APS API Error Codes Reference

Complete troubleshooting guide for Autodesk Platform Services

Contents

1 APS API Error Codes Reference

- Complete troubleshooting guide for Autodesk Platform Services with RAPS solutions**

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2 Authentication Errors (401/403)

3 401 Unauthorized

Context	Cause	RAPS Solution
All APIs	Token missing/invalid	`raps auth status`
All APIs	Token expired	`raps auth refresh`
All APIs	Malformed token	`raps auth login`

- Example Error:**

```
{
  "developerMessage": "The request requires user authentication",
  "errorCode": "AUTH-001"
}
```

- Quick Fix:**

```
raps auth status      # Check current status
raps auth refresh     # Refresh if expired
raps auth login       # Re-authenticate if needed
```

4 403 Forbidden

Context	Cause	RAPS Solution
Data Mgmt	Insufficient scopes	`raps auth status --scopes`
BIM360/ACC	No project access	`raps acc projects`
OSS	Wrong bucket permissions	`raps bucket list`
Model Deriv	Source access denied	`raps translate status <urn>`

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5 Request Format Errors (400)

6 400 Bad Request

API Context	Common Causes	RAPS Prevention
All APIs	Invalid JSON syntax	Built-in validation
Model Deriv	URN not base64-encoded	`raps urn encode <input>`
Model Deriv	Invalid output format	`raps translate --formats`
Data Mgmt	Invalid hierarchy	`raps dm folders <project>`
OSS	Invalid bucket name	`raps bucket create` validates

- URN Encoding Fix:**

```
# Manual (error-prone):
echo -n "urn:..." | base64 | tr '+/' '-_'

# With RAPS:
raps urn encode "urn:adsk.objects:os.object:bucket/file.dwg"
```

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7 Resource Not Found (404)

8 404 Not Found

API Context	Likely Cause	RAPS Debugging
Model Deriv	URN doesn't exist	`raps oss list <bucket>`
Data Mgmt	Project/folder deleted	`raps dm projects`
OSS	Bucket/object deleted	`raps bucket list`
Design Auto	Activity not found	`raps da activities`

- Debugging Workflow:**

```
# 1. Check file exists
raps oss list mybucket

# 2. Verify URN encoding
raps urn encode "urn:adsk.objects:os.object:mybucket/model.rvt"

# 3. Check translation
raps translate status <encoded_urn>
```

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9 Conflict Errors (409)

10 409 Conflict

API Context	Issue	RAPS Resolution
OSS	Bucket exists	`raps bucket list` first
Data Mgmt	Version conflict	`raps dm versions <item-id>`
Design Auto	Name conflict	`raps da create --increment-version`

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11 Rate Limiting (429)

12 429 Too Many Requests

API	Limit	RAPS Handling
Authentication	500/min	Built-in rate limiting
Data Management	100/min	Automatic queuing
Model Derivative	20 concurrent	Queue locally
OSS	500/min	Smart batching
Design Automation	50 concurrent	WorkItem management

- Rate Limit Headers:**

```
X-RateLimit-Limit: 100
X-RateLimit-Remaining: 45
X-RateLimit-Reset: 1640995200
```

- RAPS Configuration:**

```
raps config set rate-limit.enabled true
raps config set rate-limit.requests-per-minute 80
raps auth status --rate-limits
```

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13 Server Errors (500/503)

14 500 Internal Server Error

When	Cause	RAPS Response
Translation	Service overload	Automatic retry with backoff
File uploads	Network interruption	Resumable upload support
Any API	Infrastructure issue	Configurable retry policies

15 503 Service Unavailable

Usually indicates maintenance or service disruption. - RAPS Resilience:**

```
# Configure robust retry
raps config set retry.max-attempts 5
raps config set retry.strategy exponential
raps config set retry.max-delay 300s

# Monitor health
raps health check --aps-services
```

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16 Model Derivative Specific

