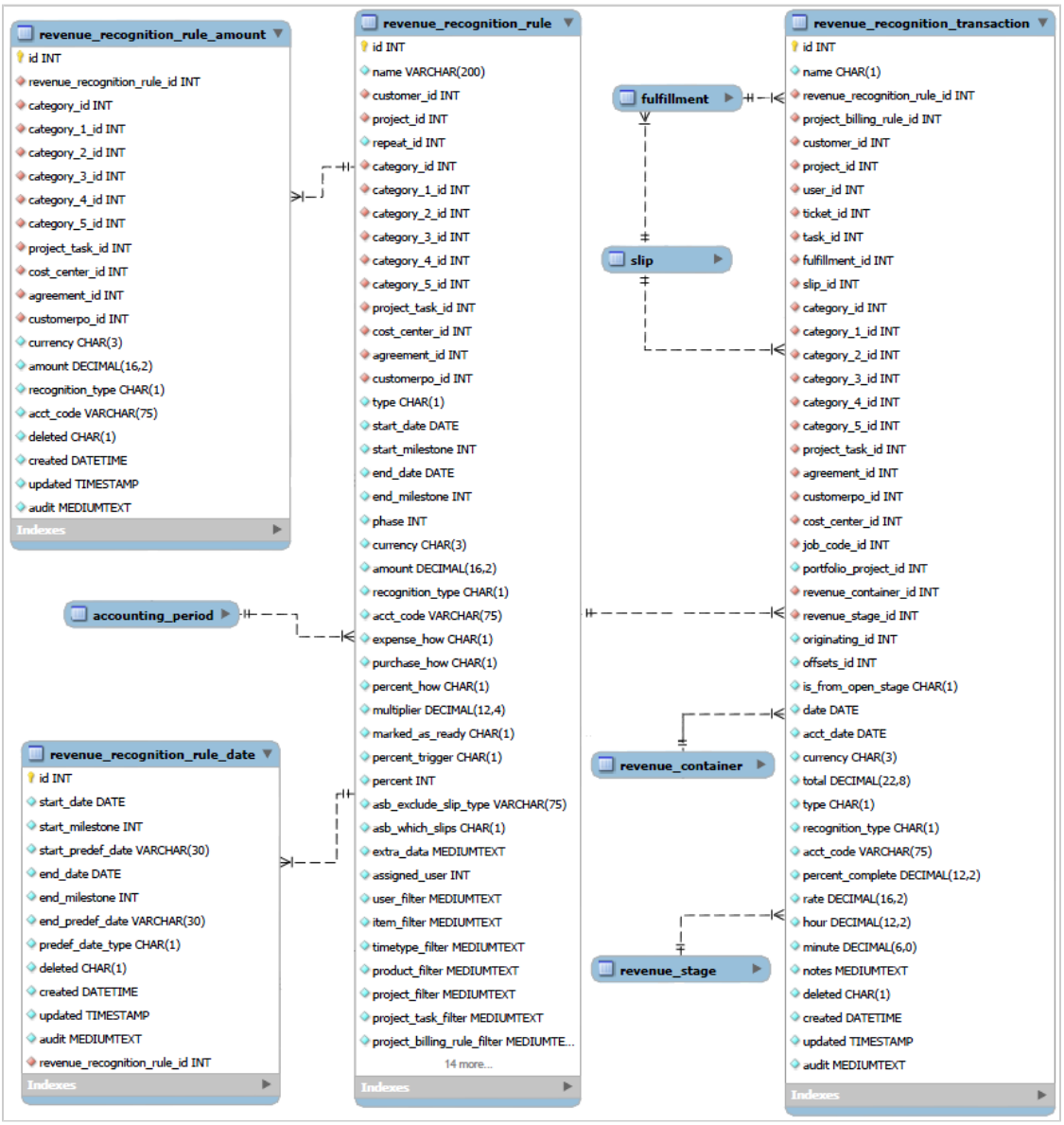
Data Dictionary	Related Diagrams
hierarchy, hierarchy_node, resource_request, resource_request_queue, resourcesearch	

Revenue Container



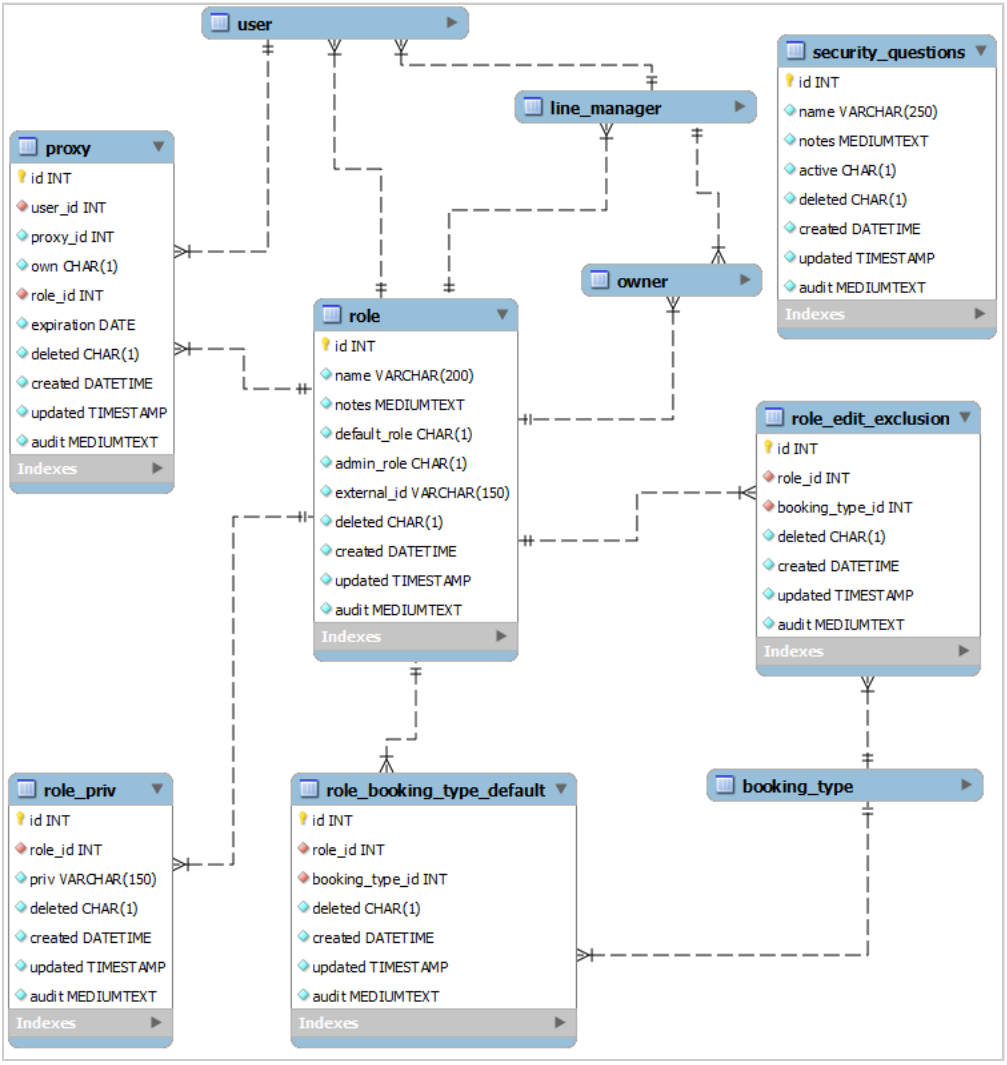
Data Dictionary	Related Diagrams
revenue_container, revenue_container_summary, revenue_stage	Approval Process, Revenue Recognition

