



# Late API Rate Limit Reset Time Tracking

**Date:** November 22, 2025

## Executive Summary

### ✓ RESET TIME TRACKING IMPLEMENTED!

Your Late API rate limit tracking system now shows **exactly when each platform's limit will reset** for each profile. This helps you plan your posting schedule more effectively.

## How Reset Times Work

### Rolling 24-Hour Window


The Late API uses a **rolling 24-hour window** for rate limits, NOT a fixed daily reset time like "8 PM":

- **When you post:** Your post is recorded with a timestamp
- **When it expires:** 24 hours after that specific post
- **When the limit resets:** 24 hours after your **oldest** post to that platform

### Example Scenario

Basketball Factory - Instagram:

Post #1: 9:00 AM → Expires at 9:00 AM **next** day  
Post #2: 10:00 AM → Expires at 10:00 AM **next** day  
Post #3: 11:00 AM → Expires at 11:00 AM **next** day  
...  
Post #8: 4:00 PM → Expires at 4:00 PM **next** day (limit reached)


 Reset Time: 9:00 AM **next** day (when Post #1 expires)  
After reset, you can post again!

## What's New

### 1. Reset Time Display in UI


The Late API rate limit banner now shows reset times for each platform:

**Example Display:**


 Late API Rate **Limit** Warning (2 platforms)

Basketball Factory [warning]

Instagram: 7/8 [1]

 Resets **in** 3 hours (9:00 PM)


Facebook: 6/8

 Resets **in** 5 hours (11:00 PM)

LinkedIn: 5/8


## 2. Console Logging Enhanced


When you post, the console now shows:

 Late API Rate Limit Status (Basketball Factory - instagram):

Posts today: 7/8

Remaining: 1

 Resets in: 3 hours (9:00 PM)

 **WARNING:** Only 1 posts remaining **for** instagram (Basketball Factory) before rate limit!

Consider reducing posting frequency **for** this platform.

Limit will reset in 3 hours (9:00 PM).


## 3. Critical Limit Display


When you reach the limit:

 Late API Rate Limit Status (Rise As One - tiktok):

Posts today: 8/8

Remaining: 0


 Resets in: 45 minutes (6:15 PM)

 **RATE LIMIT REACHED:** Cannot post more to tiktok (Rise As One) **until** reset. Limit will reset in 45 minutes (6:15 PM).

## Updated UI Components

### Banner Summary Messages


**Before:**

 Late API Rate Limit Warning (2 platforms)

You're approaching the daily posting limit (8 posts/day) for 2 platforms.

Consider reducing posting frequency.

**After:**

 Late API Rate Limit Warning (2 platforms)

You're approaching the daily posting limit (8 posts/day) for 2 platforms.

Check reset times below for each platform.

## Banner Tip

### Before:

💡 Tip: Each platform allows 8 posts per day per profile.  
Use different profiles to post more frequently, or **wait** 24 hours.

### After:

💡 Tip: Each platform allows 8 posts per day per profile using a rolling 24-hour window.  
The limit resets 24 hours after your oldest post to that platform. Use different profiles (Basketball Factory, Rise As One) to post more frequently, or **wait for** the reset time shown above.

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## Technical Implementation

### Interface Updates

`lib/late-rate-limit.ts`

Added two new fields to `PlatformStatus` :

```
interface PlatformStatus {
  platform: string
  profileId: string
  profileName: string
  count: number
  limit: number
  remaining: number
  statusLevel: 'good' | 'warning' | 'critical'
  percentageUsed: number
  resetTime: number | null // NEW: Unix timestamp
  resetTimeFormatted: string | null // NEW: Human-readable
}
```

## Calculation Logic

```
// Find the oldest post for this platform/profile
const oldestPost = platformPosts.reduce((oldest, current) =>
  current.timestamp < oldest.timestamp ? current : oldest
)

// Reset time is 24 hours after the oldest post
resetTime = oldestPost.timestamp + (24 * 60 * 60 * 1000)

// Format as human-readable
const hoursUntilReset = Math.ceil((resetTime - now) / (60 * 60 * 1000))
const minutesUntilReset = Math.ceil((resetTime - now) / (60 * 1000))

if (hoursUntilReset > 1) {
  resetTimeFormatted = `${hoursUntilReset} hours (9:00 PM)`
} else if (minutesUntilReset > 0) {
  resetTimeFormatted = `${minutesUntilReset} minutes (9:00 PM)`
} else {
  resetTimeFormatted = 'Less than 1 minute'
}
```

