ASTERISK ADMIN

Guia de Instalacao Completo

Instalacao em Servidor Debian 12 do Zero

Versao:	1.0.0
Data:	11/01/2026
SO Suportado:	Debian 12 / Ubuntu 22.04+
Tempo Estimado:	15-30 minutos

1. REQUISITOS DO SERVIDOR

1.1 Hardware Minimo

Recurso	Minimo	Recomendado
CPU	2 vCPUs	4+ vCPUs
RAM	2 GB	4+ GB
Disco	20 GB SSD	50+ GB SSD
Rede	100 Mbps	1 Gbps

1.2 Sistema Operacional

• Debian 12 (Bookworm) - Recomendado
• Ubuntu 22.04 LTS
• Ubuntu 24.04 LTS

1.3 Acesso Necessario

• Acesso root ao servidor
• Conexao SSH
• Acesso a internet para download de pacotes

2. INSTALACAO AUTOMATICA (RECOMENDADO)

Esta e a forma mais facil e rapida de instalar. O script faz tudo automaticamente.

2.1 Conectar ao Servidor

```
ssh root@SEU_IP_DO_SERVIDOR
```

2.2 Baixar o Repositorio

```
apt-get update
apt-get install -y git
git clone https://github.com/SEU_USUARIO/Asterisk-VoipGateway.git
cd Asterisk-VoipGateway
```

2.3 Executar o Instalador

```
chmod +x install.sh
./install.sh
```

2.4 Selecionar Tipo de Instalacao

O script vai mostrar um menu:

```
1) Instalacao Completa (Recomendado)
- Instala tudo: PostgreSQL, Nginx, Asterisk, Aplicacao

2) Apenas Aplicacao
- Use se o Asterisk ja estiver instalado

3) Sair
```

Selecione a opcao 1 para instalacao completa.

2.5 Aguardar Instalacao

O processo leva de 15 a 30 minutos dependendo da velocidade do servidor e internet. O script ira:

• Atualizar o sistema
• Instalar PostgreSQL
• Instalar Node.js 18
• Instalar Nginx
• Compilar e instalar Asterisk 20
• Configurar banco de dados
• Instalar a aplicacao
• Configurar servicos

2.6 Informacoes Finais

Ao terminar, o script mostra as informacoes de acesso:

```
URL do Painel: http://SEU_IP
Usuario: admin
Senha: admin123
```

```
Banco de Dados:
Database: asterisk_admin
Usuario: asterisk
Senha: [gerada automaticamente]
```

IMPORTANTE: As informacoes tambem sao salvas em /root/asterisk-admin-install.info

```
Banco de Dados:
Database: asterisk_admin
Usuario: asterisk
Senha: [gerada automaticamente]
```

IMPORTANTE: As informacoes tambem sao salvas em /root/asterisk-admin-install.info

3. INSTALACAO MANUAL (PASSO A PASSO)

Use este metodo se preferir controle total ou se a instalacao automatica falhar.

3.1 Atualizar Sistema

```
apt-get update
apt-get upgrade -y
```

3.2 Instalar Dependencias Basicas

```
apt-get install -y curl wget git gnupg2 lsb-release \
ca-certificates apt-transport-https software-properties-common \
build-essential python3 python3-pip python3-venv python3-dev \
libssl-dev libffi-dev openssl sudo
```

3.3 Instalar PostgreSQL

```
apt-get install -y postgresql postgresql-contrib
systemctl enable postgresql
systemctl start postgresql
```

Criar banco e usuario:

```
sudo -u postgres psql << EOF
CREATE USER asterisk WITH PASSWORD 'SuaSenhaSegura123';
CREATE DATABASE asterisk_admin OWNER asterisk;
GRANT ALL PRIVILEGES ON DATABASE asterisk_admin TO asterisk;
EOF
```

3.4 Instalar Node.js 18

```
curl -fsSL https://deb.nodesource.com/setup_18.x | bash -
apt-get install -y nodejs
node -v # Deve mostrar v18.x.x
```

