



Universal Content Adapter Overview

Overview

The Universal Content Adapter enables Acorn to automatically bring learning content from external platforms into your LMS.

Rather than manually uploading courses or maintaining spreadsheets, you can securely connect Acorn to an external provider (such as a course library, video platform, or internal learning system). Acorn retrieves content directly through the provider's API — their official system-to-system data connection.

Where supported, Acorn can also receive learner completion data from the external platform, allowing completion records to be reflected in Acorn automatically.

What Customers Get Out of It

1) More learning content in one place

Employees can discover external learning resources directly within Acorn's catalogue, alongside internal content. This creates a unified learning experience without requiring learners to search across multiple systems.

2) Faster rollout of new content providers

When you want to connect a new learning provider, the Universal Customer Adapter allows for faster setup compared to building a bespoke integration each time. This reduces implementation time and helps you realise value sooner.

3) Always up to date

Acorn can refresh external content automatically (for example, via nightly syncs). New courses are added, updates are reflected, and retired content can be managed cleanly — without manual effort.

4) Improved learner experience and engagement

Because external content appears within the platform learners already use, it feels like a single, curated catalogue rather than a collection of external links. This increases visibility, simplifies discovery, and supports higher engagement.

5) Flexible and scalable approach

When the integration is first configured, content made available through the provider's API is imported into Acorn in a hidden state. Administrators can then review and selectively publish (unhide) the items they wish to make visible to learners, consistent with how our other API integrations operate. This approach gives you control over what appears in your catalogue, while still allowing the integration to scale as your content library grows.

6) Completion data sync (where supported)

If the external provider makes completion data available through their API, Acorn can sync that information back into the LMS. This enables consolidated tracking and reporting without manual reconciliation. If a provider does not expose completion data, you still benefit from centralised catalogue visibility and content discovery.

What the Universal Content Adapter Does

The Universal Content Adapter connects your LMS to a third-party system through its API and:

1. Imports Content

Depending on configuration, the Universal Content Adapter imports structured information about external learning content into Acorn via the provider's API.

This may include:

- Courses
- Videos
- Learning paths
- Other vendor-defined content types

Importantly, the adapter does not copy or host the actual media files (e.g., video files) within Acorn. Instead, it imports the content metadata (such as title, description, duration, thumbnail, etc.) and provides a secure link that directs learners to the content on the external provider's platform. Imported items appear in your LMS catalogue and can be managed like other content (e.g., hidden/unhidden, assigned, organised), while the source content remains hosted by the external provider.

1.1. Learner Access and Authentication

When a learner selects an item in Acorn's catalogue, Acorn launches the content on the external provider's platform using the secure link created through the integration.

Learner authentication is handled by the external provider. Depending on the provider and your organisation's setup, learners may:

- be seamlessly signed in via your existing Single Sign-On (SSO), or
- be prompted to sign in to the provider the first time they access content.

Acorn does not store provider user passwords. If the provider requires user provisioning or access entitlements, those continue to be managed in the external platform (or via your organisation's identity/access processes).

2. Synchronises Completion Data (Optional)

If enabled, the adapter can also:

- Retrieve learner completion records
- Sync completion status into your LMS
- Keep records up to date via scheduled sync runs

This ensures accurate reporting across systems.

How It Works

The Universal Content Adapter follows a structured integration model.

1. Secure Tenant-Level Activation

The integration is enabled at the tenant level for safety and governance. It is:

- Disabled by default
- Enabled only for approved tenants
- Controlled by role-based permissions

This ensures only authorised administrators can activate or modify integrations. If needed, the integration can be quickly disabled at the tenant level to stop all activity.

2. Integration Configuration

Each adapter configuration includes:

- A clearly defined integration name (e.g., Vendor + Tenant + Environment)
- The tenant(s) it applies to
- A description of scope (content types, sync behaviour, limitations)

This allows organisations to manage multiple integrations independently (e.g., sandbox vs production).

3. Secure Credential Management

The Universal Content Adapter uses configurable variables to manage integration credentials and identifiers, such as:

- API keys
- OAuth client ID and client secret
- Bearer tokens
- Vendor base URLs
- Tenant identifiers

Secret Handling

Sensitive values (such as API keys and client secrets):

- Are stored securely
- Are write-only once saved
- Are never exposed in the admin interface after creation

If a secret needs updating, it must be re-supplied from your organisation's secure source of truth (e.g., password manager or vault). This design prevents accidental exposure of credentials.

4. Authentication Methods Supported

The Universal Content Adapter supports four standard authentication mechanisms:

API Key

Used when a vendor provides a static key.

- » Sent as a request header or query parameter

Bearer Token

Used when a vendor provides a long-lived access token.

- » Sent in the Authorization header

OAuth 2.0 (Client Credentials)

Common for enterprise vendors (e.g., Udemy Business, LinkedIn Learning).

- » The adapter exchanges client credentials for an access token
- » Access tokens are automatically requested and refreshed before sync runs
- » No manual token rotation required

Basic Authentication

Used when vendors require username and password.

- » Sent in the Authorization header
- » Encoded as Base64

5. Sync Behaviour

The Universal Content Adapter operates on a scheduled sync model.

Typical configuration includes:

- Nightly sync runs
- Incremental updates where supported
- Automatic token refresh (for OAuth integrations)

Organisations should define expected outcomes before activation:

- Number of items expected
- Supported languages/locales
- Content types
- Completion sync requirements

It is recommended to begin with a small subset of content during initial testing before enabling full-scale import.

Governance and Operational Controls

Role-Based Access

The adapter supports role-based access control:

- Some roles may enable/disable the integration
- Others may have view-only access

This ensures separation of duties and protects production environments.

Safe Rollback

If required:

- The integration can be disabled at the tenant level
- Sync activity stops immediately
- Previously imported content remains governed by your LMS configuration

This provides a controlled rollback mechanism.

Security Considerations

The Universal Content Adapter is designed with enterprise-grade security practices:

- Secrets are not exposed in the UI
- OAuth tokens are automatically refreshed
- Authentication is applied consistently to all API requests
- Tenant-level activation prevents accidental cross-tenant impact

We recommend:

- Storing credentials in a secure password manager
- Rotating API keys according to vendor policy
- Testing in a non-production environment before go-live

Typical Integration Flow

1. Confirm vendor API documentation and credentials
2. Define integration scope (content only vs content + completions)
3. Configure authentication method
4. Store credentials securely as variables
5. Run initial sync with limited content
6. Validate results
7. Enable scheduled production sync

Best Practices

- Start small: Avoid importing full catalogues (e.g., 80,000+ courses) on day one
- Validate expected item counts before scaling
- Confirm language and content-type filtering
- Document your credential source of truth
- Monitor initial sync logs carefully



02 6269 3330

+1 (888) 419-2505

hello@acorn.works

