

## Google Search Appliance

### Google Search for your organization

---

#### Google Search Appliance 7.2



---

#### What's New

- Wildcard search
- Relevance algorithm enhancements
- New GSA version manager
- Admin console enhancements
- Sort results by metadata
- Support for HTTP POST requests
- Language enhancements
- Trusted applications
- New entity recognition features
- Connector suite additions and enhancements

---

#### How To Order

For more information, visit [google.com/enterprise/search](https://google.com/enterprise/search)

For pricing details, contact us at [appliance1@google.com](mailto:appliance1@google.com)

---

What makes a good search solution? It comes down to three factors: relevance, ease of use, and speed. That's why most Internet users choose Google when they need to find the right information fast.

Google Search Appliance (GSA) 7.2 is a scalable hardware solution that brings Google Search technology to your organization's content, whether it lives in file shares, databases, your public website or systems for PLM, content management and ERP. Along with the relevance and simplicity of Google.com, GSA offers enhancements and controls specifically designed for business use, making search even more intelligent and secure.

GSA delivers high-quality search right out of the box, and robust customization options let you fine-tune results to meet your organization's needs. A single search box for all your content sources helps employees work more efficiently, giving them fast access to any information they have permission to see. Easy to implement, manage and support, GSA also reduces the burden on IT administrators responsible for your organization's search solution.

#### How your organization benefits

##### Higher productivity

Employees get more done when they can quickly find the information they need, avoiding time-consuming hunts through multiple data sources. Features like user-added results and dynamic navigation make finding relevant content with GSA even easier. GSA also boosts productivity by connecting teams with expert contacts within your organization.

##### Better website search

GSA lets employees find what they need across internal content sources, but it can also add performance to your website's search box. You get the chance to customize results, enable document preview, show secure content and more, giving visitors a high-quality search experience that promotes conversions and loyalty.

##### Faster time to market

Immediate access to relevant information expedites every step of the product development cycle, giving companies an edge over the competition. Teams can count on GSA to help them bring products to market more swiftly and efficiently.

##### Improved customer service

When a customer needs support, employees should have all the right resources at their fingertips. Call center representatives can use GSA to find information quickly, improving customer service while reducing call resolution costs. On your website, meanwhile, GSA delivers relevant results so that customers don't have to call in the first place.

##### Less work for IT

GSA is easy to install, requires little ongoing maintenance and automatically adapts to your content. It learns from user behavior and evolves with Google.com's technology, delivering better results over time even if you don't lift a finger. GSA 7.2 includes a new admin console that makes management even easier.

---

## What You Get

### Google Search Appliance Models

#### G500

Indexes up to 100 million documents, scaling to billions of documents with multiple appliances.

#### G100

Indexes up to 20 million documents.

### Auto Language Detection

Arabic, Chinese (Traditional and Simplified), Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hebrew, Hungarian, Icelandic, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Swedish, Thai and Turkish.

### File Types

Search over 220 file types including HTML, PDF, Microsoft Office and many other common business applications.

### Content Connectors (Included)

- EMC Documentum
- IBM FileNet
- IBM Lotus Notes
- LDAP
- Microsoft SharePoint
- OpenText Livelink
- Databases
- File Systems
- Open framework for other content platforms

### (Third Party)

- Alfresco
  - Atlassian Confluence
  - BEA Plumtree / Aqualogic
  - EMC eRoom
  - EMC VNX
  - eZ Publish
  - IBM HSM
  - IBM Lotus Connections
  - IBM WCM
  - IBM WebSphere
  - Novell OES2
  - OpenText DOMEA
  - Oracle Content Server
  - Oracle RightNow
  - SAP KM
  - Talisma Knowledgebase
  - And more...
- 

## Google Search Appliance Details

### Relevance

Feature	Details
<b>Enhanced!</b> Relevance	Google works continually to improve its best-in-the-business relevance algorithms.
Dynamic result clusters	When a term returns an overly broad set of results, administrators can help employees narrow the results by displaying different categories for a specific search term.
Self-learning scorer	Uses advanced, statistical regression to analyze and score specific links and user behavior, leading to increasingly precise results even without administrative intervention.