3.5 Instalar Nginx

```
apt-get install -y nginx
systemctl enable nginx
systemctl start nginx
```

3.6 Instalar Asterisk 20

Instalar dependencias do Asterisk:

```
apt-get install -y libncurses5-dev libjansson-dev libxml2-dev \
libsqlite3-dev uuid-dev libspeex-dev libspeexdsp-dev libogg-dev \
libvorbis-dev libasound2-dev portaudio19-dev libcurl4-openssl-dev \
libical-dev libneon27-dev libsrtp2-dev unixodbc-dev libedit-dev libpq-dev
```

Baixar e compilar:

```
cd /usr/src
wget
https://downloads.asterisk.org/pub/telephony/asterisk/asterisk-20-current.tar.gz
tar xzf asterisk-20-current.tar.gz
cd asterisk-20*/
contrib/scripts/install_prereq install
./configure --with-pjproject-bundled --with-jansson-bundled
make -j$(nproc)
make install
make samples
make config
```

Iniciar Asterisk:

```
systemctl enable asterisk
systemctl start asterisk
asterisk -rx 'core show version'
```

3.7 Instalar Aplicacao

Clonar repositorio:

```
cd /opt
git clone https://github.com/SEU_USUARIO/Asterisk-VoipGateway.git asterisk-admin
cd asterisk-admin
```

Configurar Backend:

```
cd /opt/asterisk-admin/backend
python3 -m venv venv
source venv/bin/activate
pip install --upgrade pip
pip install -r requirements.txt
pip install bcrypt==4.0.1
```

Criar arquivo .env:

```
cat > .env << EOF
DATABASE_URL=postgresql+asyncpg://asterisk:SuaSenhaSegura123@localhost/asterisk_adm
in
SECRET_KEY=$(openssl rand -base64 32)
ASTERISK_CONFIG_PATH=/etc/asterisk
EOF
```

Configurar Frontend:

```
cd /opt/asterisk-admin/frontend

cat > postcss.config.js << 'EOF'
module.exports = {
plugins: {
tailwindcss: {},
autoprefixer: {},
},
}
EOF

cat > vite.config.js << 'EOF'
const { defineConfig } = require("vite")
const react = require("@vitejs/plugin-react")
module.exports = defineConfig({
plugins: [react()],
})
EOF

npm install
npm run build
```

3.8 Executar Migracoes do Banco

```
cd /opt/asterisk-admin/database

PGPASSWORD=SuaSenhaSegura123 psql -U asterisk -h localhost -d asterisk_admin -f
schema.sql

PGPASSWORD=SuaSenhaSegura123 psql -U asterisk -h localhost -d asterisk_admin -f
migration_001_customer_trunk.sql

PGPASSWORD=SuaSenhaSegura123 psql -U asterisk -h localhost -d asterisk_admin -f
migration_002_tariffs.sql

PGPASSWORD=SuaSenhaSegura123 psql -U asterisk -h localhost -d asterisk_admin -f
migration_003_gateway_sip_fields.sql

PGPASSWORD=SuaSenhaSegura123 psql -U asterisk -h localhost -d asterisk_admin -f
migration_004_did_gateway.sql
```

3.9 Configurar Nginx

```
cat > /etc/nginx/sites-available/asterisk-admin << 'EOF'
server {
listen 80 default_server;
server_name _;

location / {
root /opt/asterisk-admin/frontend/dist;
index index.html;
try_files $uri $uri/ /index.html;
}

location /api {
proxy_pass http://127.0.0.1:8000;
proxy_set_header Host $host;
proxy_set_header X-Real-IP $remote_addr;
}
}
EOF

rm -f /etc/nginx/sites-enabled/default
ln -sf /etc/nginx/sites-available/asterisk-admin /etc/nginx/sites-enabled/
nginx -t
systemctl restart nginx
```

3.10 Criar Servico Systemd

```
cat > /etc/systemd/system/asterisk-admin.service << 'EOF'
[Unit]
Description=Asterisk Admin API
After=network.target postgresql.service

[Service]
Type=simple
User=root
WorkingDirectory=/opt/asterisk-admin/backend
ExecStart=/opt/asterisk-admin/backend/venv/bin/uvicorn app.main:app --host 0.0.0.0
--port 8000
Restart=always

[Install]
WantedBy=multi-user.target
EOF

systemctl daemon-reload
systemctl enable asterisk-admin
systemctl start asterisk-admin
```

