

CKYC All-in-One Service - Deployment Package

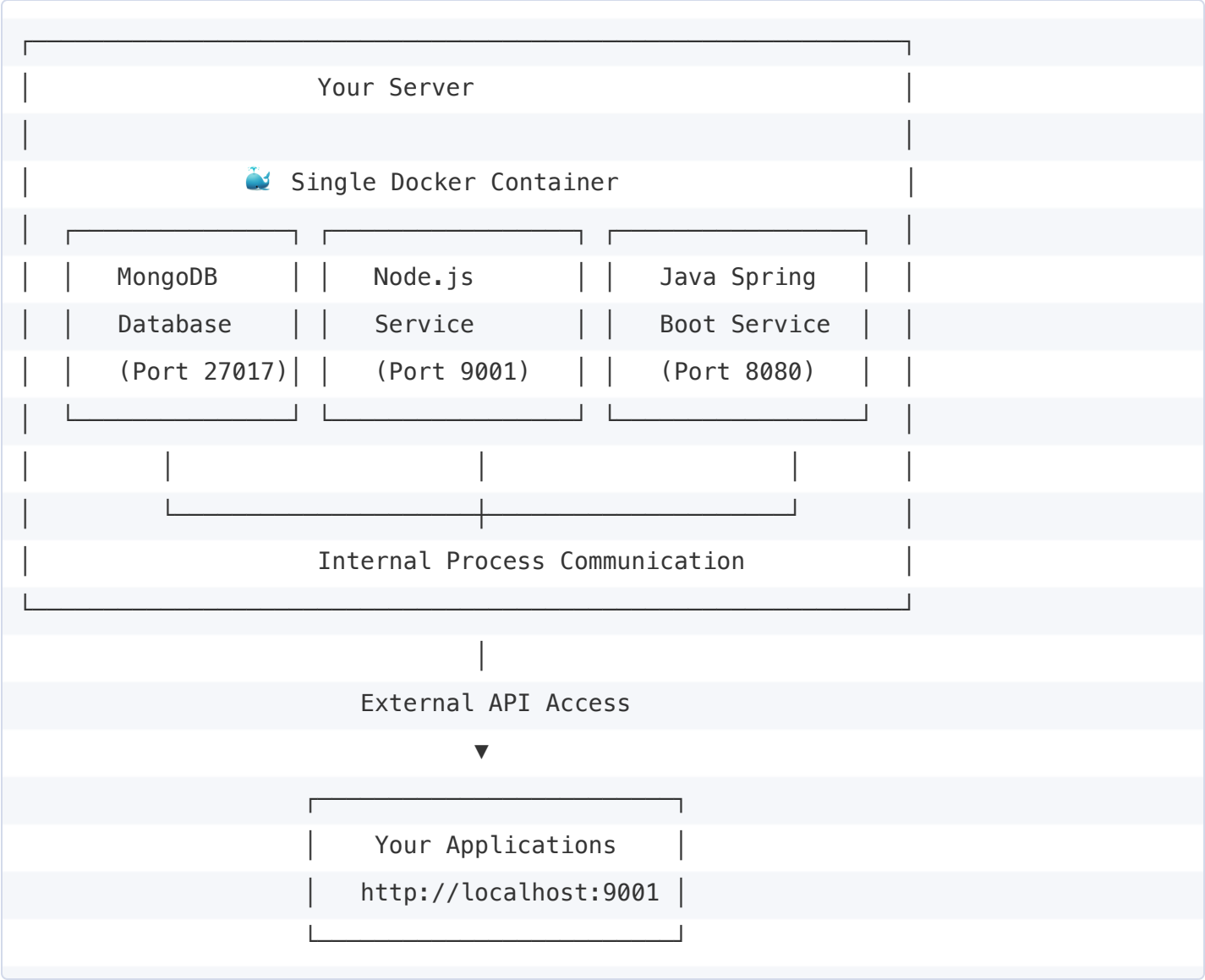
Zero-Configuration Deployment

This package contains everything needed to deploy the complete CKYC service using a **single Docker image**.

