

# Production Environment Configuration

---

## Required Environment Variables

---

### Core System Configuration

```
# Telegram Bot Configuration (REQUIRED)
TELEGRAM_BOT_TOKEN=your_bot_token_from_botfather
ADMIN_CHAT_ID=your_telegram_user_id_for_admin_access

# Database Configuration
DATABASE_URL=postgresql://username:password@host:port/database_name

# BlockBee Cryptocurrency Payment API (REQUIRED)
BLOCKBEE_API_KEY=your_blockbee_api_key_from_dashboard
BLOCKBEE_WEBHOOK_URL=https://yourdomain.replit.app/webhook/blockbee
```

### Optional SMTP Configuration (For Enhanced Email Validation)

```
# Gmail Configuration Example
SMTP_SERVER=smtp.gmail.com
SMTP_PORT=587
SMTP_USERNAME=your-email@gmail.com
SMTP_PASSWORD=your-app-specific-password
SMTP_USE_TLS=true
SMTP_TEST_EMAIL=test@validator.com
SMTP_HELO_DOMAIN=validator.com

# Outlook/Hotmail Configuration Example
# SMTP_SERVER=smtp-mail.outlook.com
# SMTP_PORT=587
# SMTP_USERNAME=your-email@outlook.com
# SMTP_PASSWORD=your-app-password

# Yahoo Configuration Example
# SMTP_SERVER=smtp.mail.yahoo.com
# SMTP_PORT=587
```

```
# SMTP_USERNAME=your-email@yahoo.com
# SMTP_PASSWORD=your-app-password
```

## System Configuration (Optional - Defaults Provided)

```
# Subscription & Pricing
SUBSCRIPTION_PRICE_USD=9.99
SUBSCRIPTION_DURATION_DAYS=30
TRIAL_VALIDATION_LIMIT=1000

# Performance Settings
MAX_CONCURRENT_VALIDATIONS=50
VALIDATION_TIMEOUT=10
MAX_FILE_SIZE_MB=10
RATE_LIMIT_PER_MINUTE=120

# Phone Validation
DEFAULT_PHONE_REGION=US
PHONE_VALIDATION_TIMEOUT=5

# API Endpoints
BLOCKBEE_BASE_URL=https://api.blockbee.io
COINGECKO_API_BASE=https://api.coingecko.com/api/v3
TELEGRAM_API_BASE=https://api.telegram.org
```

## How to Obtain Required Keys

---

### 1. Telegram Bot Token

1. Message @BotFather on Telegram
2. Use /newbot command
3. Follow prompts to create your bot
4. Copy the bot token provided
5. Get your Telegram user ID from @userinfobot

### 2. BlockBee API Key

1. Visit <https://blockbee.io>
2. Create account and verify email
3. Access API dashboard
4. Generate new API key

5. Configure supported cryptocurrencies

### 3. SMTP Credentials (Optional but Recommended)

#### Gmail:

1. Enable 2-factor authentication
2. Generate app-specific password in Google Account settings
3. Use this password, not your regular Gmail password

#### Outlook:

1. Enable 2-factor authentication in Microsoft account
2. Generate app password in security settings
3. Use app password for SMTP\_PASSWORD

### 4. Database Setup

For PostgreSQL (recommended for production):

```
# Example connection string
DATABASE_URL=postgresql://validator_user:secure_password@db.server.com:5432/validator_db
```

## Production Deployment Checklist

---

### Pre-Deployment

- [ ] Obtain Telegram bot token from BotFather
- [ ] Get BlockBee API key and configure cryptocurrencies
- [ ] Set up PostgreSQL database
- [ ] Configure SMTP credentials (optional but recommended)
- [ ] Set ADMIN\_CHAT\_ID to your Telegram user ID

### Environment Setup

- [ ] Add all required environment variables to Replit Secrets
- [ ] Verify BLOCKBEE\_WEBHOOK\_URL points to your deployed app
- [ ] Test database connection

- [ ] Validate SMTP configuration if used

## Security Considerations

- [ ] Use strong, unique passwords for database
- [ ] Store all sensitive data in environment variables
- [ ] Never commit API keys to version control
- [ ] Use app-specific passwords for email providers
- [ ] Regularly rotate API keys and passwords

## Testing Before Launch

- [ ] Test email validation with various email types
- [ ] Test phone validation with international numbers
- [ ] Verify cryptocurrency payment flow end-to-end
- [ ] Test subscription activation via webhook
- [ ] Verify file upload and download functionality
- [ ] Test admin panel access and functions

## System Architecture

---

### Port Configuration

- **Port 5000:** BlockBee Payment API Server
- **Port 5001:** File Server (validation results downloads)
- **Port 5002:** Webhook Handler (internal bot communications)

### Service Dependencies

1. **PostgreSQL Database:** User data, subscriptions, validation results
2. **BlockBee API:** Cryptocurrency payment processing
3. **Telegram Bot API:** User interface and notifications
4. **SMTP Servers:** Enhanced email validation (optional)
5. **File Storage:** Temporary storage for uploaded files and results

## Monitoring & Maintenance

- Monitor webhook delivery success rates
- Track payment confirmation times
- Watch validation processing performance
- Monitor database storage usage
- Check SMTP authentication success rates

## Troubleshooting Common Issues

---

### Bot Not Responding

- Verify TELEGRAM\_BOT\_TOKEN is correct
- Check if bot is added to channels properly
- Ensure no conflicting bot instances

### Payment Issues

- Verify BLOCKBEE\_API\_KEY is valid
- Check webhook URL is accessible publicly
- Confirm cryptocurrency is enabled in BlockBee dashboard

### Email Validation Problems

- Test SMTP credentials separately
- Check firewall settings for SMTP ports
- Verify email provider app password settings

### Database Connection Issues

- Test DATABASE\_URL connection string format
- Verify database server accessibility
- Check user permissions for database operations

# Support Contacts

---

- BlockBee Support: <https://blockbee.io/support>
  - Telegram Bot Support: <https://core.telegram.org/bots/support>
  - SMTP Provider Support: Contact your email provider
- 

**Last Updated:** August 3, 2025 **System Status:** Production Ready **Documentation**  
**Version:** 1.0