Revenue Recognition



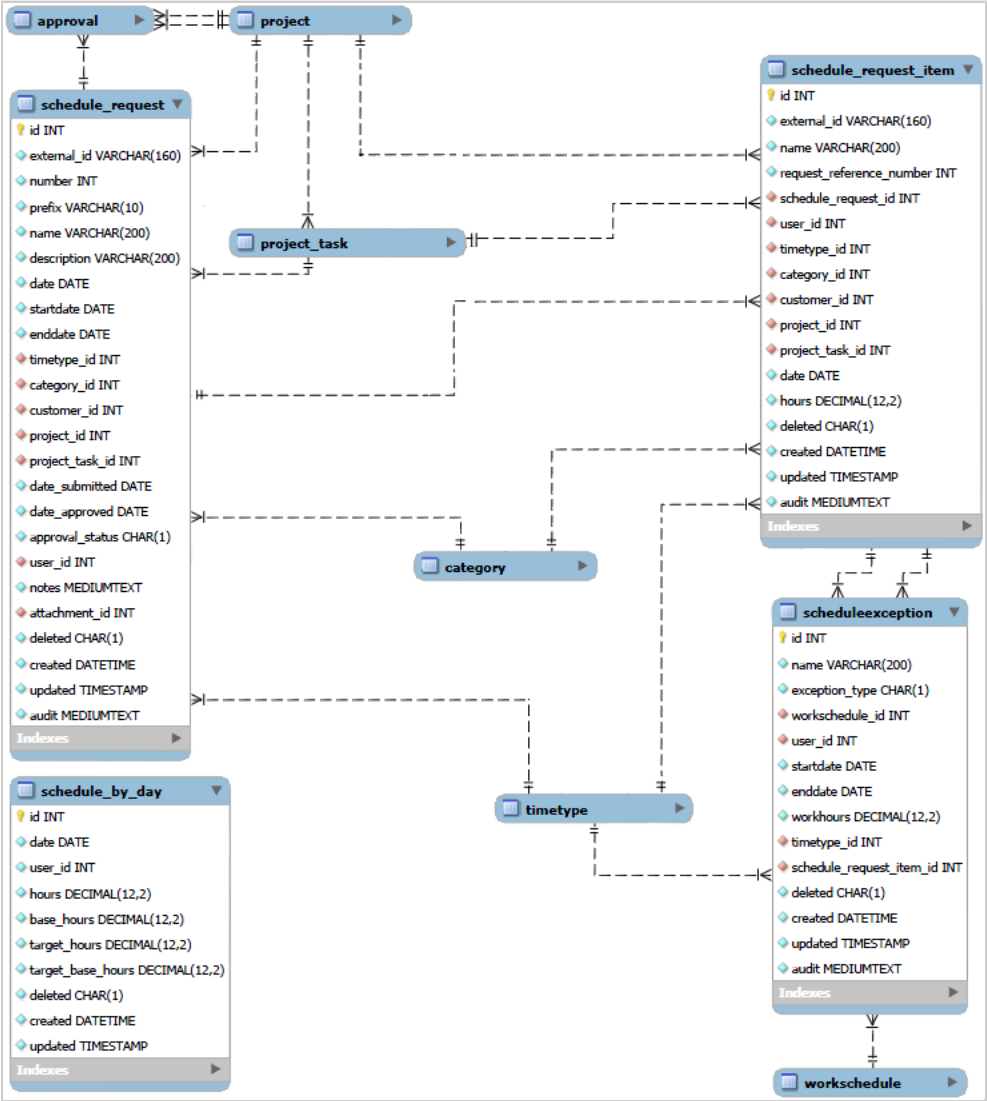
Data Dictionary	Related Diagrams
revenue_recognition_rule, revenue_recognition_rule_amount, revenue_recognition_rule_date, revenue_recognition_transaction	Accounting Period, Cost, Revenue Container

Role



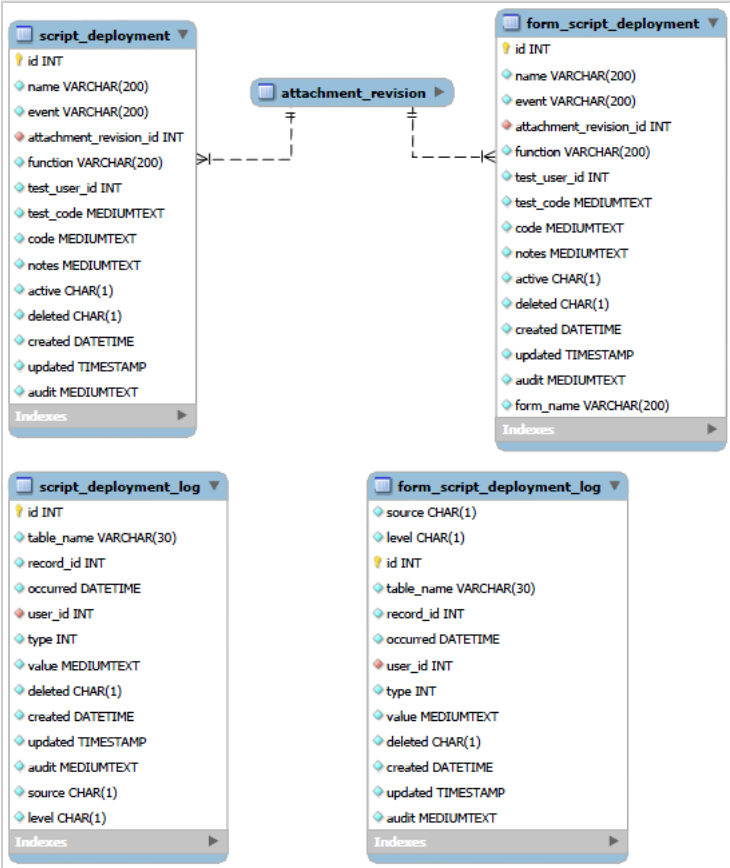
Data Dictionary	Related Diagrams
proxy, role, role_booking_type_default, role_edit_exclusion, role_priv, security_questions	

