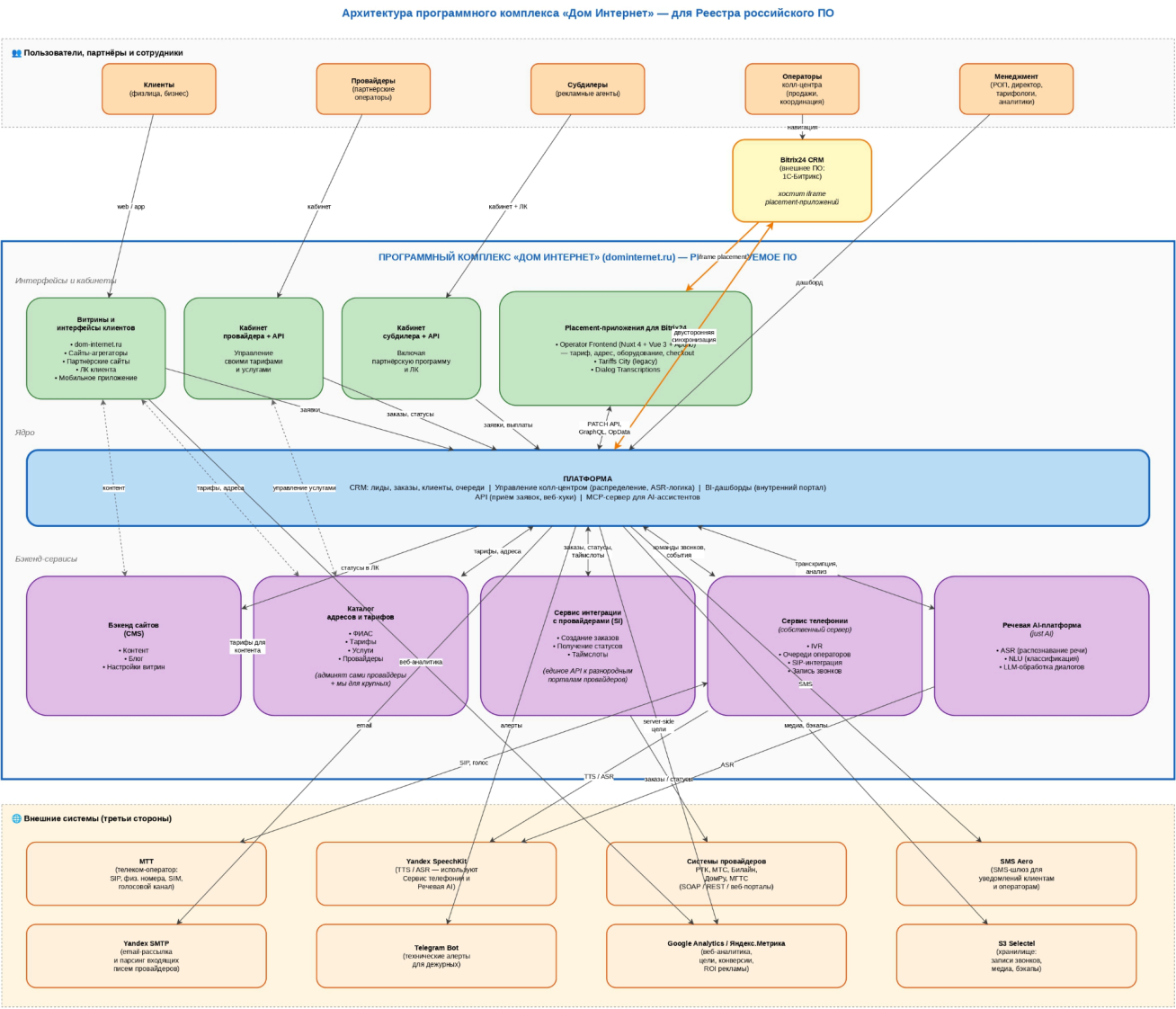


Описание архитектуры ПО «Платформа ДИ»

Блок-схема ПО:



Компоненты ПО:

Наименование используемого ПО/пакета	Назначение	Тип лицензии	Ссылки
Postgresql	СУБД	Postgresql license	https://www.postgresql.org/about/licence/

