# 🚀 Complete Railway Migration Guide

**Step-by-Step Guide to Deploy Your Discord Bank Bot on Railway**

## 🎯 What You’ll Achieve

✅ **24/7 Bot Hosting** - No more keeping your computer on!  
✅ **All Original Commands** - Every feature from your GitHub repo  
✅ **Enhanced Dice Command** - Beautiful visual dice battles  
✅ **Automatic Deployments** - Push to GitHub = Auto-deploy  
✅ **Free Hosting** - Railway’s generous free tier

## 📋 Pre-Migration Checklist

### 🔑 Required Information

* ☐ Discord Bot Token
* ☐ Discord Bot Client ID (Application ID)
* ☐ Channel ID where bot should work (optional)
* ☐ GitHub account
* ☐ Railway account (free sign-up)

### 🔍 Get Your Bot Info

#### Discord Bot Token

1. Go to [Discord Developer Portal](https://discord.com/developers/applications)
2. Click your bot application
3. Go to “Bot” section
4. Click “Reset Token” → Copy the new token
5. **Save this token securely!**

#### Application ID (Client ID)

1. Same Developer Portal
2. Go to “General Information”
3. Copy “APPLICATION ID”
4. **Save this ID!**

#### Channel ID (Optional)

1. Enable Developer Mode in Discord
2. Right-click the channel where bot should work
3. Click “Copy Channel ID”
4. **Save this ID!**

## 🗃️ Step 1: Prepare Your Repository

### Option A: Fork This Repository (Recommended)

1. **Fork this repository** to your GitHub account
2. **Clone your fork** to your computer:

* git clone https://github.com/YOUR\_USERNAME/discord-bank-bot-complete.git  
  cd discord-bank-bot-complete

1. **Add your dice assets** (copy from your original project):

* # Copy your dice images to dice\_assets/  
  cp your\_images/1.jpg dice\_assets/  
  cp your\_images/2.jpg dice\_assets/  
  cp your\_images/3.jpg dice\_assets/  
  cp your\_images/4.jpg dice\_assets/  
  cp your\_images/5.jpg dice\_assets/  
  cp your\_images/6.jpg dice\_assets/  
  cp your\_images/red\_background\_700x250.png dice\_assets/

1. **Create config.js from template**:

* cp config.js.template config.js

1. **Edit config.js** with your specific settings (channel IDs, etc.)
2. **Commit and push changes**:

* git add .  
  git commit -m "Added my bot configuration and assets"  
  git push origin main

### Option B: Create New Repository

1. **Download this complete migration folder**
2. **Create new GitHub repository**:
   * Name: discord-bank-bot-complete
   * Visibility: Public (for Railway free tier)
   * Don’t add README, .gitignore (we have our own)
3. **Upload all files** to your new repository
4. **Follow steps 3-6 from Option A**

## 🚂 Step 2: Deploy to Railway

### Create Railway Account

1. Go to [railway.app](https://railway.app)
2. Click “Login” → “Login with GitHub”
3. Authorize Railway to access your GitHub

### Deploy Your Bot

1. **Click “Deploy from GitHub repo”**
2. **Select your repository**: discord-bank-bot-complete
3. **Railway auto-detects**: Node.js project with Python support
4. **Click “Deploy”**

### Configure Environment Variables

1. **In Railway dashboard**, click your project
2. **Go to “Variables” tab**
3. **Add these variables**:

| * Variable Name | * Value | * Required |
| --- | --- | --- |
| * DISCORD\_TOKEN | * Your bot token | * ✅ Required |
| * ALLOWED\_CHANNEL\_ID | * Your channel ID | * ⚠️ Optional |
| * NODE\_ENV | * production | * ⚠️ Optional |

1. **Click “Save”** - Railway will auto-redeploy!

## ✅ Step 3: Test Your Deployment

### Check Railway Logs

1. **Go to Railway dashboard** → Your project
2. **Click “Deployments”** → Latest deployment
3. **Look for success indicators**:

* ✅ Loaded command: نرد  
  ✅ Loaded command: راتب  
  ✅ Loaded command: فلوسي  
  🤖 Bot is Ready! YourBot#1234!  
  🚀 Enhanced with Railway hosting and improved dice command!