Schedule



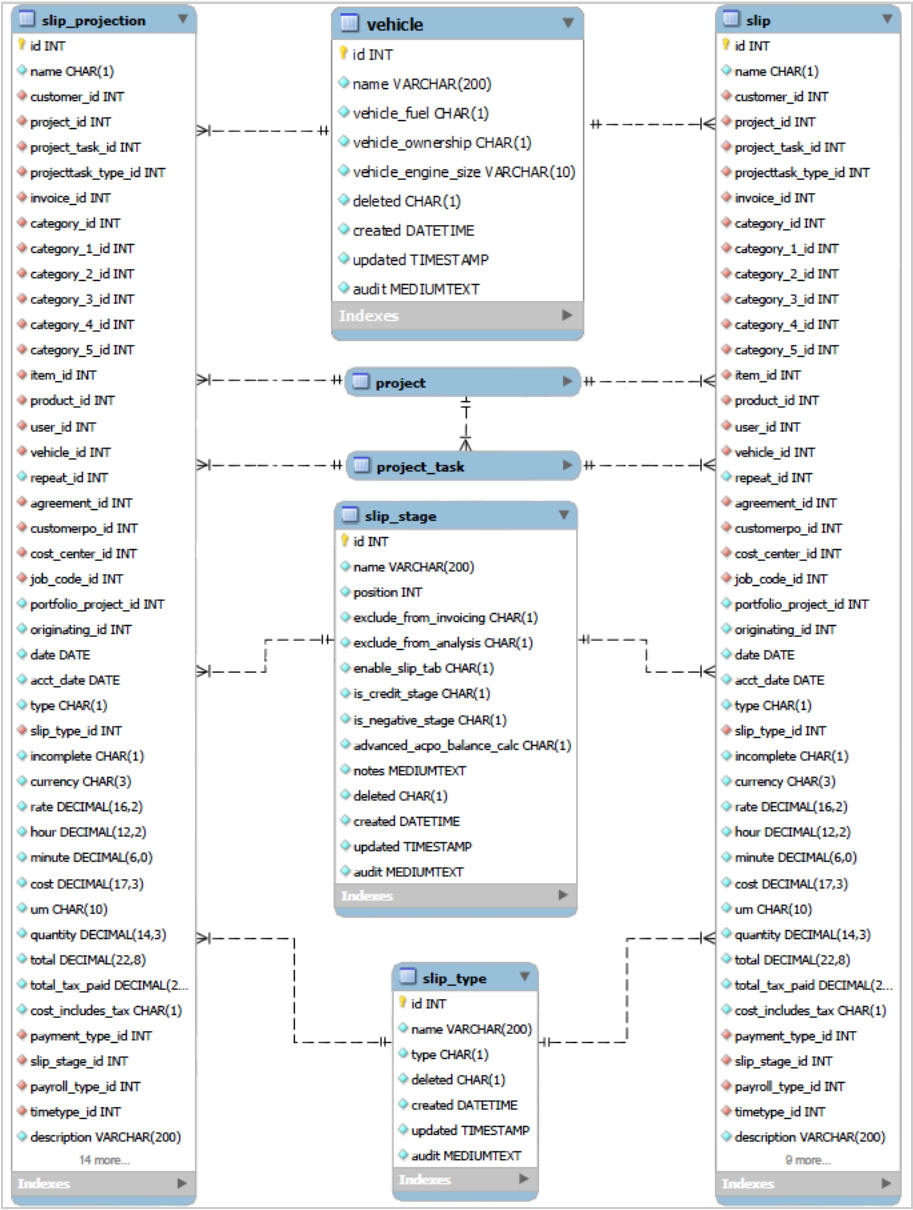
Data Dictionary	Related Diagrams
schedule_by_day, schedule_request, schedule_request_item, scheduleexception	Approval Process, Category, Project, Project Task, Time

Script



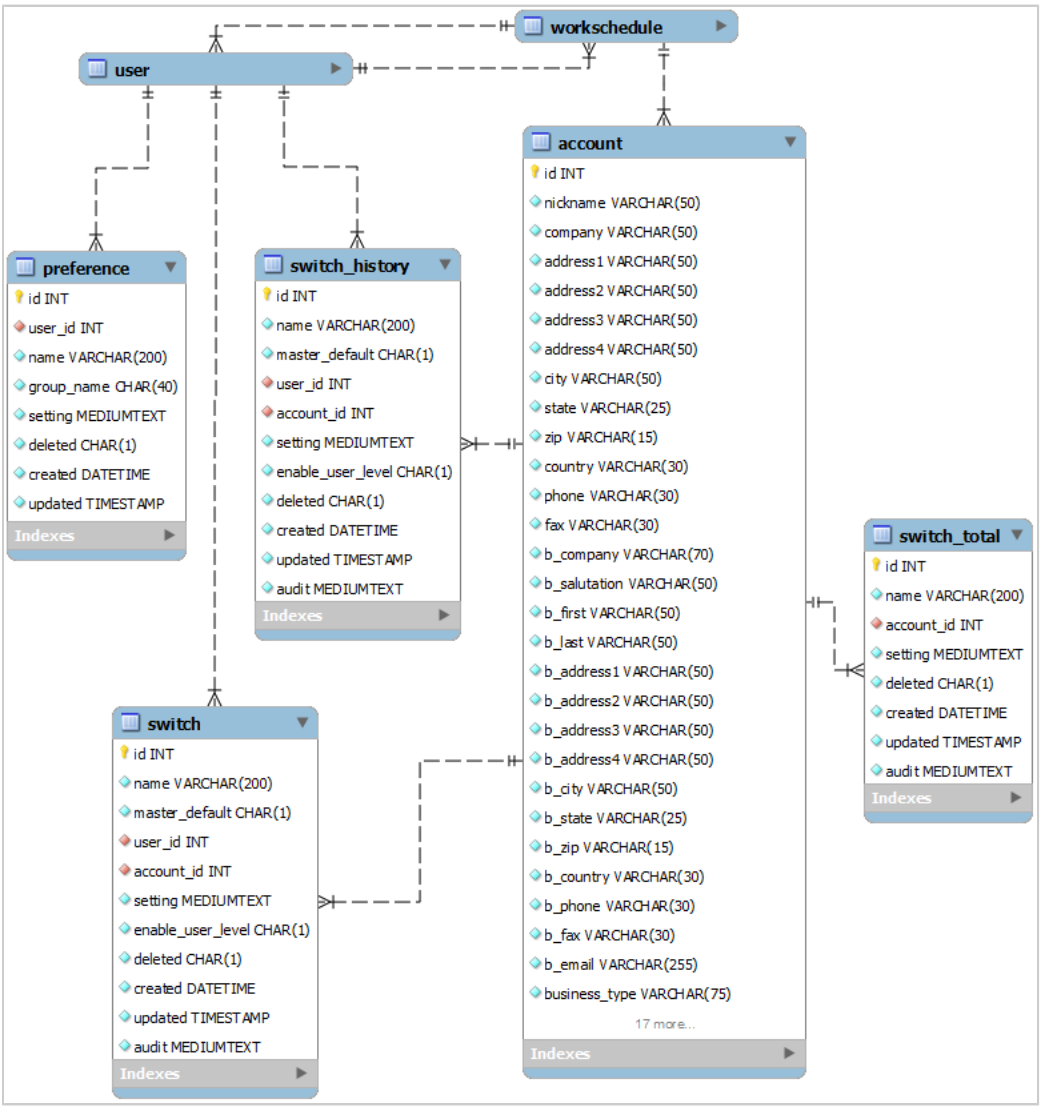
Data Dictionary	Related Diagrams
form_script_deployment, form_script_deployment_log, script_deployment, script_deployment_log	Attachment, User