ClickHouse	СУБД	Apache 2.0	https://github.com/ClickHouse/ClickHouse/blob/master/LICENSE
Все ОС, система браузерная	ОС	-	https://ru-ikt.ru/metodic
Cpython	компилятор	Python	https://github.com/python/cpython/blob/main/LICENSE
clang	компилятор	Apache 2.0	https://github.com/llvm-mirror/clang/blob/master/LICENSE.TXT
rustc	компилятор	Apache 2.0, MIT	https://rust-lang.org/policies/licenses/
Selectel S3	облачное хранилище	проприетарная	https://docs.selectel.ru/en/s3/
Yandex S3	облачное хранилище	проприетарная	https://yandex.cloud/ru
Traefik	балансировщик нагрузки	MIT	https://github.com/traefik/traefik
pingora	балансировщик нагрузки	Apache 2.0	https://github.com/cloudflare/pingora
Kubernetes	контейнеризация	Apache 2.0	https://github.com/kubernetes/kubernetes/blob/master/LICENSE
containerd	контейнеризация	Apache 2.0	https://github.com/containerd/containerd
docker	контейнеризация	Apache 2.0	https://www.docker.com/
nginx	веб-сервер	Open-source	https://nginx.org/
traefik	веб-сервер	MIT	https://github.com/traefik/traefik
gunicorn	сервер приложений	MIT	https://pypi.org/project/gunicorn/
granian	сервер приложений	BSD	https://pypi.org/project/granian/2.2.1/
Python	программная платформа	Python	https://docs.python.org/3/license.html
Rust	программная платформа	Apache 2.0, MIT, Unknown	https://github.com/rust-lang/rust
JavaScript	программная платформа	GNU GPL v2	https://github.com/TheAlgorithm/JavaScript/blob/master/LICENSE
containerd	система виртуализации	Apache 2.0	https://github.com/containerd/containerd
Nuxt	библиотека	MIT	https://github.com/nuxt/nuxt/blob/main/LICENSE
Django	библиотека	BSD-3-Clause	https://pypi.org/project/Django/
Fastapi	библиотека	MIT	https://github.com/fastapi/fastapi
Celery	библиотека	BSD-3-Clause	https://github.com/celery/celery?tab=License-1-ov-file#readme
elasticsearch-dsl	библиотека	Apache 2.0	https://github.com/elastic/elasticsearch-dsl-py

requests	библиотека	Apache 2.0	https://pypi.org/project/requests/
strawberry-graphql	библиотека	MIT	https://github.com/strawberry-graphql/strawberry
cross-web	библиотека	MIT	https://pypi.org/project/cross-web/
beautifulsoup4	библиотека	MIT	https://pypi.org/project/beautifulsoup4/
unidecode	библиотека	GNU GPL v2	https://pypi.org/project/Unidecode/
dadata	библиотека	MIT	https://pypi.org/project/dadata/
phonenumberslite	библиотека	Apache 2.0	https://pypi.org/project/phonenumberslite/
json2table	библиотека	MIT	https://pypi.org/project/json2table/
geopy	библиотека	MIT	https://pypi.org/project/geopy/
aiohttp	библиотека	Apache 2.0, MIT	https://pypi.org/project/aiohttp/
sentry-sdk	библиотека	MIT	https://pypi.org/project/sentry-sdk/
bleach	библиотека	Apache 2.0	https://pypi.org/project/bleach/
aio-pika	библиотека	Apache 2.0	https://pypi.org/project/aio-pika/
pydantic	библиотека	MIT	https://pypi.org/project/pydantic/
pydantic-xml	библиотека	OSI Approved, Public Domain (Unlicense)	https://pypi.org/project/pydantic-xml/
shortuuid	библиотека	BSD-3-Clause	https://pypi.org/project/shortuuid/
lz4	библиотека	BSD-2-Clause	https://github.com/lz4/lz4?tab=License-1-ov-file#readme
xlswriter	библиотека	BSD-2-Clause	https://pypi.org/project/xlsxwriter/
libthumbor	библиотека	MIT	https://github.com/thumbor/libthumbor
tinycss2	библиотека	BSD license	https://pypi.org/project/tinycss2/
kml2geojson	библиотека	MIT	https://pypi.org/project/kml2geojson/
xlsx2csv	библиотека	MIT	https://pypi.org/project/xlsx2csv/
orjson	библиотека	OSI Approved, Apache Software License, MIT License (Apache-2.0 OR MIT)	https://pypi.org/project/orjson/2.0.1/

