Documentación de Endpoints de la API

Notas:
- Prefijos base:
  - Usuarios y Tickets: `/api/`
  - Notificaciones: `/api/notifications/`
  - Reportes: `/api/reports/`
- Autenticación: JWT. Salvo indicación, se requiere `IsAuthenticated`. Se aclara permiso específico por endpoint.

Base URLs:
- Producción: https://tickethelp-backend.onrender.com
- Local: http://localhost:8000

Tickets (`tickets/urls.py`)

- **GET/POST `/api/tickets/` — Permisos: ADMIN**
  - Prod: https://tickethelp-backend.onrender.com/api/tickets/
  - Local: http://localhost:8000/api/tickets/
  - POST body (Ticket):
  ```json
  {
   "administrador": "admin_document",
   "tecnico": "tech_document",
   "cliente": "client_document",
   "estado": 1,
   "titulo": "Texto",
   "descripcion": "Texto",
   "equipo": "Texto",
   "fecha": "2025-11-03T12:00:00Z"
  }
  ```
  - GET response:
  ```json
  {
   "message": "Lista de tickets",
   "total_tickets": 2,
   "tickets": [ { /* Ticket */ } ]
  ```

}
    ```

- **GET `/api/tickets/least-busy-technician/` — Permisos: ADMIN**
  - Prod: https://tickethelp-backend.onrender.com/api/tickets/least-busy-technician/
  - Local: http://localhost:8000/api/tickets/least-busy-technician/
  - Response: datos del técnico menos ocupado o 404.

- **PUT/PATCH `/api/tickets/change-technician/{ticket_id}/` — Permisos: ADMIN**
  - Prod:
https://tickethelp-backend.onrender.com/api/tickets/change-technician/{ticket_id}/
  - Local: http://localhost:8000/api/tickets/change-technician/{ticket_id}/
  - Body:
    ```json
    { "documento_tecnico": "tech_document" }
    ```

  - Response:
    ```json
    {
     "message": "Técnico actualizado correctamente",
     "ticket_id": 123,
     "nuevo_tecnico": { "documento": "string", "email": "string", "nombre": "string" }
    }
    ```

- **GET `/api/tickets/active-technicians/` — Permisos: ADMIN o TECH**
  - Prod: https://tickethelp-backend.onrender.com/api/tickets/active-technicians/
  - Local: http://localhost:8000/api/tickets/active-technicians/
  - Response:
    ```json
    {
     "message": "Lista de técnicos activos disponibles",
     "total_tecnicos": 5,
     "tecnicos": [
       { "document": "string", "email": "string", "first_name": "string", "last_name":
"string", "number": "string", "porcentaje_ocupacion": 25.0 }
     ]
    }
    ```

- PUT `/api/tickets/change-state/{ticket_id}/` — Permisos: TECH
  - Prod: https://tickethelp-backend.onrender.com/api/tickets/change-state/{ticket_id}/
  - Local: http://localhost:8000/api/tickets/change-state/{ticket_id}/
  - Query: `?user_document=tech_document` (si no usa `request.user`).
  - Body:
  ```json
  { "to_state": 4, "reason": "texto opcional" }
  ```

  - Response si final (requiere aprobación):
  ```json
  {
    "message": "El estado final requiere validación del administrador, solicitud
enviada correctamente",
    "request_id": 10,
    "status": "pending_approval",
    "to_state": "Finalizado"
  }
  ```

  - Response si no final:
  ```json
  {
    "message": "Estado actualizado correctamente",
    "ticket_id": 123,
    "new_state": "En diagnóstico"
  }
  ```

- PUT `/api/tickets/approve-state/{request_id}/` — Permisos: ADMIN
  - Prod:
https://tickethelp-backend.onrender.com/api/tickets/approve-state/{request_id}/
  - Local: http://localhost:8000/api/tickets/approve-state/{request_id}/
  - Query: `?user_document=admin_document` (si no usa `request.user`).
  - Body:
  ```json
  { "action": "approve" }
  // o
  { "action": "reject", "rejection_reason": "texto" }
  ```

