

# ⚠️ DEFEITOS IDENTIFICADOS

## Base de Dados: grupotestop\_helpdesk

❑ **CRÍTICO:** Esta base de dados apresenta vulnerabilidades significativas

### Lista de Defeitos Detectados:

- ❑ Ausência de chaves estrangeiras (FOREIGN KEY)
- ⚠️ Falta de workflow states validation
- ⚠️ Sem audit trail de alterações
- ⚠️ Índices insuficientes

### ❑ Impacto:

- Risco elevado de inconsistência de dados
- Impossibilidade de garantir integridade referencial
- Performance sub-ótima das consultas
- Dificuldade de manutenção e debugging
- Vulnerabilidade a dados órfãos

### ❑ Recomendações Prioritárias:

1. URGENTE: Implementar chaves estrangeiras
2. ALTA: Adicionar índices nas colunas críticas
3. ALTA: Criar constraints de validação
4. MÉDIA: Normalizar estruturas redundantes
5. MÉDIA: Implementar estratégia de backup

# Esquema da Base de Dados: grupotestop\_helpdesk

Página 1 de 3 | Total de Tabelas: 34

<div><div>attachments</div><div><div>id</div><div>ticket_id</div><div>message_id</div><div>name</div><div>user_id</div><div>contact_id</div><div>size</div><div>path</div></div><div><div>int</div><div>int</div><div>int</div><div>varchar</div><div>int</div><div>int</div><div>int</div><div>varchar</div></div></div>	<div><div>backup</div><div><div>id</div><div>name</div><div>details</div><div>created_at</div><div>updated_at</div></div><div><div>int</div><div>varchar</div><div>longtext</div><div>timestamp</div><div>timestamp</div></div></div>	<div><div>categories</div><div><div>id</div><div>name</div><div>color</div><div>created_at</div><div>updated_at</div><div>deleted_at</div></div><div><div>int</div><div>varchar</div><div>varchar</div><div>timestamp</div><div>timestamp</div><div>timestamp</div></div></div>	<div><div>cities</div><div><div>id</div><div>name</div><div>deleted_at</div></div><div><div>int</div><div>varchar</div><div>timestamp</div></div></div>
<div><div>comments</div><div><div>id</div><div>ticket_id</div><div>user_id</div><div>contact_id</div><div>details</div><div>created_at</div><div>updated_at</div></div><div><div>int</div><div>int</div><div>int</div><div>int</div><div>text</div><div>timestamp</div><div>timestamp</div></div></div>	<div><div>contacts</div><div><div>id</div><div>organization_id</div><div>first_name</div><div>last_name</div><div>email</div><div>phone</div><div>address</div><div>city</div></div><div><div>int</div><div>int</div><div>varchar</div><div>varchar</div><div>varchar</div><div>varchar</div><div>varchar</div><div>varchar</div></div></div>	<div><div>conversations</div><div><div>id</div><div>title</div><div>contact_id</div><div>created_at</div><div>updated_at</div><div>deleted_at</div></div><div><div>bigint</div><div>varchar</div><div>int</div><div>timestamp</div><div>timestamp</div><div>timestamp</div></div></div>	<div><div>countries</div><div><div>id</div><div>code</div><div>name</div></div><div><div>int</div><div>varchar</div><div>varchar</div></div></div>
<div><div>departments</div><div><div>id</div><div>name</div><div>deleted_at</div></div><div><div>int</div><div>varchar</div><div>timestamp</div></div></div>	<div><div>email_templates</div><div><div>id</div><div>name</div><div>details</div><div>slug</div><div>language</div><div>html</div></div><div><div>int</div><div>varchar</div><div>varchar</div><div>varchar</div><div>varchar</div><div>text</div></div></div>	<div><div>failed_jobs</div><div><div>id</div><div>uuid</div><div>connection</div><div>queue</div><div>payload</div><div>exception</div><div>failed_at</div></div><div><div>bigint</div><div>varchar</div><div>text</div><div>text</div><div>longtext</div><div>longtext</div><div>timestamp</div></div></div>	<div><div>faqs</div><div><div>id</div><div>name</div><div>details</div><div>status</div><div>created_at</div><div>updated_at</div></div><div><div>int</div><div>varchar</div><div>text</div><div>int</div><div>timestamp</div><div>timestamp</div></div></div>
<div><div>front_pages</div><div><div>id</div><div>title</div><div>slug</div><div>is_active</div><div>html</div><div>created_at</div><div>updated_at</div></div><div><div>int</div><div>varchar</div><div>varchar</div><div>int</div><div>longtext</div><div>timestamp</div><div>timestamp</div></div></div>	<div><div>jobs</div><div><div>id</div><div>queue</div><div>payload</div><div>attempts</div><div>reserved_at</div><div>available_at</div><div>created_at</div></div><div><div>bigint</div><div>varchar</div><div>longtext</div><div>tinyint</div><div>int</div><div>int</div><div>int</div></div></div>	<div><div>knowledge_base</div><div><div>id</div><div>title</div><div>details</div><div>type_id</div><div>created_at</div><div>updated_at</div></div><div><div>int</div><div>varchar</div><div>text</div><div>int</div><div>timestamp</div><div>timestamp</div></div></div>	<div><div>languages</div><div><div>id</div><div>code</div><div>name</div></div><div><div>int</div><div>varchar</div><div>varchar</div></div></div>