### Test in Discord

1. **Go to your Discord server**
2. **Try these commands**:
   * راتب (salary)
   * فلوسي (balance)
   * نرد (dice - should generate beautiful image!)
   * اوامر (commands list)

### Verify Bot Status

* **Bot should appear online** in your server
* **Commands should respond** within seconds
* **Dice command should generate images** (or fallback to text)

## 🎯 Step 4: Enjoy 24/7 Hosting!

### 🎉 Congratulations! Your bot is now:

* **Running 24/7** on Railway cloud
* **Auto-deploying** when you push to GitHub
* **Enhanced** with visual dice battles
* **Monitoring** resource usage automatically

### 📊 Management Dashboard

* **Railway Dashboard**: Monitor uptime, logs, resource usage
* **GitHub Repository**: Make changes, auto-deploy
* **Discord Server**: Bot stays online 24/7

### 🔄 Making Updates

1. **Edit files locally** or on GitHub
2. **Commit and push** changes
3. **Railway auto-deploys** within 2-3 minutes
4. **Changes appear** in Discord immediately

## 🛠️ Troubleshooting Guide

### ❌ Bot Won’t Start

**Check Railway Logs for errors:**

#### Error: “DISCORD\_TOKEN is required”

* **Solution**: Add DISCORD\_TOKEN in Railway variables
* **Verify**: Token is correct and not expired

#### Error: “Failed to login to Discord”

* **Solution**: Generate new token in Discord Developer Portal
* **Add**: New token to Railway environment variables

#### Error: Command loading failures

* **Solution**: Check file syntax in affected commands
* **Look**: For missing commas, brackets, or syntax errors

### ⚠️ نرد Command Issues

#### Images Not Generating

* **Expected**: Bot falls back to text mode automatically
* **Check**: Railway logs for Python errors
* **Verify**: All dice assets are in dice\_assets/ folder

#### “Python dice generator not found”

* **Solution**: Files are in wrong location
* **Fix**: Ensure generate\_improved\_dice\_image.py is in root directory

### 🔇 Commands Not Responding

#### Bot Online But Ignoring Commands

* **Check**: ALLOWED\_CHANNEL\_ID in environment variables
* **Remove**: Variable if you want bot to work in all channels
* **Verify**: Bot has permission to read/send messages

#### Cooldown Messages

* **Normal**: Commands have cooldown periods (30s for نرد)
* **Wait**: For cooldown to expire
* **Check**: config.js cooldown settings if needed

### 📈 Performance Issues

#### Bot Slow or Timing Out

* **Check**: Railway resource usage
* **Upgrade**: To paid plan if hitting limits
* **Optimize**: Database queries if needed

#### High Memory Usage

* **Normal**: Image generation uses memory
* **Cleanup**: Temp images are auto-deleted after 1 minute
* **Monitor**: Railway dashboard for alerts

## 💡 Pro Tips

### 🔧 Optimization

* **Monitor Railway dashboard** for resource usage
* **Keep dice assets optimized** (smaller file sizes)
* **Enable cleanup** in dice command (already configured)

### 🔒 Security

* **Never share your bot token** publicly
* **Use environment variables** for all secrets
* **Regenerate token** if accidentally exposed

### 📊 Monitoring

* **Check logs regularly** for errors
* **Monitor bot uptime** in Discord
* **Watch Railway resource usage**

### 🚀 Scaling

* **Railway free tier**: 500 hours/month + $5 credit
* **Upgrade to Pro**: For unlimited usage
* **Multiple bots**: Deploy each as separate project

## 📞 Getting Help

### 🆘 If You’re Still Stuck:

1. **Check Railway logs** first - most issues show up there
2. **Verify environment variables** are set correctly
3. **Test locally** using npm start to isolate Railway issues
4. **Review this guide** - solution is usually here
5. **Contact support** - Railway has excellent documentation

### 📚 Useful Resources:

* [Railway Documentation](https://docs.railway.app/)
* [Discord.js Guide](https://discordjs.guide/)
* [Discord Developer Portal](https://discord.com/developers/)
* [Wick Studio Discord](https://discord.gg/wicks)

## 🎯 Success Checklist

* ☐ Bot appears online in Discord
* ☐ Commands respond correctly (راتب, فلوسي, etc.)
* ☐ Enhanced نرد command generates images
* ☐ Railway logs show successful startup
* ☐ No error messages in console
* ☐ Bot has been running for 24+ hours
* ☐ Auto-deployment works when pushing to GitHub

**🎉 Congratulations! Your Discord Bank Bot is now running 24/7 on Railway with enhanced features!**

*Need help? The bot includes comprehensive error handling and will fallback gracefully if anything goes wrong.*