Slip



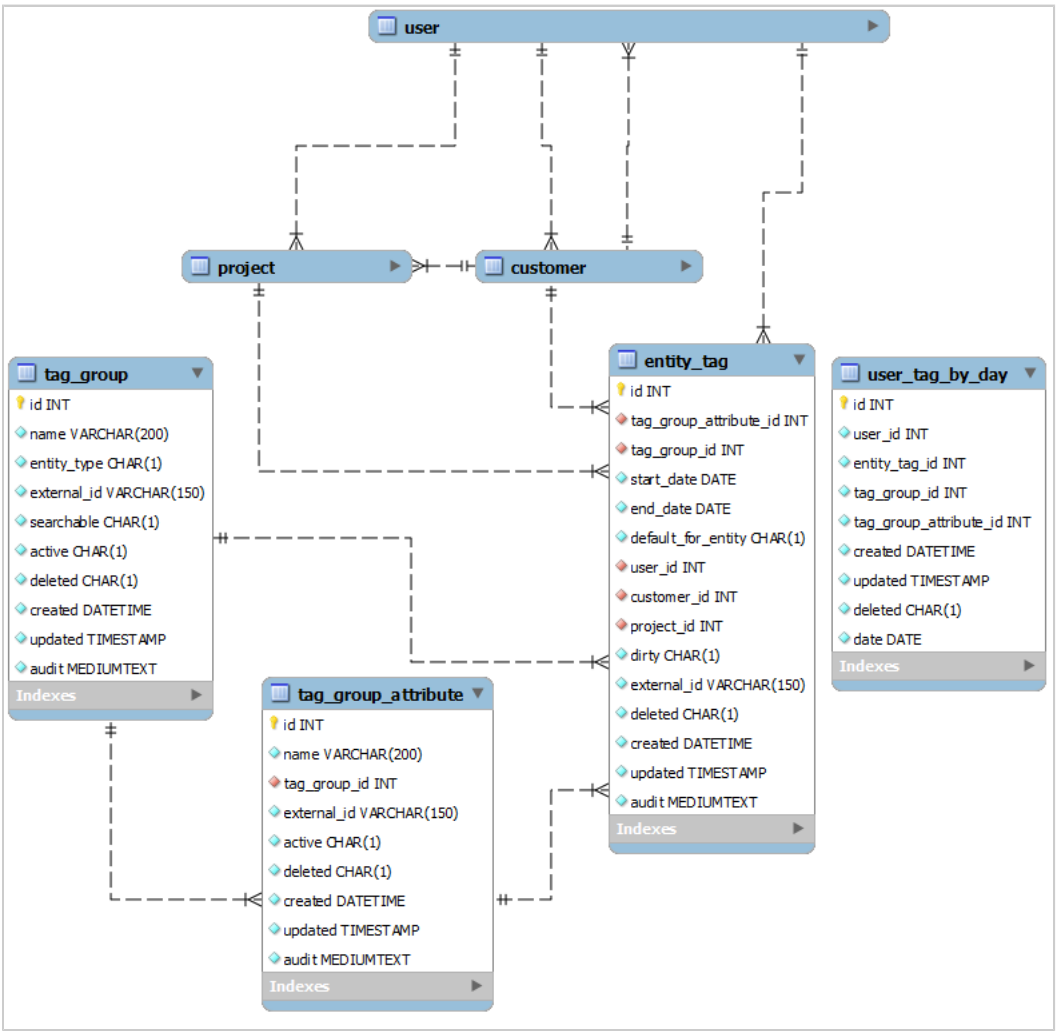
Data Dictionary	Related Diagrams
slip, slip_projection, slip_stage, slip_type, vehicle	Product, Proposal, Revenue Recognition, Tax

Switch



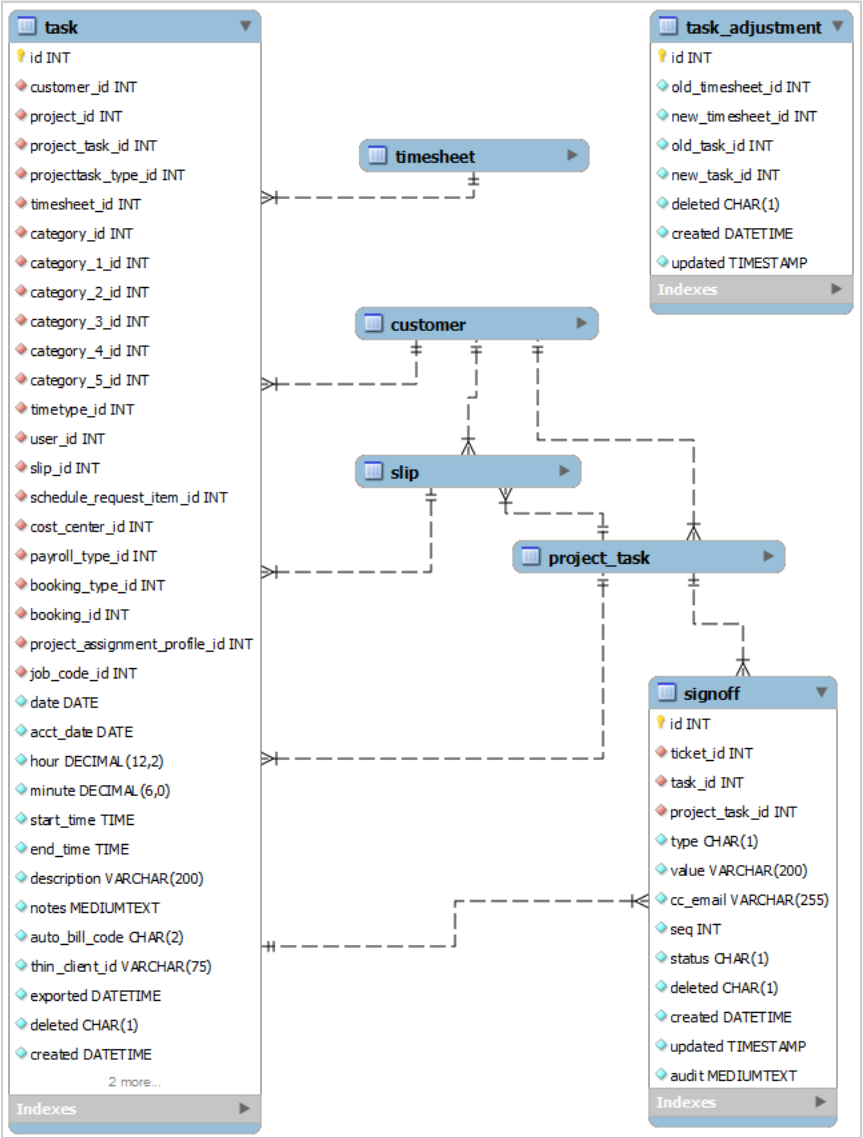
Data Dictionary	Related Diagrams
switch, switch_history, attachment_revision, switch_total	