3.11 Configurar Asterisk

Adicionar includes no pjsip.conf:

```
cat >> /etc/asterisk/pjsip.conf << 'EOF'

#include pjsip_gateways.conf
#include pjsip_customer_trunks.conf
#include pjsip_extensions.conf
EOF

touch /etc/asterisk/pjsip_gateways.conf
touch /etc/asterisk/pjsip_customer_trunks.conf
touch /etc/asterisk/pjsip_extensions.conf
```

Adicionar includes no extensions.conf:

```
cat >> /etc/asterisk/extensions.conf << 'EOF'

#include extensions_routes.conf
#include extensions_dids.conf
EOF

touch /etc/asterisk/extensions_routes.conf
touch /etc/asterisk/extensions_dids.conf

asterisk -rx 'core reload'
```

4. POS INSTALACAO

4.1 Verificar Servicos

```
systemctl status asterisk-admin
systemctl status asterisk
systemctl status nginx
systemctl status postgresql
```

Todos devem mostrar 'active (running)'

4.2 Primeiro Acesso

1. Abra o navegador
2. Acesse: http://IP_DO_SERVIDOR
3. Login: admin
4. Senha: admin123

IMPORTANTE: Altere a senha imediatamente em Configuracoes!

4.3 Configurar Firewall (Opcional)

```
apt-get install -y ufw
ufw allow 22/tcp # SSH
ufw allow 80/tcp # HTTP
ufw allow 443/tcp # HTTPS
ufw allow 5060/udp # SIP
ufw allow 5060/tcp # SIP TCP
ufw allow 10000:20000/udp # RTP
ufw --force enable
```

5. COMANDOS UTEIS

5.1 Gerenciamento de Servicos

```
# Reiniciar aplicacao
systemctl restart asterisk-admin

# Reiniciar Asterisk
systemctl restart asterisk

# Ver logs da aplicacao
journalctl -u asterisk-admin -f

# Ver logs do Asterisk
tail -f /var/log/asterisk/messages
```

5.2 Asterisk CLI

```
# Entrar no CLI
asterisk -rvvv

# Ver endpoints PJSIP
asterisk -rx 'pjsip show endpoints'

# Recarregar PJSIP
asterisk -rx 'pjsip reload'

# Recarregar Dialplan
asterisk -rx 'dialplan reload'

# Ver canais ativos
asterisk -rx 'core show channels'
```

5.3 Banco de Dados

```
# Conectar ao banco
PGPASSWORD=SuaSenha psql -U asterisk -h localhost -d asterisk_admin

# Ver clientes
SELECT * FROM customers;

# Ver DIDs
SELECT * FROM dids;

# Ver CDR
SELECT * FROM cdr ORDER BY start_time DESC LIMIT 10;
```

6. RESOLUCAO DE PROBLEMAS

Problema	Solucao
Pagina nao carrega	Verificar: systemctl status nginx
Erro 500	Ver logs: journalctl -u asterisk-admin -n 50
Tela branca apos login	Limpar cache (Ctrl+F5) e ver console (F12)
API nao responde	Verificar: systemctl status asterisk-admin
Gateway nao aparece	Verificar /etc/asterisk/pjsip_gateways.conf
Ramal nao registra	Conferir senha e fazer pjsip reload
Banco nao conecta	Verificar: systemctl status postgresql

6.1 Reinstalar Aplicacao

Se precisar reinstalar apenas a aplicacao:

```
cd /opt
rm -rf asterisk-admin
git clone https://github.com/SEU_USUARIO/Asterisk-VoipGateway.git asterisk-admin
cd asterisk-admin
./install.sh
# Selecione opcao 2 (Apenas Aplicacao)
```

INSTALACAO CONCLUIDA!

Seu sistema Asterisk Admin esta pronto para uso.

Acesse: http://SEU_IP

Usuario: admin | Senha: admin123

Documento gerado em 11/01/2026 12:18

Asterisk Admin v1.0.0