

# Trello Integration Setup Guide

This guide walks you through setting up Trello integration with TaskTuner step-by-step.

## Prerequisites

- A Trello account (free or paid)
- At least one Trello board with cards/tasks
- Access to create API applications in Trello

## Step 1: Get Your Trello API Key

### 1. Visit the Trello Developer Portal

- Go to <https://trello.com/app-key>
- Make sure you're logged into your Trello account

### 2. Copy Your API Key

- You'll see a page titled "Trello API Key"
- Find the section labeled "Key"
- Copy the long string of characters (this is your TRELLO\_KEY)
- Save this somewhere secure - you'll need it for your .env file


3. Example: a1b2c3d4e5f6g7h8i9j0k1l2m3n4o5p6


## Step 2: Generate Your API Token

### 1. Click the Token Link

- On the same API key page, look for a link that says "Token"
- Click on this link

### 2. Authorize TaskTuner

- You'll be taken to an authorization page
- The page will ask you to authorize access to your Trello account
- Choose the appropriate permissions:
  -  **Read** - Required to fetch your cards/tasks

-  **Write** - Not needed (TaskTuner only reads tasks)
- Select expiration: **Never** (recommended) or set a specific timeframe
- 3. **Set Authorization Scope**
  - **Account Access:** Allow access to your account
  - **Board Access:** Allow access to all your boards, or specify particular boards
- 4. **Complete Authorization**
  - Click "Allow" or "Authorize"
  - You'll be shown your token - a long string of characters
  - Copy this token (this is your TRELLO\_TOKEN)
  - Save this securely alongside your API key

### Step 3: Find Your Board ID (Optional)

If you want to limit TaskTuner to tasks from a specific board:

1. **Open Your Trello Board**
  - Navigate to the Trello board you want to use
  - Make sure you're viewing the board (not in a card or menu)
2. **Extract Board ID from URL**
  - Look at your browser's address bar
  - The URL will look like: `https://trello.com/b/BOARD_ID/board-name`
  - Copy the BOARD\_ID part (between /b/ and the next /)
3. Example URL: `https://trello.com/b/5f8a9b2c1d3e4f5g/my-project-board`
4. Board ID: `5f8a9b2c1d3e4f5g`
5. **Alternative Method - Use Trello API** If the URL method doesn't work, you can use the API:
6. `curl`  
`"https://api.trello.com/1/members/me/boards?key=YOUR_KEY&token=YOUR_TOKEN"`

This will return JSON with all your boards and their IDs.

#### Step 4: Configure TaskTuner

1. **Create Environment File**

2. `cp .env.example .env`

3. **Edit Your .env File** Open .env in your text editor and add your credentials:

4. # Required - Your Trello API credentials

5. `TRELLO_KEY=your_actual_api_key_here`

6. `TRELLO_TOKEN=your_actual_token_here`

- 7.

8. # Optional - Limit to specific board

9. `BOARD_ID=your_board_id_here`

- 10.

11. # Optional - Daily scheduling limit

12. `DAILY_HOUR_LIMIT=8`

13. **Save and Restart**

- Save the .env file
- Restart your TaskTuner application
- The app will now connect to Trello on startup

#### Step 5: Test Your Connection

1. **Start TaskTuner**

2. `python app.py`

3. **Check the Console Output**

- Look for a message like: [Trello] Loaded X cards from Trello
- If you see an error, double-check your credentials

4. **Verify in the UI**

- Go to `http://localhost:5000/tasks-ui`
- You should see your Trello cards listed

- If the list is empty, check your board access and card visibility

## Troubleshooting

### Common Issues

#### "Invalid API Key" Error

- **Cause:** Wrong or expired API key
- **Solution:** Generate a new API key from <https://trello.com/app-key>

#### "Invalid Token" Error

- **Cause:** Wrong, expired, or insufficient permission token
- **Solution:** Generate a new token with read permissions

#### "No Cards Found"

- **Cause:** Empty board, wrong board ID, or permission issues
- **Solutions:**
  - Verify the board has cards/tasks
  - Remove BOARD\_ID to fetch from all boards
  - Check that your token has access to the specified board

#### "API Rate Limited"

- **Cause:** Too many requests to Trello API
- **Solution:** Wait a few minutes and try again

## Testing Your Credentials

You can test your credentials manually using curl:

# Test API key and token

```
curl "https://api.trello.com/1/members/me?key=YOUR_KEY&token=YOUR_TOKEN"
```

# Test board access (if using BOARD\_ID)

```
curl
```

```
"https://api.trello.com/1/boards/YOUR_BOARD_ID/cards?key=YOUR_KEY&token=YOUR_TOKEN"
```

# List all your boards

```
curl "https://api.trello.com/1/members/me/boards?key=YOUR_KEY&token=YOUR_TOKEN"
```





## Fallback Mode

If Trello integration fails, TaskTuner will automatically fall back to using task\_data.json:




1. **Create Fallback File**
2. `cp sample_data.json task_data.json`
3. **Edit Sample Data**
  - Modify task\_data.json with your actual tasks
  - Format: [{"id": "unique-id", "name": "Task name", "effort": 0}]

## Security Best Practices




### Protect Your Credentials

-  Add .env to your .gitignore file
-  Never commit API keys to version control
-  Use environment variables in production
-  Regularly rotate your tokens

### Token Permissions

-  Use read-only tokens when possible
-  Set appropriate expiration dates
-  Revoke unused tokens

### Access Control

-  Only grant access to boards you need
-  Review authorized applications periodically
-  Use board-specific tokens for sensitive projects

## Advanced Configuration

## Multiple Boards

To fetch tasks from multiple specific boards (not all boards), you can modify the service:

1. Edit services/trello\_service.py
2. Add multiple board IDs to your environment:
3. BOARD\_IDS=board1,board2,board3
4. Update the fetch function to iterate through multiple boards

## Custom Fields

Trello custom fields can be used for effort estimation:

1. Set up a "Hours" custom field in Trello
2. Modify the Trello service to read custom field values
3. Map custom field values to effort estimates

## Webhooks (Advanced)

For real-time synchronization, you can set up Trello webhooks:

1. Register webhook endpoints in TaskTuner
2. Configure Trello to send updates to your application
3. Handle incoming webhook data to update tasks automatically

## API Rate Limits

Trello has the following rate limits:

- **300 requests per 10 seconds per API key**
- **100 requests per 10 seconds per user token**

TaskTuner makes minimal API calls:

- 1 call on application startup
- 1 call when manually refreshing tasks
- No ongoing polling or real-time requests

For most users, rate limits should not be an issue.