



# Acquia Lift: Connecting Technologies and Extending Systems to Source Content

The need for quality, personalized content has evolved the way different business units operate within an organization by creating huge content demands. It doesn't matter if you're in marketing, human resources or IT; every department, every division has its own content and specific requirements for how that content is produced and delivered. An e-commerce system houses its own content in the form of product descriptions and user reviews, while a separate CMS might generate and manage blog posts and press releases about those products on the corporate website. The larger and more complex the organization, the more siloed content and knowledge becomes, making it difficult to know what is available. Discovering and sharing all of this content across these various silos poses a major challenge.



One solution is Acquia Lift, with a core content hub component which was developed in response to customer demand for a cure to the pain of aggregating and sharing organizational content across many departments, teams and content sources. Acquia Lift is a cloud-based solution that merges content and customer data from all sources into a single solution to make it easier for organizations to manage and deliver the most cohesive experiences across multiple channels and devices. With the ability to target audiences in real-time, marketers are able to scale their web personalization efforts in order to drive conversions and bottom-line results throughout the customer journey. In addition, the solution offers content discovery and distribution services that enables users to publish, search, and share content across a complex network of sites and channels.

Whether it's multiple sites, disparate departments, different CMS systems, or asset management solutions, Acquia Lift unleashes the potential of an organization's content assets by enabling global enterprises to discover, reuse, and distribute content between their business units, functional teams, and even external partners in a secure cloud environment. This means teams can create content in whatever system they prefer, and share that content or data with the central content repository, so content can be discovered by other teams and used to build out engaging digital experiences.



# How Acquia Lift Works

While Acquia Lift's content hub builds on the strength of Drupal's workflows and scalable approach to large scale content management, the true power is its fast and flexible content sharing across Drupal and non-Drupal sites alike.

Acquia Lift fulfills several key needs for content managers and authors:

- **The ability to scale and store data** : Acquia Lift allows you to import content from your entire network, or from just part of your network, depending on your need.
- **The ability to find and discover content** : Acquia Lift features advanced search functionality allowing users to locate content within the repository. In addition, search filters can be saved for faster content discovery and import or publish automation.
- **The need to be “API-first”**: Acquia Lift can be connected to various systems (Drupal sites, legacy CMS, etc.), allowing content authors to import and distribute content across the entire network.

Acquia Lift enables you to source content from the systems that you have in place through its [RESTful API](#) to websites and applications. Content can be easily shared with its content hub and then pushed out to the front end of your digital experience.

Acquia Lift not only enables you to source and distribute content across your network, but also mitigate risk associated with out-of-date or inconsistent content. If any changes need to be made to say, a boilerplate for example, you can add or change that boilerplate in Acquia Lift and syndicate it out to your network. Acquia Lift links that piece to the original source.

Acquia Lift operates in a publisher-subscriber model, which is enabled by webhooks. Webhooks provide a way for websites to communicate with each other through normal HTTP protocols. When an event is triggered, webhooks send an HTTP POST payload to the configured URL. This is the common way [web applications like GitHub](#) and others communicate with each other. And it's the primary mechanism through which Acquia Lift notifies the subscribing sites that actions have been taken. If you have three Drupal sites connected, webhooks sends a request to all three for you.

Acquia Lift is able to scale large amounts of content quickly because publishing content to the hub -- through write operations -- takes place as a series of quick, asynchronous steps. Write operations aren't immediate; they are queued first and then made. While market expectations are that content syndication occurs in under five seconds, Acquia Lift actually enables content syndication in under two seconds (depending on the network speed between Acquia Lift and the connected applications and the optimization of Drupal sites).

The asynchronous model is common in most modern distributed services. A great example of asynchronous is Amazon Web Services. AWS has options to send notifications based on certain events and in keeping with asynchronicity, are eventually consistent. The reason why distributed services today often perform asynchronously is because doing so facilitates better scale and performance. The drawback is that the integrations are slightly more complex.