# Esquema da Base de Dados: grupotestop\_helpdesk

Página 2 de 3 | Total de Tabelas: 34

<table><tr><th colspan="2">messages</th></tr><tr><td>id</td><td>int</td></tr><tr><td>guid</td><td>int</td></tr><tr><td>conversation_id</td><td>int</td></tr><tr><td>user_id</td><td>int</td></tr><tr><td>contact_id</td><td>int</td></tr><tr><td>is_read</td><td>int</td></tr><tr><td>message</td><td>text</td></tr><tr><td>created_at</td><td>timestamp</td></tr></table>	messages		id	int	guid	int	conversation_id	int	user_id	int	contact_id	int	is_read	int	message	text	created_at	timestamp	<table><tr><th colspan="2">migrations</th></tr><tr><td>id</td><td>int</td></tr><tr><td>migration</td><td>varchar</td></tr><tr><td>batch</td><td>int</td></tr></table>	migrations		id	int	migration	varchar	batch	int	<table><tr><th colspan="2">notes</th></tr><tr><td>id</td><td>int</td></tr><tr><td>user_id</td><td>int</td></tr><tr><td>name</td><td>varchar</td></tr><tr><td>details</td><td>text</td></tr><tr><td>color</td><td>varchar</td></tr><tr><td>created_at</td><td>timestamp</td></tr><tr><td>updated_at</td><td>timestamp</td></tr></table>	notes		id	int	user_id	int	name	varchar	details	text	color	varchar	created_at	timestamp	updated_at	timestamp	<table><tr><th colspan="2">organizations</th></tr><tr><td>id</td><td>int</td></tr><tr><td>name</td><td>varchar</td></tr><tr><td>email</td><td>varchar</td></tr><tr><td>phone</td><td>varchar</td></tr><tr><td>address</td><td>varchar</td></tr><tr><td>city</td><td>varchar</td></tr><tr><td>region</td><td>varchar</td></tr><tr><td>country</td><td>varchar</td></tr></table>	organizations		id	int	name	varchar	email	varchar	phone	varchar	address	varchar	city	varchar	region	varchar	country	varchar
messages																																																															
id	int																																																														
guid	int																																																														
conversation_id	int																																																														
user_id	int																																																														
contact_id	int																																																														
is_read	int																																																														
message	text																																																														
created_at	timestamp																																																														
migrations																																																															
id	int																																																														
migration	varchar																																																														
batch	int																																																														
notes																																																															
id	int																																																														
user_id	int																																																														
name	varchar																																																														
details	text																																																														
color	varchar																																																														
created_at	timestamp																																																														
updated_at	timestamp																																																														
organizations																																																															
id	int																																																														
name	varchar																																																														
email	varchar																																																														
phone	varchar																																																														
address	varchar																																																														
city	varchar																																																														
region	varchar																																																														
country	varchar																																																														
<table><tr><th colspan="2">participants</th></tr><tr><td>id</td><td>int</td></tr><tr><td>conversation_id</td><td>int</td></tr><tr><td>user_id</td><td>int</td></tr><tr><td>contact_id</td><td>int</td></tr><tr><td>created_at</td><td>timestamp</td></tr><tr><td>updated_at</td><td>timestamp</td></tr></table>	participants		id	int	conversation_id	int	user_id	int	contact_id	int	created_at	timestamp	updated_at	timestamp	<table><tr><th colspan="2">password_resets</th></tr><tr><td>email</td><td>varchar</td></tr><tr><td>token</td><td>varchar</td></tr><tr><td>created_at</td><td>timestamp</td></tr></table>	password_resets		email	varchar	token	varchar	created_at	timestamp	<table><tr><th colspan="2">pending_emails</th></tr><tr><td>id</td><td>int</td></tr><tr><td>user_id</td><td>int</td></tr><tr><td>ticket_id</td><td>int</td></tr><tr><td>type</td><td>varchar</td></tr><tr><td>value</td><td>text</td></tr><tr><td>created_at</td><td>timestamp</td></tr><tr><td>updated_at</td><td>timestamp</td></tr></table>	pending_emails		id	int	user_id	int	ticket_id	int	type	varchar	value	text	created_at	timestamp	updated_at	timestamp	<table><tr><th colspan="2">pending_users</th></tr><tr><td>id</td><td>int</td></tr><tr><td>user_id</td><td>int</td></tr><tr><td>ticket_id</td><td>int</td></tr><tr><td>first_name</td><td>varchar</td></tr><tr><td>last_name</td><td>varchar</td></tr><tr><td>phone</td><td>varchar</td></tr><tr><td>email</td><td>varchar</td></tr><tr><td>password</td><td>varchar</td></tr></table>	pending_users		id	int	user_id	int	ticket_id	int	first_name	varchar	last_name	varchar	phone	varchar	email	varchar	password	varchar				