  - Response approve:
  ```json
```

```json
{ "message": "Cambio de estado aprobado y aplicado", "ticket_id": 123,
"new_state": "Finalizado" }
```

- Response reject:
```json
{ "message": "Solicitud de cambio de estado rechazada", "ticket_id": 123,
"rejection_reason": "texto" }
```

- **GET `/api/tickets/pending-approvals/` — Permisos: ADMIN**
  - Prod: https://tickethelp-backend.onrender.com/api/tickets/pending-approvals/
  - Local: http://localhost:8000/api/tickets/pending-approvals/
  - Response:
  ```json
  {
   "message": "Solicitudes de cambio de estado pendientes",
   "total_pending": 3,
   "requests": [ { /* solicitud */ } ]
  }
  ```

- **GET/POST `/api/estados/` — Permisos: ADMIN**
  - Prod: https://tickethelp-backend.onrender.com/api/estados/
  - Local: http://localhost:8000/api/estados/
  - Maneja catálogo de estados (`Estado`).

- **GET `/api/tickets/consulta/?user_document={doc}` — Permisos: AUTH**
  - Prod:
https://tickethelp-backend.onrender.com/api/tickets/consulta/?user_document={doc}
  - Local: http://localhost:8000/api/tickets/consulta/?user_document={doc}
  - Response:
  ```json
  {
   "message": "Lista de tickets",
   "total_tickets": 3,
   "tickets": [ { /* Ticket */ } ]
  }
  ```

- Vacío:
  ```json
```

```
{ "message": "No tienes tickets registrados." }
```

Usuarios (`users/urls.py`)

- GET `/api/users/` — ADMIN — lista usuarios
  - Prod: https://tickethelp-backend.onrender.com/api/users/
  - Local: http://localhost:8000/api/users/
- POST `/api/users/create/` — ADMIN — crea usuario
  - Prod: https://tickethelp-backend.onrender.com/api/users/create/
  - Local: http://localhost:8000/api/users/create/
  - Body:
    ```json
    {
"document":"string","email":"string","number":"string","role":"ADMIN|TECH|CLIE
NT","first_name":"string","last_name":"string" }
    ```
  - Response: `{ "message": "Usuario creado exitosamente" }`
- GET `/api/users/{pk}/` — ADMIN — detalle usuario
  - Prod: https://tickethelp-backend.onrender.com/api/users/{pk}/
  - Local: http://localhost:8000/api/users/{pk}/
- DELETE `/api/users/delete/{pk}` — ADMIN — borra usuario (409 si tiene tickets activos)
  - Prod: https://tickethelp-backend.onrender.com/api/users/delete/{pk}
  - Local: http://localhost:8000/api/users/delete/{pk}
- POST `/api/users/deactivate/{pk}` — ADMIN — desactiva usuario → `{ "detail": "Usuario desactivado." }`
  - Prod: https://tickethelp-backend.onrender.com/api/users/deactivate/{pk}
  - Local: http://localhost:8000/api/users/deactivate/{pk}
- POST `/api/users/activate/{pk}/` — ADMIN — activa usuario → `{ "detail": "Usuario activado." }`
  - Prod: https://tickethelp-backend.onrender.com/api/users/activate/{pk}/
  - Local: http://localhost:8000/api/users/activate/{pk}/
- PATCH `/api/users/update-profile-picture/{pk}/` — AUTH — actualiza foto perfil
  - Prod:
https://tickethelp-backend.onrender.com/api/users/update-profile-picture/{pk}/
  - Local: http://localhost:8000/api/users/update-profile-picture/{pk}/

- Body: `{ "profile_picture":"https://..." }`
- Response: `{ "message": "Foto de perfil actualizada correctamente." }`

