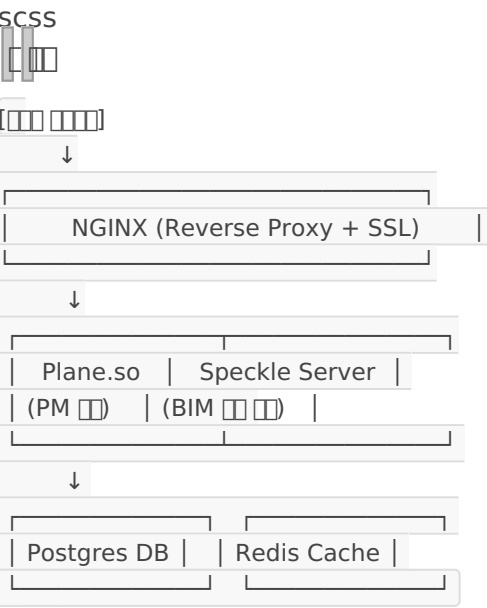


# BIM + PM ( )

**Speckle = BIM** /  
**Plane.so =** / / /  
:

( )



The diagram consists of three pairs of small boxes, each pair enclosed in a larger box. These are followed by a large pair of boxes, each of which contains three smaller pairs of boxes. This represents the expression  $(a_1 a_2)(a_3 a_4)(a_5 a_6)(a_1 a_2 a_3 a_4 a_5 a_6)$ .

▶ `<iframe src="/>` (iframe)

- Speckle    URL

arduino



`https://your-speckle-server/projects/1234`

- [Plane.so](#) Docs                                       

markdown

### ☐ ☐ ☐

```
<iframe src="https://your-speckle-server/embed?stream=abcd" width="100%" height="600px"></iframe>
```

- 

less



🔗 <https://your-speckle-server/projects/1234>

		:						
--	--	---	--	--	--	--	--	--

► **Speckle ID**

Speckle , Plane.so    .

2

ison

{

```
"type": "wall",
```

```
"issued": "PL-1234"
```

}

→ Plane[PL-1234]

Speckle API!



1. [Speckle Server](#) [文档](#) [教程](#)
2. [Plane.so](#) [文档](#) ([文档](#) [教程](#) [教程](#))
3. [Nginx](#) [文档](#) [教程](#) + [HTTPS](#) [教程](#)
4. [Speckle](#) [文档](#) [embed](#) [教程](#) [教程](#)
5. [Plane Docs](#) [iframe](#) [教程](#)
6. [API](#) [文档](#) [教程](#) [教程](#) ([文档](#))

## 部署 [Plane](#) 到 [腾讯云](#) ([文档](#))



mathematica

## 部署 [Plane](#) 到 [阿里云](#) (1. [文档](#))

组件	说明	版本
<a href="#">Plane.so</a>	<a href="#">文档</a> <a href="#">教程</a>	3000
<a href="#">Speckle Server</a>	BIM <a href="#">文档</a> <a href="#">教程</a>	3001
<a href="#">Nginx</a> ( <a href="#">文档</a> )	<a href="#">文档</a> <a href="#">教程</a> , <a href="#">HTTPS</a>	80, 443
<a href="#">Postgres</a>	<a href="#">文档</a> <a href="#">教程</a>	5432 ( <a href="#">文档</a> )
<a href="#">Redis</a>	<a href="#">文档</a>	6379 ( <a href="#">文档</a> )

其他:

- [Bookstack](#)
- [Nextcloud](#)
- [Superset](#)
- [Keycloak](#) (SSO)

# 📄 Docker Compose (docker-compose.yml)

```
version: "3.9"
```

```
services:
```

```
  postgres:
```

```
    image: postgres:15
```

```
    container_name: shared-postgres
```

```
    restart: always
```

```
    environment:
```

```
      POSTGRES_USER: plane
```

```
      POSTGRES_PASSWORD: plane123
```

```
      POSTGRES_DB: plane
```

```
  volumes:
```

```
    - pgdata:/var/lib/postgresql/data
```

```
  redis:
```

```
    image: redis:7
```

```
    container_name: shared-redis
```

```
    restart: always
```

```
  plane:
```

```
    image: makeplane/plane:latest
```

```
    container_name: plane
```

```
    depends_on:
```

```
      - postgres
```

```
      - redis
```

```
    ports:
```

```
      - "3000:3000"
```

```
    environment:
```

```
      DATABASE_URL: postgres://plane:plane123@postgres:5432/plane
```

```
      REDIS_URL: redis://redis:6379
```

```
      PORT: 3000
```

```
  speckle:
```

```
    image: speckle/speckle-server:latest
```

```
container_name: speckle

ports:
  - "3001:3000"

environment:
  SPECKLE_HOST_URL: http://localhost:3001
  POSTGRES_URL: postgres://plane:plane123@postgres:5432/speckle
  REDIS_URL: redis://redis:6379

depends_on:
  - postgres
  - redis

volumes:
  pgdata:
```



- **Postgres:** Plane Speckle DB (DB)
- **Redis:**
- **Plane:** PM
- **Speckle:** BIM
- **Docker 1**
- Nginx + HTTPS



```
#
mkdir bim-pm-platform && cd bim-pm-platform

# docker-compose.yml
nano docker-compose.yml

# ,
docker compose up -d
```



# 📁 📁 📁

📁	📁
Plane	http://📁IP:3000
Speckle	http://📁IP:3001

# 📁 📁 📁?

- 📁.env 📁 📁 📁? → 📁📁📁 📁 📁!
- 📁 Bookstack/Nextcloud📁 📁📁? → 📁📁 📁 📁!
- 📁 Nginx + HTTPS 📁📁 📁📁 📁 📁!
- 📁 Plane Docs📁 Speckle iframe 📁 📁 📁📁📁? → 📁📁!

# 📁 📁 📁 📁📁 📁 📁📁!

📁 📁.env 📁 init.sql, Nginx 📁, 📁 Bookstack 📁 📁📁📁 📁📁  
"📁📁 📁📁?"📁📁 📁📁! 📁 📁📁 📁📁📁📁 📁