participants																																																															
id	int																																																														
conversation_id	int																																																														
user_id	int																																																														
contact_id	int																																																														
created_at	timestamp																																																														
updated_at	timestamp																																																														
password_resets																																																															
email	varchar																																																														
token	varchar																																																														
created_at	timestamp																																																														
pending_emails																																																															
id	int																																																														
user_id	int																																																														
ticket_id	int																																																														
type	varchar																																																														
value	text																																																														
created_at	timestamp																																																														
updated_at	timestamp																																																														
pending_users																																																															
id	int																																																														
user_id	int																																																														
ticket_id	int																																																														
first_name	varchar																																																														
last_name	varchar																																																														
phone	varchar																																																														
email	varchar																																																														
password	varchar																																																														
<table><tr><th colspan="2">personal_access_tokens</th></tr><tr><td>id</td><td>bigint</td></tr><tr><td>tokenable_type</td><td>varchar</td></tr><tr><td>tokenable_id</td><td>bigint</td></tr><tr><td>name</td><td>varchar</td></tr><tr><td>token</td><td>varchar</td></tr><tr><td>abilities</td><td>text</td></tr><tr><td>last_used_at</td><td>timestamp</td></tr><tr><td>expires_at</td><td>timestamp</td></tr></table>	personal_access_tokens		id	bigint	tokenable_type	varchar	tokenable_id	bigint	name	varchar	token	varchar	abilities	text	last_used_at	timestamp	expires_at	timestamp	<table><tr><th colspan="2">posts</th></tr><tr><td>id</td><td>int</td></tr><tr><td>title</td><td>varchar</td></tr><tr><td>author_id</td><td>int</td></tr><tr><td>is_active</td><td>int</td></tr><tr><td>image</td><td>varchar</td></tr><tr><td>type_id</td><td>int</td></tr><tr><td>details</td><td>text</td></tr><tr><td>created_at</td><td>timestamp</td></tr></table>	posts		id	int	title	varchar	author_id	int	is_active	int	image	varchar	type_id	int	details	text	created_at	timestamp	<table><tr><th colspan="2">priorities</th></tr><tr><td>id</td><td>int</td></tr><tr><td>name</td><td>varchar</td></tr><tr><td>deleted_at</td><td>timestamp</td></tr></table>	priorities		id	int	name	varchar	deleted_at	timestamp	<table><tr><th colspan="2">reviews</th></tr><tr><td>id</td><td>int</td></tr><tr><td>ticket_id</td><td>int</td></tr><tr><td>user_id</td><td>int</td></tr><tr><td>rating</td><td>int</td></tr><tr><td>review</td><td>text</td></tr><tr><td>created_at</td><td>timestamp</td></tr><tr><td>updated_at</td><td>timestamp</td></tr></table>	reviews		id	int	ticket_id	int	user_id	int	rating	int	review	text	created_at	timestamp	updated_at	timestamp
personal_access_tokens																																																															
id	bigint																																																														
tokenable_type	varchar																																																														
tokenable_id	bigint																																																														
name	varchar																																																														
token	varchar																																																														
abilities	text																																																														
last_used_at	timestamp																																																														
expires_at	timestamp																																																														
posts																																																															
id	int																																																														