Tag



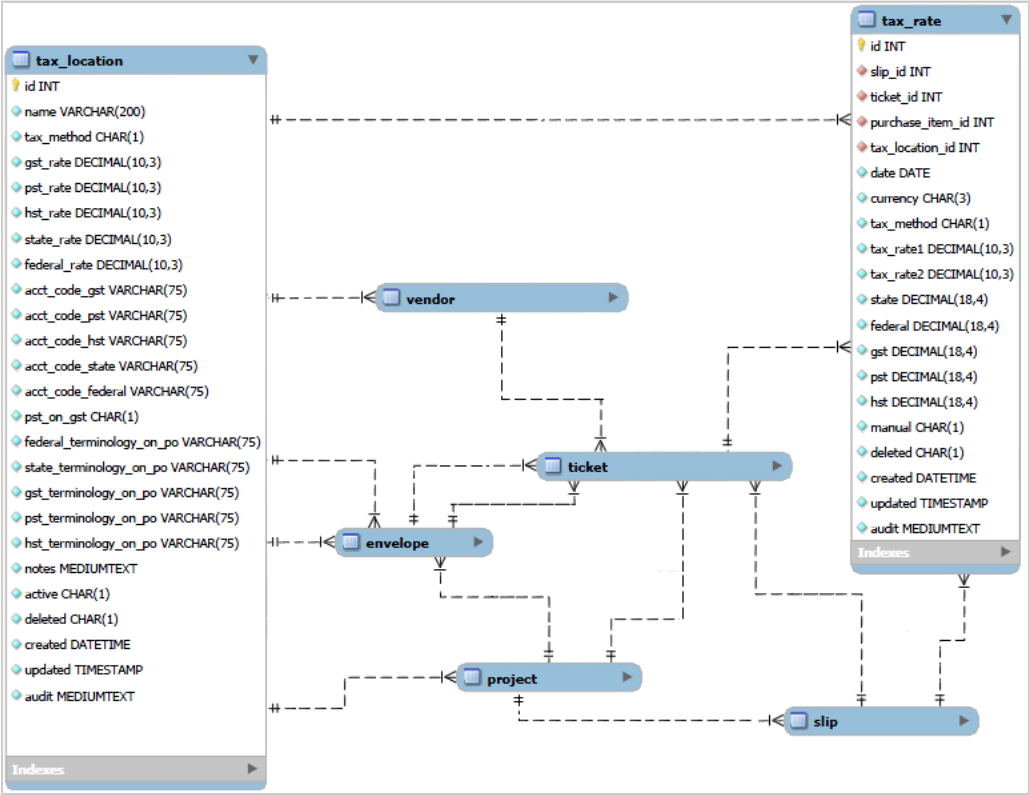
Data Dictionary	Related Diagrams
entity_tag, tag_group, tag_group_attribute, user_tag_by_day	

Task



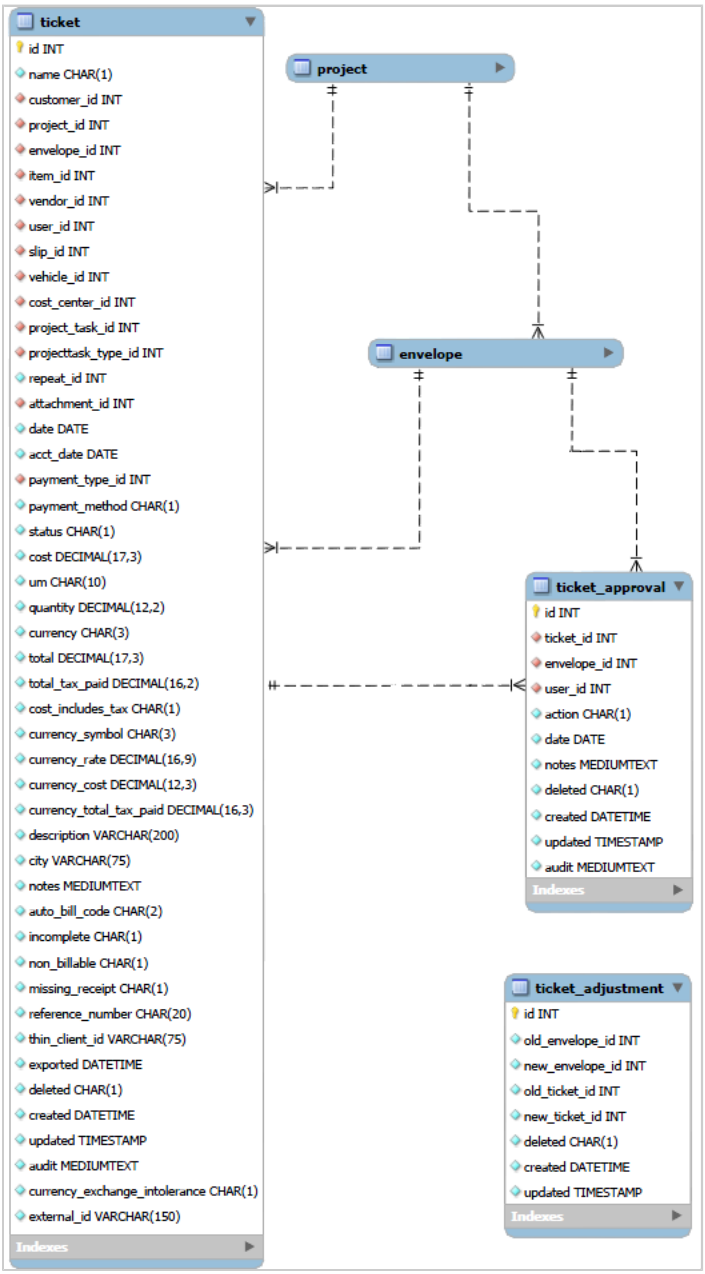
Data Dictionary	Related Diagrams
task, task_adjustment	Billing, Category, Customer, Project, Project Task, Revenue Recognition, Schedule, Time, User