What’s Included in ONE Image:

- **MongoDB Database** (with automatic initialization)
- **Node.js CKYC Service** (main API)
- **Java CKYC Service** (encryption & third-party communication)
- **Automatic health monitoring**
- **Data persistence** (survives restarts)

Architecture:



Prerequisites

- **Docker** installed and running
- **Docker Compose** installed
- **4GB+ RAM** available
- **10GB+ disk space**

- **Ports available:** 9001, 8080, 27017

Quick Start (2 Commands)

Option 1: Automated Setup (Recommended)

```
chmod +x setup.sh
./setup.sh
```

Option 2: Manual Setup

```
docker-compose up -d
```

That’s it! Service will be available at: <http://localhost:9001>

Service URLs

- **Main CKYC API:** <http://localhost:9001>
- **Health Check:** <http://localhost:9001/health>

Default Configuration

Database Credentials

- **Username:** `admin`
- **Password:** `ckyc2024`
- **Database:** `ckyc`

 **Important:** Change the password in production by editing `docker-compose.yml`

Management Commands

```
# Service Control
docker-compose up -d           # Start service
docker-compose down           # Stop service
docker-compose restart        # Restart service
docker-compose ps             # Check status

# Monitoring
docker-compose logs -f         # Live logs
curl http://localhost:9001/health # Health check

# Updates
```

```
docker-compose pull          # Get latest image
docker-compose up -d         # Apply update
```



Health Check

```
# Check if service is running
curl http://localhost:9001/health

# Expected response:
# {"status":"ok","timestamp":"2025-09-23T...", "service":"ckyc-allinone"}
```



Troubleshooting

Service Won't Start

```
# Check what's using the ports
sudo lsof -i :9001
sudo lsof -i :8080

# View detailed logs
docker-compose logs

# Restart everything
docker-compose down && docker-compose up -d
```

Can't Download Image

```
# Check internet connection
ping google.com

# Manual image pull
docker pull indiap2p/ckyc-allinone:latest
```

Health Check Fails

```
# Wait for full startup (can take 2-3 minutes for all services)
sleep 120
curl http://localhost:9001/health

# Check container is running
docker-compose ps
```

Security Recommendations

Before Production:

1. **Change MongoDB password** in `docker-compose.yml`
2. **Configure firewall** to restrict port access
3. **Set up SSL/HTTPS** using reverse proxy (nginx)
4. **Regular backups** of MongoDB data
5. **Monitor logs** for security events

Firewall Example (Ubuntu):

```
# Allow only local access
sudo ufw allow from 127.0.0.1 to any port 9001
sudo ufw allow from 127.0.0.1 to any port 8080
```

Backup & Recovery

Backup Database

```
# Create backup
docker exec ckyc-mongodb mongodump --uri="mongodb://admin:ckyc2024@localhost:27017/ckyc?authSource=admin" --out=/tmp/backup

# Copy backup to host
docker cp ckyc-mongodb:/tmp/backup ./backup-$(date +%Y%m%d)
```

Restore Database

```
# Copy backup to container
docker cp ./backup-20250923 ckyc-mongodb:/tmp/restore

# Restore database
docker exec ckyc-mongodb mongorestore --uri="mongodb://admin:ckyc2024@localhost:27017/ckyc?authSource=admin" /tmp/restore/ckyc
```

Support

Getting Help

1. **Check logs:** `docker-compose logs > logs.txt`
2. **System info:** `docker version > system.txt`
3. **Service status:** `docker-compose ps > status.txt`

Common Solutions

- **Port conflicts:** Change ports in `docker-compose.yml`
- **Memory issues:** Increase Docker memory limit
- **Permission errors:** Add user to docker group: `sudo usermod -aG docker $USER`

Success Checklist

After deployment, verify:

- ☐ **All containers running:** `docker-compose ps`
- ☐ **Health check passes:** `curl http://localhost:9001/health`
- ☐ **No errors in logs:** `docker-compose logs`
- ☐ **API responds:** `curl http://localhost:9001`

Next Steps

1. **Test the API** with your applications
2. **Configure SSL/HTTPS** for production
3. **Set up monitoring** and alerting
4. **Schedule regular backups**
5. **Update regularly:** `docker-compose pull && docker-compose up -d`

 **Congratulations!** Your CKYC service is now running.

For questions or issues, collect the logs and contact support.