python-redis-lock	библиотека	BSD-2-Clause	https://pypi.org/project/python-redis-lock/
loguru	библиотека	MIT	https://github.com/delgan/loguru
geoip2	библиотека	Apache 2.0	https://pypi.org/project/geoip2/
pillow	библиотека	MIT	https://pypi.org/project/pillow/
httpx	библиотека	BSD-3-Clause	https://pypi.org/project/httpx/
jinja2	библиотека	BSD license	https://pypi.org/project/Jinja2/
ipython	библиотека	BSD-3-Clause	https://pypi.org/project/ipython/
granian	библиотека	BSD-3-Clause	https://pypi.org/project/granian/2.2.1/
psycopg	библиотека	LGPL 3.0	https://pypi.org/project/psycopg/
xmltodict	библиотека	MIT	https://pypi.org/project/xmltodict/
uuid6	библиотека	MIT	https://pypi.org/project/uuid6/
arq	библиотека	MIT	https://github.com/python-arq/arq
deepdiff	библиотека	MIT	https://pypi.org/project/deepdiff/
dacite	библиотека	MIT	https://github.com/konradhalas/dacite
pika	библиотека	BSD-3-Clause	https://pypi.org/project/pika/
clickhouse-sqlalchemy	библиотека	MIT	https://pypi.org/project/clickhouse-sqlalchemy/
uvicorn	библиотека	BSD-3-Clause	https://pypi.org/project/uvicorn/
uvloop	библиотека	Apache 2.0, MIT	https://pypi.org/project/uvloop/
urllib3	библиотека	MIT	https://pypi.org/project/urllib3/
marisa-trie	библиотека	MIT AND (BSD-2-Clause OR LGPL-2.1-or-later)	https://pypi.org/project/marisa-trie/
google-cloud-recaptcha-enterprise	библиотека	Apache 2.0	https://www.npmjs.com/package/@google-cloud/recaptcha-enterprise
inflection	библиотека	MIT	https://pypi.org/project/inflection/
celery-once	библиотека	BSD license	https://pypistats.org/packages/celery-once
openai	библиотека	Apache 2.0	https://github.com/openai/openai-python/blob/main/LICENSE
user-agents	библиотека	BSD-2-Clause	https://www.npmjs.com/package/user-agents
aioredlock	библиотека	MIT	https://github.com/joanvila/aioredlock
pyjwt	библиотека	MIT	https://pypi.org/project/PyJWT/

whitenoise	библиотека	MIT	https://github.com/evansd/whitenoise/blob/main/LICENSE
gunicorn	библиотека	MIT	https://pypi.org/project/gunicorn/
great-tables	библиотека	MIT	https://pypi.org/project/great-tables/
redis	библиотека	Open-source	https://github.com/redis/redis
django	библиотека	BSD-3-Clause	https://pypi.org/project/Django/
django-enviro	библиотека	MIT	https://pypi.org/project/django-enviro/
django-elastic-search-dsl	библиотека	BSD License (Apache Software License 2.0)	https://pypi.org/project/django-elasticsearch-dsl/
django-leaflet	библиотека	MIT	https://pypi.org/project/django-colorfield/
django-colorfield	библиотека	MIT	https://pypi.org/project/django-colorfield/
django-nested-admin	библиотека	BSD license	https://pypi.org/project/django-nested-admin/
django-adminactions	библиотека	MIT	https://pypi.org/project/django-adminactions/
django-extensions	библиотека	MIT	https://github.com/django-extensions/django-extensions
django-webpack-loader	библиотека	MIT	https://pypi.org/project/django-webpack-loader/1.4.1/
django-redis	библиотека	BSD license	https://pypi.org/project/django-redis/3.1.6/
django-celery-beat	библиотека	BSD license	https://pypi.org/project/django-celery-beat/
django-celery-results	библиотека	BSD license	https://pypi.org/project/django-celery-results/
django-grappelli	библиотека	BSD license	https://pypi.org/project/django-grappelli/
django-polymorphic	библиотека	BSD-3-Clause	https://pypi.org/project/django-polymorphic/
django-admin-autocomplete-filter	библиотека	LGPL v3	https://pypi.org/project/django-admin-autocomplete-filter/
django-autocomplete-light	библиотека	MIT	https://github.com/yourlabs/django-autocomplete-light
django-cacheops	библиотека	BSD-3-Clause	https://github.com/Suor/django-cacheops
django-pglocks	библиотека	MIT	https://pypi.org/project/django-pglocks/
django-dbbackup	библиотека	BSD-3-Clause	https://pypi.org/project/django-dbbackup/