- **GET `/api/admins/` — ADMIN — lista admins**
  - Prod: https://tickethelp-backend.onrender.com/api/admins/
  - Local: http://localhost:8000/api/admins/
- **GET `/api/admins/{pk}/` — ADMIN — detalle admin**
  - Prod: https://tickethelp-backend.onrender.com/api/admins/{pk}/
  - Local: http://localhost:8000/api/admins/{pk}/
- **GET `/api/technicians/` — ADMIN — lista técnicos**
  - Prod: https://tickethelp-backend.onrender.com/api/technicians/
  - Local: http://localhost:8000/api/technicians/
- **GET `/api/technicians/{pk}/` — ADMIN — detalle técnico**
  - Prod: https://tickethelp-backend.onrender.com/api/technicians/{pk}/
  - Local: http://localhost:8000/api/technicians/{pk}/
- **GET `/api/clients/` — ADMIN — lista clientes**
  - Prod: https://tickethelp-backend.onrender.com/api/clients/
  - Local: http://localhost:8000/api/clients/
- **GET `/api/clients/{document}/` — ADMIN — busca cliente por documento**
  - Prod: https://tickethelp-backend.onrender.com/api/clients/{document}/
  - Local: http://localhost:8000/api/clients/{document}/
  - 200:
    ```json
    { "success": true, "message": "Cliente encontrado exitosamente", "data": { /* User */ } }
    ```
  - 404:
    ```json
    {
     "success": false,
     "message": "El cliente con documento X no existe en el sistema",
     "suggestion": "Debe crear el cliente antes de continuar",
     "code": "CLIENT_NOT_FOUND",
     "data": null
    }
    ```

- **GET/PATCH `/api/me/` — AUTH — actualiza perfil propio**
  - Prod: https://tickethelp-backend.onrender.com/api/me/
  - Local: http://localhost:8000/api/me/

- PATCH → `{ "message": "Datos actualizados correctamente.", ... }`
- POST `/api/me/change-password/` — AUTH
  - Prod: https://tickethelp-backend.onrender.com/api/me/change-password/
  - Local: http://localhost:8000/api/me/change-password/
  - Body: `{ "new_password":"..." }`
  - Response: `{ "message": "Contraseña actualizada correctamente, vuelve a iniciar sesión." }`
- GET `/api/me/{pk}/` — AUTH — (uso de pruebas) actualizar usuario por id
  - Prod: https://tickethelp-backend.onrender.com/api/me/{pk}/
  - Local: http://localhost:8000/api/me/{pk}/
- POST `/api/me/change-password/{pk}/` — ADMIN — cambiar contraseña por id
  - Prod: https://tickethelp-backend.onrender.com/api/me/change-password/{pk}/
  - Local: http://localhost:8000/api/me/change-password/{pk}/
  - Body: `{ "new_password":"..." }`
  - Response: `{ "message": "Contraseña actualizada. Vuelve a iniciar sesión." }`
- PATCH `/api/users/update-user/{pk}/` — ADMIN — actualiza usuario arbitrario → `{ "message": "Datos actualizados correctamente." }`
  - Prod: https://tickethelp-backend.onrender.com/api/users/update-user/{pk}/
  - Local: http://localhost:8000/api/users/update-user/{pk}/

- POST `/api/users/auth/login/` — PUBLIC — login JWT
  - Prod: https://tickethelp-backend.onrender.com/api/users/auth/login/
  - Local: http://localhost:8000/api/users/auth/login/
  - Body: `{ "email":"user@example.com","password":"..." }`
  - Response:
  ```json
  {
   "refresh":"token",
   "access":"token",
   "email":"user@example.com",
   "role":"ADMIN|TECH|CLIENT",
   "is_active": true,
   "document":"string"
  }
  ```

    - POST `/api/users/auth/change-password/` — AUTH → `{ "detail": "Contraseña actualizada con éxito" }`