Tax



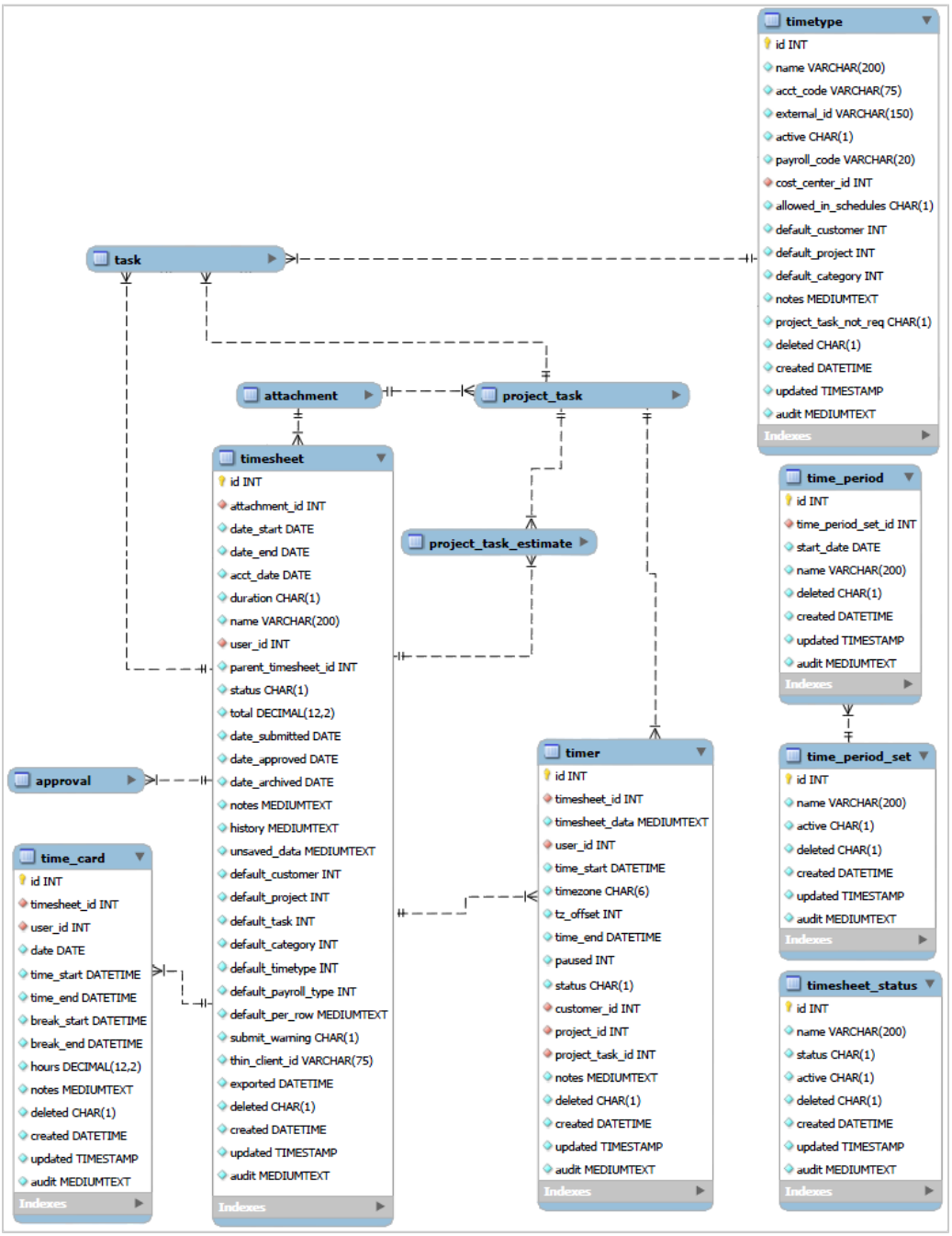
Data Dictionary	Related Diagrams
tax_location, tax_rate, signoff	Product, Purchase Item

Ticket



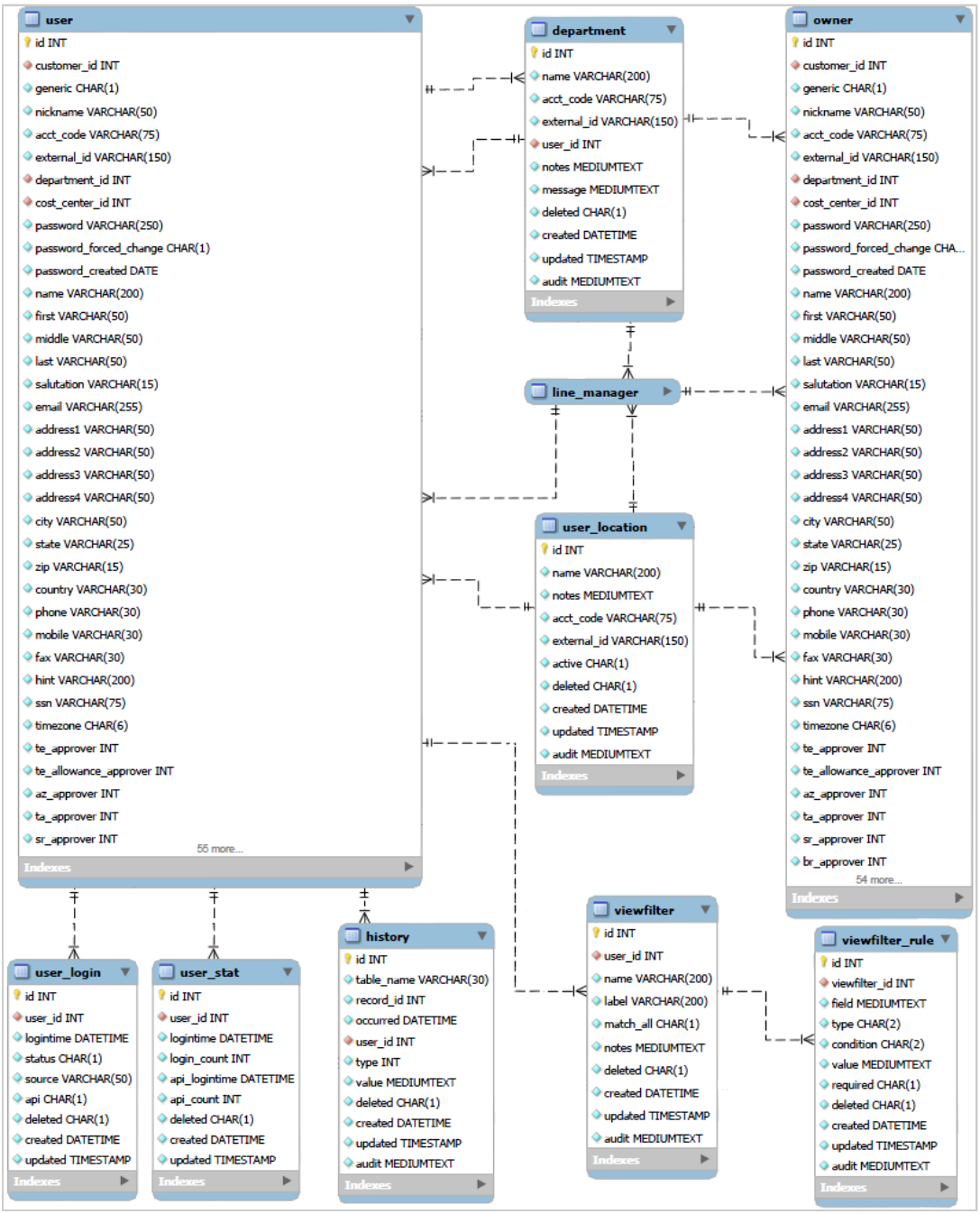
Data Dictionary	Related Diagrams
ticket, ticket_adjustment, ticket_approval	Authorization, Product, Tax