## Files Modified

### 1. lib/late-rate-limit.ts

- Added `resetTime` and `resetTimeFormatted` to `PlatformStatus` interface
- Updated `getPlatformStatus()` to calculate and format reset times
- Enhanced console logging in `recordLatePost()` to show reset times

### 2. components/late-rate-limit-banner.tsx

- Updated `PlatformStatus` interface to match library
- Modified platform display to show reset times
- Updated grid layout to accommodate reset time rows
- Enhanced summary messages to reference reset times
- Updated tip to explain rolling 24-hour window

## User Benefits

### Before (No Reset Times)

- ✗ "When can I post again?"
- ✗ "How long do I need to wait?"
- ✗ "Is it 24 hours from now or from my first post?"
- ✗ Users had to manually calculate or guess

## After (With Reset Times)

- ✓ "Limit resets in 3 hours (9:00 PM)"
- ✓ Clear countdown showing hours/minutes remaining
- ✓ Exact time displayed (e.g., "9:00 PM")
- ✓ Visible on dashboard banner
- ✓ Logged in console for debugging

## Examples

### Scenario 1: Multiple Platforms Approaching Limit

```
Rise As One [warning]
Instagram: 7/8 [1]
🕒 Resets in 2 hours (8:30 PM)

TikTok: 6/8 [2]
🕒 Resets in 4 hours (10:30 PM)

Facebook: 5/8
```

### Scenario 2: Platform at Critical Limit

```
Basketball Factory [critical]
LinkedIn: 8/8 [0]
🕒 Resets in 45 minutes (6:15 PM)

Instagram: 6/8
Facebook: 5/8
```

### Scenario 3: Fresh Profile (No Reset Times Yet)

```
Rise As One [good]
Instagram: 2/8
TikTok: 1/8
Facebook: 3/8
```

(No reset times shown because limits aren't being approached)

## FAQ

### Q: Why don't I see reset times for all platforms?

**A:** Reset times only appear when a platform is at **warning** ( $\leq 2$  posts remaining) or **critical** (0 remaining) status. If you have plenty of posts left, reset times aren't shown to keep the UI clean.

### Q: Is this a fixed daily reset like "8 PM every day"?

**A:** No, it's a **rolling 24-hour window**. The reset time depends on when you posted, not a fixed time. If you post at 3 PM, that post expires at 3 PM the next day.

## Q: Why does the reset time change?

**A:** As your oldest post expires, the “next oldest” post becomes the reference point. The reset time will shift forward as posts expire throughout the day.

## Q: Can I see reset times in advance?

**A:** Reset times are only displayed when you’re approaching or at the limit (warning/critical status). This helps you plan when you need it most.

## Q: What if I use multiple profiles?

**A:** Each profile has **separate** rate limits and reset times. Basketball Factory and Rise As One are tracked independently, so you can post 8 times per day per platform for each profile.



## Testing

### How to Test

1. Post to a platform 6-7 times in quick succession
2. Check the dashboard rate limit banner
3. You should see the reset time appear when you reach warning status
4. Post one more time to reach the limit
5. The reset time should update to show when the oldest post expires

### Console Output to Verify

```

 Late API Rate Limit Status (Basketball Factory - instagram):
Posts today: 7/8
Remaining: 1
 Resets in: 3 hours (9:23 PM)

```

## Comparison: Before vs After

### BEFORE



```

Status: "7/8 posts used"
User: "When can I post again?"
System: "Wait 24 hours"
User: "24 hours from when?"
System: "~\_(\ツ)\_/"

```

### AFTER

```

Status: "7/8 posts used"
Reset: " Resets in 3 hours (9:23 PM)"
User: "Perfect! I'll schedule my next post for 9:30 PM"
System: 

```

## Summary

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### COMPLETE RESET TIME VISIBILITY!

- ✓ **Rolling 24-hour window:** Resets 24 hours after oldest post
- ✓ **Real-time countdown:** Shows hours/minutes remaining
- ✓ **Exact time display:** Shows when limit resets (e.g., "9:00 PM")
- ✓ **Dashboard integration:** Visible in rate limit banner
- ✓ **Console logging:** Detailed reset info in logs
- ✓ **Per-profile tracking:** Separate reset times for each profile

**Status:** Production Ready

**Location:** Dashboard → Rate Limit Banner (visible when approaching/at limit)

**Update Frequency:** Real-time (banner refreshes every 2 minutes)

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**Last Updated:** November 22, 2025 at 3:45 PM

**Checkpoint:** "Added reset time tracking to rate limits"