17 Translation Failed

Error Message	Cause	Solution
"Unsupported format"	Extension not recognized	Check supported formats
"File corrupted"	Upload incomplete	Re-upload source
"Missing dependencies"	Assembly refs missing	Upload all files
"Invalid password"	Wrong password	Provide correct password

Error Message	Cause	Solution
"File too large"	Exceeds limits	Use Design Automation

- Translation Debugging:**

```
# Detailed status check
raps translate status <urn> --verbose

# Get error manifest
raps translate manifest <urn> --errors-only

# Retry with options
raps translate <urn> --formats svf2 --retry
```

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18   Design Automation Specific

19   WorkItem Failures

Status	Cause	RAPS Investigation
failedLimitDataSize	Output too large	raps da workitem logs <id>
failedLimitProcessingTime	Timeout	raps da workitem details <id>
failedDownload	Input download failed	raps da workitem retry <id>
failedInstructions	Script execution failed	raps da workitem logs <id> --detailed

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20   BIM360/ACC Specific

21   Project Access Issues

Error Code	Meaning	RAPS Check
FORBIDDEN	User not in project	raps acc projects
NOT_FOUND	Invalid project ID	raps acc hubs
INVALID_SCOPE	Wrong permissions	raps auth status --scopes

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22   OAuth/Authentication Deep Dive

23   Scope Issues

Action	Minimum Scopes	RAPS Command
Read files	data:read	raps auth login --scopes data:read
Upload files	data:read data:write data:create	raps auth login --scopes data:read,data:write,data:create
Translate	data:read viewables:read	raps auth login --scopes data:read,viewables:read
Design Auto	code:all	raps auth login --scopes code:all
BIM360 admin	account:read account:write	raps auth login --scopes account:read,account:write

24 Token Troubleshooting

```
# View current token
raps auth status --token-details

# Decode JWT manually
raps auth decode-token <jwt-token>

# Test specific endpoint
raps auth test-token --endpoint "/oss/v2/buckets"
```

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25 Network Issues

26 Timeout Errors

Operation	Default	RAPS Config
File Upload	300s	`raps config set timeout.upload 600`
Translation	3600s	`raps config set timeout.translation 7200`
API Calls	30s	`raps config set timeout.api 60`

27 Regional Issues

Service	US Region	EMEA Region
OSS	us-west	emea-west
Data Mgmt	Global	Global
Model Deriv	Region-aware	Region-aware

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28 Quick Diagnostics

29 Health Check Commands

```
# Full system diagnostic
raps health check --comprehensive

# APS connectivity test
raps health check --aps-endpoints

# Authentication verification
raps health check --auth

# Configuration check
raps health check --config
```

30 Debug Workflow

```
# 1. Verify auth
raps auth status

# 2. Test connectivity
raps oss buckets --limit 1
```

```
# 3. Check specific resource
raps translate status <urn> --verbose

# 4. Review logs
raps logs --level error --last 24h
```

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31   Error Prevention

32   Best Practices

```
# Validate inputs
raps validate urn <urn>
raps validate bucket-name <name>

# Configure retries
raps config set retry.enabled true
raps config set retry.max-attempts 3

# Monitor rate limits
raps config set rate-limit.monitor true

# Health monitoring
raps health monitor --interval 60s
```

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33   Getting Help

34   Support Resources

1. **Autodesk Status:** status.autodesk.com
2. **APS Forums:** forums.autodesk.com

3. **APS Docs:** aps.autodesk.com
4. **RAPS Discord:** discord.gg/raps-community

35   Report Issues

```
# Generate diagnostic report
raps debug report --include-logs --sanitize-tokens

# Submit support ticket
raps support create-ticket --attach-diagnostics
```

- ** Pro Tip:** Most APS errors can be avoided by using RAPS CLI, which includes built-in validation, retry logic, and error recovery.
- *RAPS v4.2.1 | APS APIs: Auth v2, DM v1, MD v2, OSS v2, DA v3 | January 2026*