django-axes	библиотека	MIT	https://github.com/jazzband/django-axes
django-storages	библиотека	BSD-3-Clause	https://github.com/jschneier/django-storages
django-clickhouse	библиотека	BSD-3-Clause	https://pypi.org/project/django-clickhouse/
django-clickhouse-backend	библиотека	MIT	https://github.com/jayvynl/django-clickhouse-backend
dal-admin-filters	библиотека	MIT	https://pypi.org/project/dal-admin-filters/
django-cqrs	библиотека	Apache 2.0	https://github.com/cloudblue/django-cqrs
django-simple-history	библиотека	BSD-3-Clause	https://github.com/django-commons/django-simple-history
django-ninja	библиотека	MIT	https://github.com/vitalik/django-ninja
flower	библиотека	BSD license	https://pypi.org/project/flower/
channels	библиотека	BSD-3-Clause	https://github.com/django/channels/blob/main/LICENSE
channels-redis	библиотека	BSD-3-Clause	https://github.com/django/channels_redis/
connectorx	библиотека	MIT	https://github.com/sfu-db/connector-x
fastexcel	библиотека	MIT	https://pypi.org/project/fastexcel/
pandas	библиотека	BSD-3-Clause	https://github.com/pandas-dev/pandas
polars	библиотека	MIT	https://github.com/pola-rs/polars
pyarrow	библиотека	Apache 2.0	https://pypi.org/project/pyarrow/
statsforecast		Apache 2.0	https://pypi.org/project/statsforecast/
pymorphy2	библиотека	MIT	https://pypi.org/project/pymorphy2/
pymorphy3	библиотека	MIT	https://pypi.org/project/pymorphy3/
pymorphy3-dicts-ru	библиотека	MIT	https://pypi.org/project/pymorphy3-dicts-ru/
debugpy	библиотека	MIT	https://github.com/microsoft/debugpy?tab=License-1-ov-file#readme
undetected-chromedriver	библиотека	MIT	https://www.npmjs.com/package/undetected-chromedriver-js
webdriver-manager	библиотека	Apache 2.0	https://github.com/bonigarcia/webdrivermanager
altair	библиотека	BSD-3-Clause	https://github.com/vega/altair
sqlalchemy	библиотека	MIT	https://github.com/sqlalchemy/sqlalchemy

boto3	библиотека	Apache 2.0	https://pypi.org/project/boto3/
@nuxtjs/apollo	библиотека	MIT	https://www.npmjs.com/package/nuxt-apollo
@nuxtjs/device	библиотека	MIT	https://nuxt.com/modules/device
@openapitools/openapi-generator-cli	библиотека	Apache 2.0	https://www.npmjs.com/package/@openapitools/openapi-generator-cli
@saslavik/nuxt-gtm	библиотека	MIT	https://www.npmjs.com/package/@saslavik/nuxt-gtm
autocannon	библиотека	MIT	https://www.npmjs.com/package/autocannon
nuxt-delay-hydration	библиотека	MIT	https://nuxt.com/modules/delay-hydration
sass	библиотека	MIT	https://www.npmjs.com/package/sass
vite-plugin-vuetify	библиотека	MIT	https://www.npmjs.com/package/vite-plugin-vuetify?activeTab=versions
vuetify	библиотека	MIT	https://www.npmjs.com/package/vuetify
@artmizu/nuxt-prometheus	библиотека	MIT	https://github.com/artmizu/nuxt-prometheus
@formkit/auto-animate	библиотека	MIT	https://www.npmjs.com/package/@formkit/auto-animate
@nuxt/eslint	библиотека	MIT	https://nuxt.com/modules/eslint
@nuxtjs/leaflet	библиотека	Apache 2.0	https://nuxt.com/modules/leaflet
@pinia/nuxt	библиотека	MIT	https://nuxt.com/modules/pinia
@sentry/nuxt	библиотека	MIT	https://www.npmjs.com/package/@sentry/nuxt
@vueuse/core	библиотека	MIT	https://www.npmjs.com/package/@vueuse/core?activeTab=code
chart.js	библиотека	MIT	https://www.npmjs.com/package/chart.js?activeTab=readme
eslint	библиотека	MIT	https://www.npmjs.com/package/eslint
isomorphic-dompurify	библиотека	MIT	https://www.npmjs.com/package/isomorphic-dompurify?activeTab=versions
markdown-it	библиотека	MIT	https://github.com/markdown-it/markdown-it
nuxt	библиотека	MIT	https://github.com/nuxt/nuxt
nuxt-swiper	библиотека	MIT	https://nuxt.com/modules/swiper
nuxt-vitalizer	библиотека	MIT	https://nuxt.com/modules/vitalizer

photoswipe	библиотека	MIT	https://github.com/Avantio/Photoswipe/blob/master/LICENSE
pinia	библиотека	MIT	https://www.npmjs.com/package/pinia
thumbor-url-builder	библиотека	MIT	https://www.npmjs.com/package/thumbor-url-builder
vue	библиотека	MIT	https://www.npmjs.com/package/vue
vue-chartjs	библиотека	MIT	https://www.npmjs.com/package/vue-chartjs