

Google Search Appliance

Google Search for Your Business



"Our agents got spoiled at home using Google search. They were discontent that the search at work was archaic, slow, and cumbersome - and delighted when we chose the Google Search Appliance to power search in their everyday business lives."

- Rich Loft, Technical Lead, HP Enterprise Services

For more information visit:
<http://www.google.com/gsa>

With the Google Search Appliance (GSA), the search experience shared by millions across the globe can be harnessed by your individual company.

The Google Search Appliance 6.14 offers your company the vast power expected from Google.com, which has come to define Internet searching for the past decade, but with specific enterprise enhancements that make searching easier, intuitive, and customizable. Ready to work "out of the box", the GSA turns your company's intranet or website search engine into a system that is as relevant and reliable as Google's - with the same ease of use.

Users can now execute universal searches through one familiar, easy search box, returning content results from a multitude of sources that includes intranets, web servers, portals, file shares, databases, content management systems, real-time data in business applications, and cloud-based systems (Google Apps, Google Search, and Twitter®). No longer confined to archaic or outmoded forms of search, the GSA enables companies to make full use of their resources to further enhance productivity and, more importantly, the bottom line.

What you get

User Experience

Given the popularity of Google.com among the general public who want reliable results quickly, the GSA offers the same experience to users within your organization. From simple keyword searches to advanced Boolean queries, the GSA combs through multiple sources within your enterprise to deliver the results that your users want, all contained in the simple framework of the Google interface. Whether users are establishing content-change email alerts or administrators are creating customized search experiences for different user groups, the GSA is a robust means by which users can experience the full power of Google, tailored specifically for their company.

Security and Access Control

The GSA is designed with a full range of access controls that enable full integration with enterprise security systems and the enforcement of existing policies for content systems and applications. This full immersion between your technology and our technology guarantees that users see only what they are supposed to see. The GSA supports complex and heterogeneous security configurations. This support allows administrators to enable users to securely and seamlessly search across multiple systems protected by multiple credentials.

Content and Collaboration

The GSA allows you to maximize the return of your content investment by enabling easy access to all of the content within your enterprise: file shares, web servers, document management systems, and enterprise applications. The type of collaborative environment facilitated by the GSA leverages proprietary signals to deliver the highest quality, most relevant documents, no matter what content sources or formats are searched.

Administration and Customization

The GSA's intelligent-tuning parameters allow administrators to customize search to the company's specific needs while being easy to deploy, maintain, and scale.

The GSA provides highly relevant results "out of the box" without the complexity and expense of custom-configuring hardware and operating systems. The GSA goes a step further by allowing the customization of its search functions by using a full array of intelligent-biasing features, such as source, data, metadata, collection, and node biasing. Additionally, the GSA allows for the customization of the user interface and security.

Architecture and Scale

The GSA's fully scalable architecture allows multiple appliances within one organization to share search indices across a vast range of content while still providing unified results. This brings scale to existing enterprise search deployments without disruption to the hardware or software and allows unified search across multiple instances – even across multiple departments and geographies with separate appliances. Additionally, the GSA provides rigid security across millions or even billions of content sources.

The 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 GB-7007 (supporting installations of up to 10 million documents) and the GB-9009 (installations of 10 million pages with unlimited capacity).

How the company benefits

Increase Productivity

With the goal of enhanced productivity, the GSA is positioned to enable your organization to not only capitalize on in-house resources but to also make this "home-grown" expertise available to everyone in your organization. The GSA offers a compelling way for employees to discover information and experts within their organization that previously were not available to them. With its built-in ability to search for information stored in over 220 file types across multiple enterprise systems, the GSA is a simple, highly scalable search solution that brings universal search capabilities to your organization.

Reach New Customers

Given the fact that websites are one of the chief marketing tools for any company, it is important that your customers be able to find the information they are looking for quickly and easily. The GSA delivers a fast, reliable search solution for your website and intranet, providing you with complete flexibility and control over the web search experience to help convert prospects into leads.

Improve Customer Service

The GSA is an enterprise-ready search solution that benefits both your company's website and contact center by providing fast, reliable search results and seamlessly integrating with common contact center applications. This leads to increased customer satisfaction and greater cost savings. There are multiple benefits to your contact center as call volumes can be reduced due to a richer website search experience for your customers, while your employees will experience an average call time reduction of up to 20%. Additionally, the GSA can help reduce training costs by up to 25%.