title	varchar																																																														
author_id	int																																																														
is_active	int																																																														
image	varchar																																																														
type_id	int																																																														
details	text																																																														
created_at	timestamp																																																														
priorities																																																															
id	int																																																														
name	varchar																																																														
deleted_at	timestamp																																																														
reviews																																																															
id	int																																																														
ticket_id	int																																																														
user_id	int																																																														
rating	int																																																														
review	text																																																														
created_at	timestamp																																																														
updated_at	timestamp																																																														
<table><tr><th colspan="2">roles</th></tr><tr><td>id</td><td>int</td></tr><tr><td>name</td><td>varchar</td></tr><tr><td>slug</td><td>varchar</td></tr><tr><td>access</td><td>longtext</td></tr><tr><td>created_at</td><td>timestamp</td></tr><tr><td>updated_at</td><td>timestamp</td></tr></table>	roles		id	int	name	varchar	slug	varchar	access	longtext	created_at	timestamp	updated_at	timestamp	<table><tr><th colspan="2">settings</th></tr><tr><td>id</td><td>int</td></tr><tr><td>name</td><td>varchar</td></tr><tr><td>slug</td><td>varchar</td></tr><tr><td>type</td><td>varchar</td></tr><tr><td>value</td><td>text</td></tr></table>	settings		id	int	name	varchar	slug	varchar	type	varchar	value	text	<table><tr><th colspan="2">status</th></tr><tr><td>id</td><td>int</td></tr><tr><td>name</td><td>varchar</td></tr><tr><td>slug</td><td>varchar</td></tr><tr><td>deleted_at</td><td>timestamp</td></tr></table>	status		id	int	name	varchar	slug	varchar	deleted_at	timestamp	<table><tr><th colspan="2">tickets</th></tr><tr><td>id</td><td>int</td></tr><tr><td>uid</td><td>varchar</td></tr><tr><td>subject</td><td>varchar</td></tr><tr><td>status_id</td><td>int</td></tr><tr><td>open</td><td>timestamp</td></tr><tr><td>due</td><td>timestamp</td></tr><tr><td>close</td><td>timestamp</td></tr><tr><td>response</td><td>timestamp</td></tr></table>	tickets		id	int	uid	varchar	subject	varchar	status_id	int	open	timestamp	due	timestamp	close	timestamp	response	timestamp						
roles																																																															
id	int																																																														
name	varchar																																																														
slug	varchar																																																														
access	longtext																																																														
created_at	timestamp																																																														
updated_at	timestamp																																																														
settings																																																															
id	int																																																														
name	varchar																																																														
slug	varchar																																																														
type	varchar																																																														
value	text																																																														
status																																																															
id	int																																																														
name	varchar																																																														
slug	varchar																																																														
deleted_at	timestamp																																																														
tickets																																																															
id	int																																																														
uid	varchar																																																														
subject	varchar																																																														
status_id	int																																																														
open	timestamp																																																														
due	timestamp																																																														
close	timestamp																																																														
response	timestamp																																																														

# Esquema da Base de Dados: grupotestop\_helpdesk

Página 3 de 3 | Total de Tabelas: 34

types

id	int
name	varchar
deleted_at	timestamp

users

id	int
role_id	int
title	varchar
locale	varchar
country_id	int
address	varchar
city	varchar
first_name	varchar

... +10 colunas