- Prod:
https://tickethelp-backend.onrender.com/api/users/auth/change-password/
- Local: http://localhost:8000/api/users/auth/change-password/
- **GET `/api/users/auth/validate-token/` — AUTH → estado y datos del usuario**
  - Prod: https://tickethelp-backend.onrender.com/api/users/auth/validate-token/
  - Local: http://localhost:8000/api/users/auth/validate-token/
- **GET `/api/users/auth/user-data/` — AUTH → datos del usuario y claims del token**
  - Prod: https://tickethelp-backend.onrender.com/api/users/auth/user-data/
  - Local: http://localhost:8000/api/users/auth/user-data/

Notificaciones (`notifications/urls.py`) — AUTH

- **GET `/api/notifications/` — lista del usuario**
  - Prod: https://tickethelp-backend.onrender.com/api/notifications/
  - Local: http://localhost:8000/api/notifications/
  - Query: `estado`, `tipo`, `leidas`, `limit`, `offset`
  - Response: `Array` de notificaciones

- **GET `/api/notifications/{notification_id}/` — detalle**
  - Prod: https://tickethelp-backend.onrender.com/api/notifications/{notification_id}/
  - Local: http://localhost:8000/api/notifications/{notification_id}/
- **GET `/api/notifications/stats/`**
  - Prod: https://tickethelp-backend.onrender.com/api/notifications/stats/
  - Local: http://localhost:8000/api/notifications/stats/
  - Response:
  ```json
  {
   "total": 10,
   "pendientes": 2,
   "enviadas": 5,
   "leidas": 3,
   "fallidas": 0,
   "no_leidas": 7
  }
  ```
- **GET `/api/notifications/types/` — tipos activos**
  - Prod: https://tickethelp-backend.onrender.com/api/notifications/types/

- Local: http://localhost:8000/api/notifications/types/
- **GET `/api/notifications/user-notifications/` — historial**
  - Prod: https://tickethelp-backend.onrender.com/api/notifications/user-notifications/
  - Local: http://localhost:8000/api/notifications/user-notifications/
  - Response:
    ```json
    {
     "message": "Historial de notificaciones",
     "total_notifications": 12,
     "notifications": [ /* Notification */ ]
    }
    ```

- **POST `/api/notifications/{notification_id}/mark-read/` — marca como leída**
  - Prod:
https://tickethelp-backend.onrender.com/api/notifications/{notification_id}/mark-read/
  - Local: http://localhost:8000/api/notifications/{notification_id}/mark-read/

Reportes (`reports/urls.py`) — ADMIN

- **GET `/api/reports/stats/general-stats/`**
  - Prod: https://tickethelp-backend.onrender.com/api/reports/stats/general-stats/
  - Local: http://localhost:8000/api/reports/stats/general-stats/
  - Response:
    ```json
    { "tickets_abiertos": 17, "tickets_finalizados": 5 }
    ```

- **GET `/api/reports/stats/performance-ranking/`**
  - Prod:
https://tickethelp-backend.onrender.com/api/reports/stats/performance-ranking/
  - Local: http://localhost:8000/api/reports/stats/performance-ranking/
  - Response:
    ```json
    [
      { "nombre_completo":"...", "tickets_asignados":15, "tickets_resueltos":12,
"porcentaje_exito":80.0 }
    ]
    ```

```

**- GET `/api/reports/stats/clients-evolution/?year=YYYY`**
  - Prod:
https://tickethelp-backend.onrender.com/api/reports/stats/clients-evolution/?year=YYYY
  - Local: http://localhost:8000/api/reports/stats/clients-evolution/?year=YYYY
  - Response:
  ```json
  {
    "year": 2025,
    "total_clientes": 42,
    "mensual": {
"01":5,"02":3,"03":4,"04":6,"05":2,"06":1,"07":7,"08":4,"09":5,"10":3,"11":1,"12":1 }
  }
  ```