

## CASE STUDY



# How Red Hat Cut Costs and Improved Relevancy with Lucidworks Fusion

Red Hat provides open source enterprise software and services to a global customer base, including over 80% of the Fortune 1000. Their subscription-based approach to delivering and supporting products such as Red Hat Enterprise Linux and JBoss Enterprise Application Platform includes a wide variety of online content, tools, and services that are supported via their award-winning customer portal.

When the Red Hat Customer Portal debuted, the team had implemented Google Search Appliance (GSA) for search. At this point, the document corpus was a little more than a collection of support-related applications and content living under a single web property.

Over time, the portal's reach grew to include product documentation, online forums, and eventually, a knowledgebase. Like all programs built from the ground up, the knowledgebase started small but soon grew to many tens of thousands of documents all written and curated by support engineers. Red Hat's product portfolio grew and along with each new product came a new set of documentation. Groups expanded their participation. Subject matter experts began writing articles.

By 2010, GSA was performing adequately but license costs were growing, and the prospect of indexing large net new data sources was simply out of the question as the incremental costs would eliminate any return on investment. Adding 100,000 individual software packages or 500,000 case or 5,000,000 case comments had a great technical and functional allure but not at an incremental cost of six figures.

## What led to Red Hat engaging Lucidworks?

- Rapidly growing document corpus driving GSA licensing costs sky-high.
- Search analysts and engineers craved a system that allowed for more customization than Google's proprietary turn-key solutions.
- The Red Hat Customer Portal was using the search infrastructure not only as a traditional search engine but also as a content browsing service, something the GSA solution could not accommodate.
- Search metrics were middling, with click-through rates rarely over 40%.
- Red Hat prefers open source.

## The Challenge

Red Hat's customer support portal was originally built on Google Search Appliance. A rapidly growing document corpus was driving licensing costs sky-high. Clickthroughs were rarely over 40%, showing that customers weren't finding what they needed. Analysts and engineers wanted a system that allowed for more customization but also let them use the platform as a content browsing service.

## Our Plan

Red Hat's pedigree is open source so they wanted to take advantage of open source search technologies. Fusion, Lucidworks' commercial search solution, is built with the power of Apache Solr, the most widely used open source search platform in the world. Red Hat decided to work with Lucidworks and implement their commercial solution on both the Customer Portal (access. redhat.com) and also for site search on their main website, redhat.com.

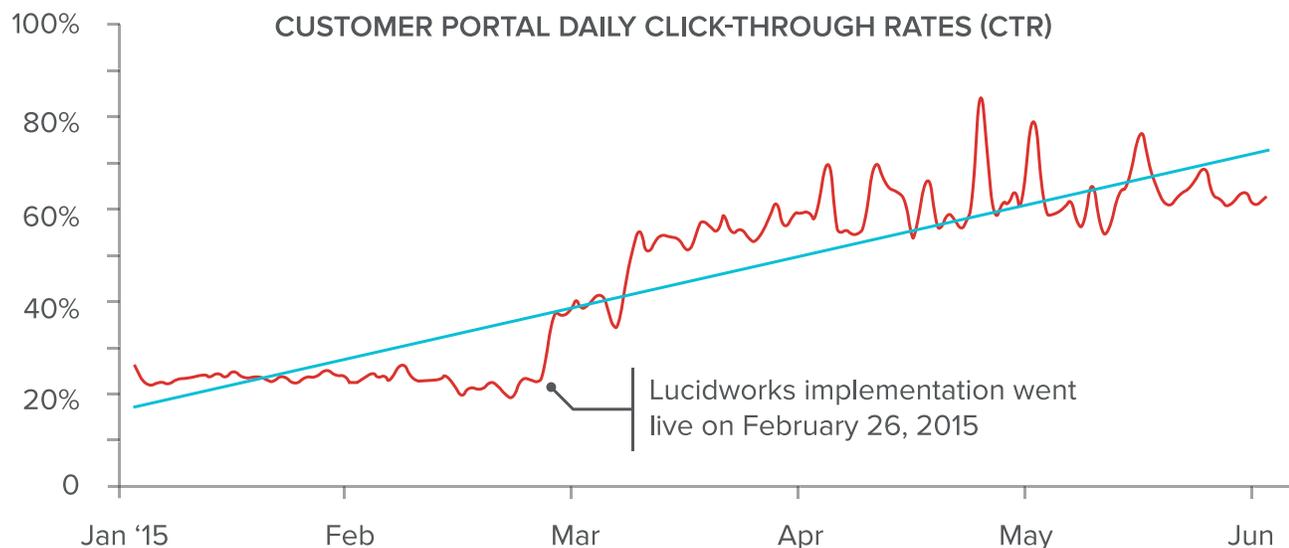
## The Results

Red Hat saved 91% in total licensing costs switching to Lucidworks Fusion. Average daily click-through rate on the customer portal increased by 212%. Customers are able to more frequently self-resolve resulting in 50,000 fewer support tickets.

Lucidworks' commercial search solution is built on the power of Apache Solr, the most widely used open source search platform in the world, and comes pre-built with many of the capabilities large enterprises are looking for- connectors for indexing various types of data sources, security, relevancy tools, an administrative user interface, and the flexibility to look into query results and understand what factors are affecting the quality of search results.

Since Lucidworks Fusion is built on top of Apache Solr, the ability to scale is unmatched. Red Hat decided to work with Lucidworks and implement their commercial solution on both the Customer Portal (access.redhat.com) and also for site search on their main website (redhat.com).

## What was the outcome?



- Red Hat was able to index several hundreds of thousands of documents from their Drupal CMS in just a few days.
- Red Hat now runs a four-node Solr cluster that indexes about 13 million documents and provides search/browser services for thousands of internal users as well as one million web visitors per month.
- Red Hat saved 91% on total licensing costs in switching from Google Search Appliance to Lucidworks.
- Average daily click-through rate on the Customer Portal increased from 24% with Google to 58% with Lucidworks.
- Further investments in additional data collection and monitoring as well as an upgrade to Fusion,
- Lucidworks' search app platform built on top of Apache Solr.

*“Lucidworks Fusion provided the UI, security, and support we needed to make the move to Solr while minimizing our dependency on IT resources. With our initial success using Solr and Lucidworks, we’re moving all of our search applications to Fusion.”*

— Andrew Hecox, Manager, Software Engineering

## Get Started or Learn More

For more information or to start using Lucidworks Fusion, contact us today at [lucidworks.com/contact](http://lucidworks.com/contact) or call 415-329-6515.