Time



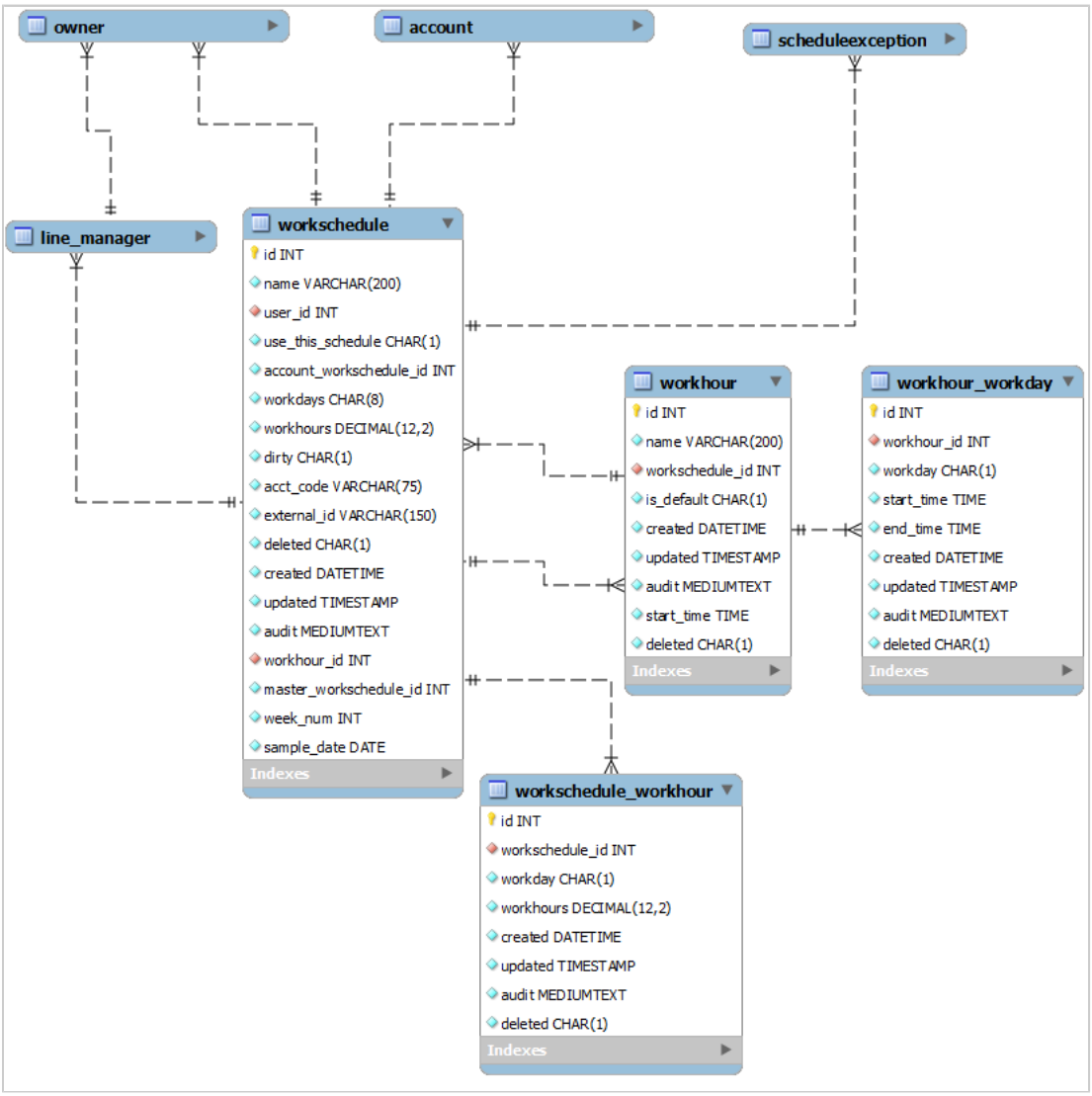
Data Dictionary	Related Diagrams
time_card, time_period, time_period_set, timesheet, timesheet_status, timetype	Approval Process, User

User



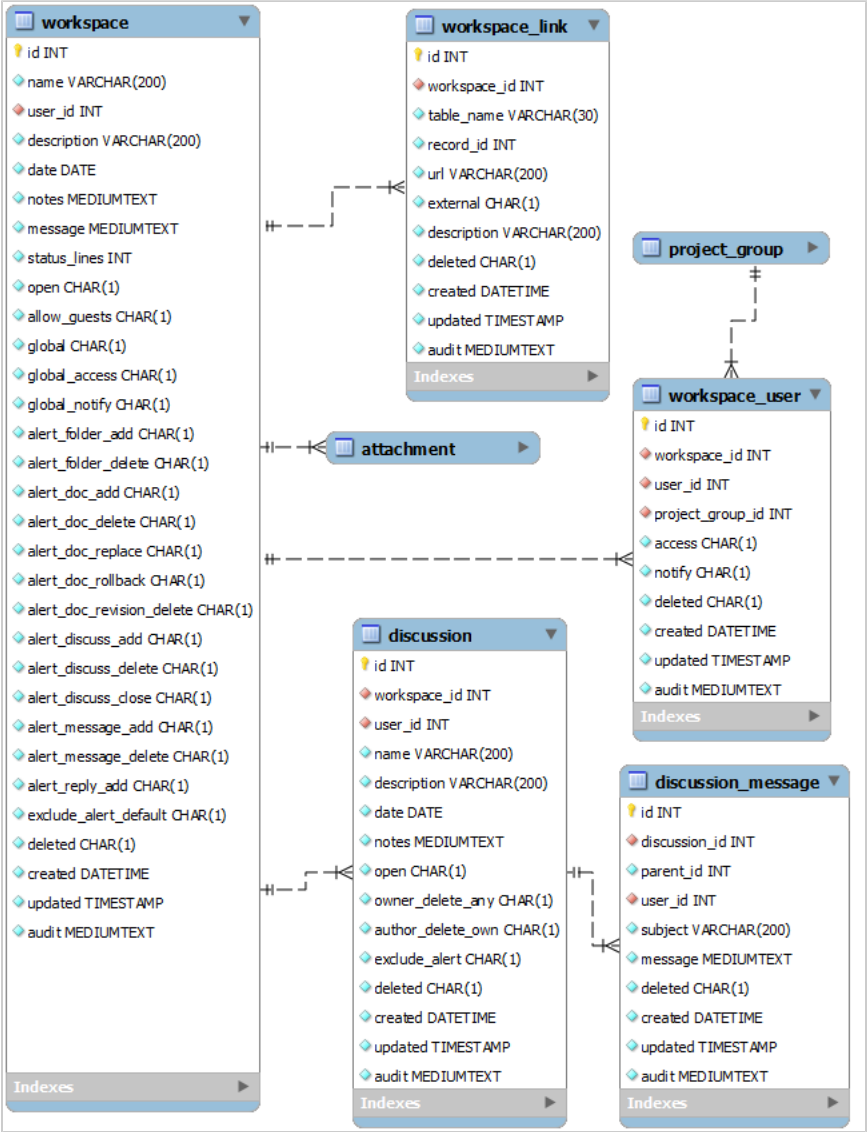
Data Dictionary	Related Diagrams
department, history, owner, user, user_location, user_login, user_stat, viewfilter, viewfilter_rule	Switch