### Search experience

Feature	Details
<b>New!</b> Wildcard search	Search by entering a word pattern rather than the exact spelling of a term.
<b>New!</b> Sort results by metadata	Sort search results by metadata and entities associated with individual documents.
<b>New!</b> HTTP POST requests	Supports query strings with a large number of metadata filters.
Document preview	Preview documents created in multiple formats—including .docx, .pptx and .pdf—on the search results page.
Dynamic navigation	Filter search results using specific metadata attributes such as keywords. Users can select multiple attributes and back out of their selections to navigate through results. This feature is fully integrated with secure search, so employees only see permission-based results. Dynamic navigation can make use of the additional metadata provided by entity recognition (see Metadata support).
Expert search	Search colleagues' profiles for instant connection and collaboration. Search results suggest people with expertise related to the user's query and fully integrate profile information stored in SharePoint 2010 or Sharepoint 2013.
Query suggestions	Intuitively offers query refinement suggestions to help users type less and navigate more quickly.
Related queries	Define suggested queries for company-specific acronyms or terminology to be displayed when an employee searches for particular terms.
Automatic spellcheck	Intuitively guides users to accurate results, even with typos or misspellings, and automatically suggests corrections, even for company-specific terms and phrases.
Cloud Connect	Users can search secure content in Google Apps and view the results alongside those from GSA's index.

*"With GSA, Juniper Networks has experienced a tremendous boost in employee productivity. It has improved customer service by reducing turnaround times for solving customer problems, and it has given engineers faster access to information they need for building innovative products and solutions."*  
 -Rina Rockind, IT Director-Applications,  
 Juniper Networks

Sidebar elements	Control the presentation of specific information as sidebar elements, such as cloud search results, expert search results or competitive intelligence from external site search.
Alerts	Employees can establish email alerts for notification on key topics and documents based on user-defined schedules.

### Metadata support

Feature	Details
Enhanced! Entity Recognition	Recognizes metadata from unstructured documents automatically, enabling GSA features such as nested metadata queries and dynamic navigation to be used much more effectively for a wide range of content.
External metadata indexing	Index external metadata repositories and their associated documents to enable easy access across annotated and enhanced content in document and content management systems.
Nested metadata queries	Users can search over metatags in documents by writing complex queries using "AND" "OR" or "NOT" operators nested within each other. The use of nested metadata queries enables users to refine their search for more precise results.
Filters	Users can easily restrict their searches to specific criteria such as collections, languages, file types, content sources, websites and/or metatags.

### Result biasing

Feature	Details
KeyMatch	Highlight preferred content on your website or intranet by defining specific search terms for which content should appear in a spotlight position at the top of the search results page.
User-added results	Employees can suggest the best document for a particular search term or terms, and the document appears at the top of the search results page. Allows the administrator to moderate user-added results to ensure that this feature is used appropriately.
Customized search experience	Define different search front ends for each department to provide appropriate search results by defining specific biasing policies and/or using different collections.
Collections	Group sets of content into collections, which can be used to bias or restrict the content from which search results are drawn.
Composite collections	Create composite collections that represent the union or intersection of existing collections. Composite collections can be used like collections to bias or restrict search results.

---

*"We wanted to provide citizens with easy-to-use search and better access to city programs and services. With GSA, citizens can find most of what they need online 24/7. As a result, we can conserve phone and in-person resources for more complex requests and operate more strategically."*

*-David Watson, Executive Project Sponsor and General Manager, City of Calgary*

---

---

Ranking framework	Use information from various sources, such as web performance analytics or document creation dates, to influence results rankings.
Source and metadata biasing	Promote or demote documents based on age, content source, collection, metadata and selected search appliances, even across geographies.

---

## Reach

Feature	Details
<b>Enhanced!</b> SharePoint 2010 and SharePoint 2013 integration	Provide the ability to use GSA to search all content within SharePoint 2010 and SharePoint 2013 directly from the SharePoint user interface.
<b>Enhanced!</b> Content connectors	Use pre-built GSA connectors for Documentum, FileNet, SharePoint, Lotus Notes, file shares, databases and Livelink. GSA also gives customers access to third-party connectors for Atlassian Confluence, Oracle Content Server (Stellent) and others.
Content feed API	Push non-web-accessible content—from portals, content management systems and files shares—into GSA with a simple XML conversion.
OneBox for Enterprise	Create a single search interface that will search sources indexed by multiple independent search appliances or by Google.com. This lets you provide your employees with real-time access to business data, such as ERP, CRM or business intelligence systems.
Sitemap auto-generation	Automatically generate a sitemap for easy submission to Google Webmaster Tools, allowing your public website's content to be crawled and discovered by Google.com.

## Scalability

Feature	Details
Scalable architecture	Fully scalable architecture allows multiple GSAs within one organization to share search indices across a vast range of content without disrupting existing hardware or software configurations. Also allows unified search across multiple instances, such as multiple departments or geographies with separate appliances.
Unlimited scale	GSA delivers unlimited scale in the speed and number of documents crawled and the number of queries it can concurrently process. The established architecture is built in two models: the G100 (supporting installations of up to 20 million documents) and the G500 (installations of over 100 million documents). Capacity can then be scaled indefinitely by simply adding more G500 appliances.