# Connecting Drupal Sites and Acquia Lift

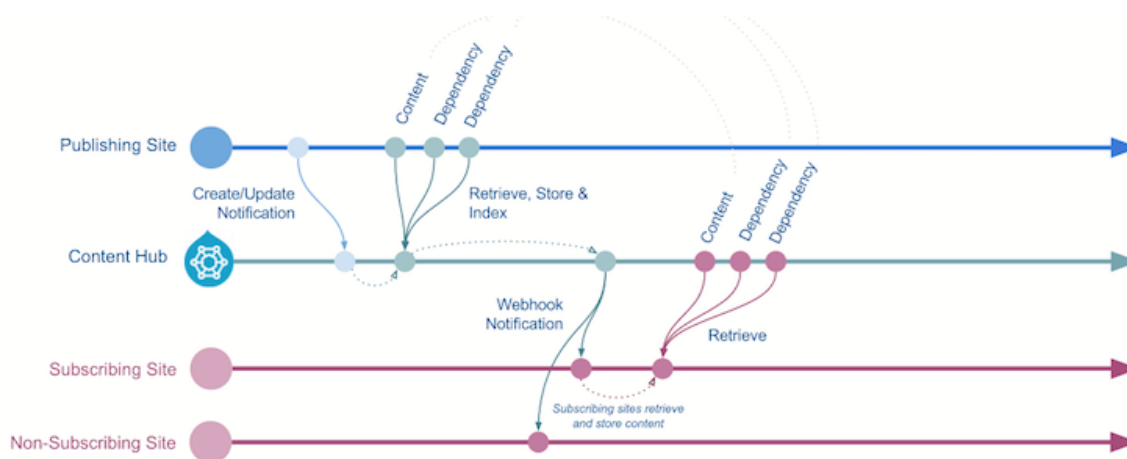
One of the best use cases for Acquia Lift is to syndicate content between two Drupal sites. In this scenario, one site serves as the publishing site where the content is created, and the other site serves as the subscribing site where the content is consumed.

Before starting, it's important to get a sense of what it takes to connect the Drupal sites to Acquia Lift. This paper assumes its content hub modules are downloaded, and all dependencies are downloaded and enabled.

Once the module is enabled, site administrators need only set the URL and API keys of their subscription to connect to their content hub. If a site is subscribing to content, it's important to make sure that webhooks is enabled in order to receive updates of content. If the site is the publishing site, it's necessary to select which entities or Drupal content should be sent to and shared with the content hub.

The following is a diagram of what happens behind the scenes.

## Publishing to Content Hub



While content is being distributed, all actions occur in near-real time so that process doesn't disrupt the digital experience. The front end design or functionality is not impacted by what is happening behind-the-scenes.

In the background, Acquia Lift's content hub starts working by reaching back out to Drupal to retrieve the content that was referenced earlier. Then the publishing Drupal site will respond back with the content in a common data format (CDF). This is a JSON-based schema in which information is stored.

Once connected to Acquia Lift's content hub, a subscribing site can now discover the content shared from the publishing site. Content editors are able to import the content on the subscribing site from the content hub discovery page. Imported content is saved locally, and therefore available immediately. Additionally, importing

content will establish a link between the subscribing site and the content hub, so that any updates made by the publishing site will send webhooks to subscribing sites to automatically update that content. All imported content appears in the content tab on the subscribing site. When updates are made by the publishing site, notifications will display next to that piece of content on the subscribing site's content tab.

## Acquia Lift and Other Drupal Modules

Since Acquia Lift was built to integrate seamlessly with Drupal, it plays incredibly well with Drupal modules. In fact, there are several modules that enhance the content authoring and content sharing experience.

[Metatag](#) is a perfect example. [Per Metatag's maintainer, Damien McKenna](#), "Metatag is a system for controlling the hundreds of possible 'meta' tags that get added to HTML pages, in order to provide more information about the page for search engines, social networks, and other services." Metatag can be used in conjunction with Acquia Lift to [maintain canonical URLs and avoid SEO penalties](#) for content duplication. When using Metatag, Acquia Lift by default will pass that canonical URL. If preferred, developers also have the option to override the default assumptions and make choices about what metadata to share with subscribing sites.

Another set of modules that Acquia Lift can be paired with are [Paragraphs](#) and [Field Collection](#). If your data model includes Paragraphs or Field Collections, Acquia Lift's content hub allows for native integration. In the past, this has been difficult to accomplish. Acquia Lift, however, has a system for resolving circular dependencies and complex relationships, which allows it to work with both Paragraphs and Field Collections.

## Conclusion

Organizations will continue to expand their digital footprint. Every website launched, every application built, every touchpoint created will have content, whether it's a well researched article or detailed legal terms and conditions. Regardless of industry, organizations are already struggling to manage their surplus of content. Sites and systems need a way to share that content. Content authors need a way distribute that content. The only way to remedy these challenges, to break down content silos and build a more effective content program across any organization, is with an API-first service like Acquia Lift.