Workhour



Data Dictionary	Related Diagrams
workhour, workhour_workday, workschedule, workschedule_workhour	Switch

Workspace



Data Dictionary	Related Diagrams
discussion, discussion_message, workspace, workspace_link, workspace_user	

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Data Dictionary	Diagram
account	Switch
accounting_period	Accounting Period
accounts_payable	Purchase Order
actual_cost	Cost
address	Proposal
adhoc_report	Reporting
agreement	Agreement
agreement_to_project	Agreement
alert	Item
approval	Approval Process
approval_confirmation_status	Miscellaneous
approvalprocess	Approval Process
approvalprocess_rule	Approval Process
assign_by_day	Miscellaneous
assignment_profile	Resource Profile
attachment	Attachment
attachment_category	Attachment
attachment_revision	Attachment
attachment_text	Attachment
attribute	Resource Profile
attribute_set	Resource Profile
authorization	Authorization
authorization_item	Authorization
auto_bill	Billing
baseline_by_day	Miscellaneous
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billing_split	Billing
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booking_by_day	Booking
booking_request	Booking
booking_type	Booking
budget	Budget
budget_activity	Budget

Data Dictionary	Diagram
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budget_category	Budget
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builtin_detail	Reporting
bulk_payment	Payment
bus_type	Customer
carrier	Purchase Order
category	Category
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category_2	Category
category_3	Category
category_4	Category
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cc_rate	Category
company_size	Customer
contact	Proposal
cost_category	Cost
cost_center	Cost
cost_center_used	Cost
cost_type	Cost
currency	Payment
current_period	Accounting Period
cust_field	Custom Field
custom_detail	Custom Field
customer	Customer
customer_location	Customer
customerpo	Customer
customerpo_to_project	Customer
deal	Deal
deal_booking_request	Deal
deal_contact	Deal
deal_schedule	Deal
deal_stage	Deal
department	User
dependent_custom_field	Custom Field
discussion	Workspace

Data Dictionary	Diagram
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entity_report	Reporting
entity_tag	Tag
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estimate_expense	Estimate
estimate_labor	Estimate
estimate_markup	Estimate
estimate_phase	Estimate
event	Proposal
expense_policy	Expense Policy
expense_policy_item	Expense Policy
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filter	Filter
filter_set	Filter
filter_user	Filter
fob_location	Purchase Order
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folder_content	Project Group
forex	Payment
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form_script_deployment_log	Script
fulfillment	Request Item
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hierarchy	Resource Request
hierarchy_node	Resource Request
history	User
import_export	Miscellaneous
import_export_state	Miscellaneous
invoice	Invoice
invoice_layout	Invoice
invoice_tax_rates	Invoice
issue	Issue
issue_category	Issue

Data Dictionary	Diagram
issue_severity	Issue
issue_source	Issue
issue_stage	Issue
issue_status	Issue
item	Item
item_to_user_location	Item
item_history	Item
job_code	Job Rate
job_code_history	Job Rate
job_code_rate_by_task	Job Rate
job_code_used	Job Rate
leave_accrual_rule	Leave Accrual
leave_accrual_rule_to_user	Leave Accrual
leave_accrual_transaction	Leave Accrual
line_manager	User
loaded_cost	Cost
manufacturer	Product
merchant	Payment
owner	User
payment	Payment
payment_terms	Payment
payment_type	Payment
payroll_type	Payment
pending_booking	Booking
preference	Switch
product	Product
project	Project
project_assign	Project
project_assignment_profile	Resource Profile
project_assignment_profile_filter	Resource Profile
project_baseline	Project
project_billing_rule	Billing
project_billing_transaction	Billing
project_booking_grid	Booking
project_group	Project Group
project_group_assign	Project Group

Data Dictionary	Diagram
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project_mutex	Project
project_mutex_override	Project
project_pricing	Project Pricing
project_pricing_approval	Project Pricing
project_pricing_estimate	Project Pricing
project_pricing_split	Project Pricing
project_pricing_type	Project Pricing
project_stage	Project
project_task	Project Task
project_task_assign	Project Task
project_task_baseline	Project Task
project_task_estimate	Project Task
project_task_split	Project Task
project_transfer	Project
projecttask_type	Project Task
proposal	Proposal
proposal_block	Proposal
proxy	Role
purchase_item	Purchase Item
purchaseorder	Purchase Order
purchaser	Purchase Order
purchaserequest	Request Item
queue	Item
rate_card	Job Rate
rate_card_item	Job Rate
receiving	Purchase Order
registry_entry	Miscellaneous
reimbursement	Envelope
repeat	Miscellaneous
report	Reporting
request_item	Request Item
resource_request	Resource Request
resource_request_queue	Resource Request
resourceprofile	Resource Profile
resourceprofile_type	Resource Profile

Data Dictionary	Diagram
resourcesearch	Resource Request
revenue_container	Revenue Container
revenue_container_summary	Revenue Container
revenue_projection	Revenue Recognition
revenue_recognition_rule	Revenue Recognition
revenue_recognition_rule_amount	Revenue Recognition
revenue_recognition_rule_date	Revenue Recognition
revenue_recognition_transaction	Revenue Recognition
revenue_stage	Revenue Container
role	Role
role_booking_type_default	Role
role_edit_exclusion	Role
role_priv	Role
schedule_by_day	Schedule
schedule_request	Schedule
schedule_request_item	Schedule
scheduleexception	Schedule
script_deployment	Script
script_deployment_log	Script
security_questions	Role
shared_folder	Project Group
shared_report	Reporting
shipping_terms	Purchase Order
short_url	Miscellaneous
signer	Project
signoff	Task
slip	Slip
slip_projection	Slip
slip_stage	Slip
slip_type	Slip
snapshot	Miscellaneous
switch	Switch
switch_history	Switch
switch_total	Switch
tag_group	Tag
tag_group_attribute	Tag

Data Dictionary	Diagram
target_utilization	Miscellaneous
task	Task
task_adjustment	Task
tax_location	Tax
tax_rate	Tax
template	Proposal
territory	Deal
ticket	Ticket
ticket_adjustment	Ticket
ticket_approval	Ticket
time_card	Time
time_period	Time
time_period_set	Time
timer	Time
timesheet	Time
timesheet_status	Time
timetype	Time
todo	Proposal
up_rate	Job Rate
user	User
user_location	User
user_login	User
user_stat	User
user_tag_by_day	Tag
valuelist_custom_field	Custom Field
vehicle	Slip
vendor	Product
viewfilter	User
viewfilter_rule	User
workhour	Workhour
workhour_workday	Workhour
workschedule	Workhour
workschedule_workhour	Workhour
workspace	Workspace
workspace_link	Workspace
workspace_user	Workspace