

# Oscar Universe Organisation Resolution API

## Technical Documentation

Version 1.0

Date: 1 July 2026

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## Purpose

The Oscar Universe Organisation Resolution API provides real-time resolution of UK public sector organisations from free-text input. It is designed for CRM integration, data quality improvement, workflow automation and analytics, allowing client systems to consistently identify organisations using the Oscar Universe as the canonical reference.

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## Overview

The Oscar Universe Organisation Resolution API allows client applications to resolve free-text organisation names against the Oscar public sector organisation universe.

The service combines multiple matching techniques to maximise accuracy while remaining suitable for real-time integrations.

Matching methods include:

- Exact deterministic matching
- Normalised string matching
- Token-based fuzzy matching
- AI-assisted candidate evaluation

The API always returns a single highest-confidence organisation where a confident match can be made.

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# Base URL

`https://www.oscar-research.co.uk/api/`

Endpoint

`POST /org_resolution.php`

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# Authentication

Authentication is performed using an API Key supplied in the HTTP header.

`X-API-KEY: YOUR_API_KEY`

Each customer receives:

- unique API key
- active subscription period
- configurable usage limits
- usage logging

Unauthorised requests return:

`401 Unauthorized`

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# Request

Content Type

`application/json`

Example

```
{  
  "organisation_name": "Nottm City Council",  
  "postcode": "NG2 3NG"  
}
```

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## Parameters

| Field             | Required | Description                                      |
|-------------------|----------|--------------------------------------------------|
| organisation_name | Yes      | Organisation supplied by the calling application |
| postcode          | No       | Optional postcode used to improve confidence     |

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## Response

Successful requests return

```
{
  "status": "success",
  "matched": true,
  "match_type": "ai",
  "confidence": 0.95,
  "input_name": "Nottm City Council",
  "input_postcode": "NG2 3NG",
  "organisation": {
    "OrgURN": 241450,
    "Org": "Nottingham City Council",
    "Town": "NOTTINGHAM",
    "Postcode": "NG2 3NG",
    "DataTypes": "Local Government",
    "OrgTypes": "Local Authority",
    "ParentOrg": "East Midlands Combined County Authority"
  }
}
```

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# Response Fields

## Top Level

| Field          | Type    | Description                         |
|----------------|---------|-------------------------------------|
| status         | string  | success / error                     |
| matched        | boolean | Whether a confident match was found |
| confidence     | decimal | Confidence score between 0 and 1    |
| match_type     | string  | direct, deterministic, fuzzy, ai    |
| input_name     | string  | Organisation submitted              |
| input_postcode | string  | Submitted postcode                  |

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## Organisation Object

Initially the API returns:

| Field         | Description                  |
|---------------|------------------------------|
| OrgURN        | Oscar Organisation ID        |
| Org           | Organisation Name            |
| Town          | Town                         |
| Postcode      | Postcode                     |
| DataType<br>s | Primary data classifications |
| OrgTypes      | Organisation type            |
| ParentOrg     | Parent organisation          |

Additional Oscar Universe fields can be enabled where required or use the **Organisation Look Up** API once OrgURN is known.

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# Matching Process

The Organisation Resolution API performs several stages before returning a result.

## Stage 1

Normalisation

Examples

Ltd  
Limited

Borough  
Boro

Council  
Council

Case

Whitespace

Punctuation

Common abbreviations

are standardised.

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## Stage 2

Deterministic matching

Attempts exact matches against known organisation names.

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## Stage 3

Candidate generation

Builds a shortlist using fuzzy similarity scoring.

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## Stage 4

AI evaluation

Where multiple high-quality candidates exist, AI evaluates:

- organisation context
- token relevance
- public sector naming conventions
- postcode (if supplied)

The highest confidence candidate is returned.

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# Confidence Scores

## Match Acceptance and Confidence

The API returns both a `matched` indicator and a `confidence` score.

For `direct` and `smart_string` results, a response of:

```
"matched": true
```

means that the organisation has passed the API's internal deterministic matching controls and may normally be accepted.

For `ai_evaluated_shortlist` results, client systems should consider both `matched` and `confidence`.

The recommended automated acceptance rule subject to own testing is:

```
matched = true
```

```
AND
```

```
confidence >= 0.90
```

AI-evaluated results below 0.90 should not normally be treated as confirmed matches. They may instead be retained as possible matches for manual review.

Recommended handling:

| Match type                                                    | Recommended client action                    |
|---------------------------------------------------------------|----------------------------------------------|
| direct with matched=true                                      | Accept automatically                         |
| smart_string with matched=true                                | Accept automatically                         |
| ai_evaluated_shortlist with matched=true and confidence ≥0.90 | Accept automatically                         |
| ai_evaluated_shortlist with confidence below 0.90             | Manual review                                |
| matched=false                                                 | Retain original value and review if required |
| status=error                                                  | Retry or investigate the request             |

The confidence value is an assessment produced by the matching process and should be treated as supporting decision metadata rather than a statistical guarantee.

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# Error Responses

## Invalid API Key

```
{  
  "status":"error",  
  "message":"Invalid API key"  
}
```

---

## Missing organisation

```
{  
  "status":"error",  
  "message":"organisation_name is required"  
}
```

---

## No Match

```
{  
  "status":"success",  
  "matched":false,  
  "confidence":0  
}
```

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# Performance

Typical response time

< 1 second

(Where AI evaluation is required, responses may take slightly longer.)

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# Security

- HTTPS only
  - API Key authentication
  - Server-side request logging
  - Rate limiting
  - No customer data retained beyond request logging
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# Rate Limits

Configured per subscription.

Example

5,000 requests per month

Overage and burst limits can be configured individually.

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# Versioning

Current version

v1

Future enhancements will maintain backwards compatibility wherever possible.