---

*"GSA gave us a simple, easy-to-implement solution that was familiar to our users and required no training. As soon as we turned it on, engineers had access to key data across systems. They now spend less time searching for information, which helps reduce the average product development time."*

*-Jim Schwaller, IT Manager,  
Honeywell Transportation*

---

## Security

Feature	Details
<b>New!</b> Trusted applications	Trusted applications can send end users' search requests along with pre-validated IDs when performing a secure search.
LDAP authentication with universal login	Administrators can configure a universal login credential for LDAP authentication over multiple LDAP servers if necessary.
Universal login	Dynamically generate unique login pages and securely pass login information to back-end systems, even when using heterogeneous authentication protocols.
Enterprise single sign-on	Integrates with LDAP, NTLM and Windows Integrated Authentication, as well as forms-based single sign-on. This includes Oracle Access Manager and CA SiteMinder.
Broad protocol support	GSA supports a wide range of security and access protocols, including: LDAP, Kerberos, SAML (including SAML batch processing), HTTP authentication, NTLM, Windows Integrated Authentication and X.509.
Multiple cookie domains	GSA supports multiple cookie domains. This allows for single sign-on systems to access content across multiple domains.
Early and late binding to security interfaces	To allow organizations to balance performance with security in the way that is most appropriate for their business, GSA supports both early binding and late binding or a combination of early and late binding to security interfaces of the systems it accesses.
X-Robots-Tag support	Supports the X-Robots-Tag directive in the HTTP header response to prevent the crawler, as well as other crawlers, from indexing or following links in a specific, non-HTML document.

## Administration and reporting

Feature	Details
<b>Enhanced!</b> Browser-based admin console	A complete visual redesign of the admin console with simplified navigation. Allows admins to easily configure multiple logins and includes administrative roles for crawling, serving and monitoring.
<b>New!</b> GSA version manager	A new browser-based version manager designed to simplify the software upgrade process.
Administrative API	Streamline and automate common tasks and integrate with existing system management tools.
Front end customization	Create customized search results layout pages using XSLT style sheets or GSA's layout design wizard.
RAID support	Provide redundancy to minimize impact from disk drive failures, increasing reliability and uptime.
SNMP monitoring	Monitor system health and appliance crawling via a standard simple network management protocol (SNMP) interface.

---

---

*"We pride ourselves on the quality of support we deliver to thousands of manufacturers in 27 languages. GSA lets customer service representatives search across repositories to locate information. And customers have an easier time finding documentation and answers to their support questions online."*  
-Scott Lawson, Director of IT Architecture, QAD

---

Real-time diagnostics	Promote greater transparency for administrator debugging and troubleshooting with real-time administrative diagnostic tools.
Remote diagnostics	Simplify maintenance through optional remote diagnostics from Google Support.
URL tracking	View analysis of all crawled content to quickly identify usage patterns, problematic servers, errors and sources of content.
Active-active mirroring	Mirroring architecture allows multiple GSAs to process index updates in real time to prevent multiple crawls, handle additional query load and serve as hot backup units.
Advanced reporting	View and export hourly or daily reports listing top queries, special feature usage, click patterns and OneBox results.
Analytics integration	In addition to integrating with Google Analytics and other common web analytics tools, GSA provides extensive reporting to help with website optimization.
Continuous crawler	A thorough, intelligent crawler that searches for new data on an ongoing basis, ensuring that new content quickly displays in the search results. It also recognizes the rate of content updates and will prioritize its crawling activity accordingly.
Immediate crawling	Specify URLs to crawl immediately in a feed by using the crawl immediately function.
Distributed crawling	Multiple GSAs in a workgroup can distribute tasks intelligently to speed up indexing. Distribution is dynamically re-calibrated as additional GSAs are added to networks.
Index removal and backoff intervals	If a temporary error is encountered during a crawl, GSA schedules a series of tries over backoff intervals before removing the URL from the index. Administrators can use the default settings for index removal and backoff intervals or configure them to their own preferences.

### Language support

Feature	Details
Translation of search results	Enhances the search experience by leveraging Google Translate to automatically translate search entries in other languages into the user's own language on the results page.
Advanced word segmentation	Offers ability to split phrases into meaningful semantic units across all supported languages, including Chinese, Japanese, Korean and Thai.
Language recognition	Allows the restriction of search results to any of the 28 auto-detected languages.
Localized administration	Manage your GSA around the globe in 31 different languages.