Minimal Administration Time

An enterprise solution is only as good as the simplicity by which it can integrate with your existing architecture. The beauty of the GSA is the ease of use that it provides to administrators who are tasked with maintaining the enterprise

"The Google Search Appliance has unlocked and revealed information we didn't know we had."

- Oliver Tsai, Director of Information Technology, Sunnybrook Health Services Centre

while minimizing the administrator's time on tasks such as maintenance. The GSA is designed for easy deployment and geared towards providing results almost immediately upon installation. With a robust feature set that enables customization and multiple security options, administrators will find that the GSA is a perfect addition to their current infrastructure.

Google Search Appliance Details

User Experience

Feature	Details
Advanced Boolean search	The GSA enables the user to perform searches based on several criteria using Boolean parameters.
Advanced language phrase segmenting	Offers phrase segmentation across any language, including Chinese, Japanese, Korean, and Thai.
Automatic spellcheck	The GSA intuitively guides users to accurate results, even with typos or misspellings. The GSA automatically suggests corrections, even on company-specific terms and phrases. The feature works in English (US & UK), French, Italian, German, Spanish, Portuguese, and Dutch.
Cloud Connect	The GSA offers a Cloud Connect feature wherein users can access public and private content in the cloud, including sites and documents, while also searching across public services on the web. Additionally, through the GSA's OneBox capability, diverse content can be searched through a single query, providing real-time access to business applications such as ERP, CRM, or business intelligence systems.
Composite collections	The GSA provides a method for administrators and users to group content and create collections for addressing specific user needs.
Customized search experience	Administrators have the ability to adjust search results for different user groups based on department or function.
Date and number sorting	Users can filter content based on date range, age, number ranges, or numerical values.
Dynamic navigation	Users can filter search results using specific metadata attributes such as keywords. When the user clicks on the attribute value, the search results are narrowed to pinpoint the exact information that the user is looking for. Users can select multiple attributes and can also back out of their selections to navigate the result set and quickly locate the information they are looking for.
Dynamic result clustering	With the GSA, the user can further drill down on specific subjects and easily refine their searches with automated grouping of search results by topic. With the aid of user-defined special search queries, preferred results can display above the main set of search results.

Query suggestions	The GSA search box intuitively offers query refinement suggestions to aid users in typing less and navigating more quickly. The GSA allows users to define and suggest queries for company-specific acronyms or terminology.
Schedule	Employees can establish email alerts for notification on key topics and documents based on user-defined schedules.
Self-learning scorer	The GSA is designed to use advanced, statistical regression to analyze and score specific links and user behavior. This leads to increasingly precise results, even without administrative intervention.
Sidebar elements	The user is able to control the presentation of specific information, such as personal results from Apps Search, employee information using People Search, competitive intelligence from external Site Search, or real-time information from Twitter, as sidebar elements alongside indexed content.
Social search	The GSA enables the user to weigh the best results for any search query with User-Added Results.
View as HTML	GSA allows the reformatting of more than 220 file formats into HTML. This allows document display without requiring the original client application.

Security and Access Control

Feature	Details
Dynamic navigation for secure search	The GSA adds functionality that supports dynamic navigation. This feature was developed to help users explore search results by using specific metadata attributes such as keywords. When the user clicks on an attribute value, the search results are filtered to contain results from the original search query that also have that specific attribute value. When turned on by the administrator, the GSA only returns content that the specific user is authorized to see.
LDAP authentication with universal login	Within the new release of GSA, administrators can configure a Universal Login credential for LDAP authentication. Additionally, options are now available for enabling LDAP for a search appliance as well as group lookup.
Content API	Users have the ability to search across secure content using Google's SAML Authorization API to integrate into existing access control systems.
Extra binding for large scale deployments	The GSA offers support for Policy ACLs in the index. This enables early binding for deployments ranging in the billions of documents. Users are given the flexibility to deploy early or late stage binding options, depending on their security requirements.

*"I would recommend the GSA to any organization. It works tremendously – and virtually on its own – with little dedicated IT support. It has advanced WellStar's capabilities, knowledge, and efficiency."
– Robert Zanin, Systems Analyst, WellStar*

Enterprise single sign-on	Integrate with LDAP, NTLM, Windows Integrated Authentication as well as forms-based single sign-on. This includes Oracle Access Manager and CA SiteMinder.
Kerberos support	The GSA provides native support for Kerberos, enabling a silent authentication experience.
Multiple cookie domains	The GSA supports multiple cookie domains. This allows for single sign-on systems to access content across multiple domains.
SAML batch processing	Custom security authentication and authorization using SAML is enabled through the GSA. This includes batch processing for more efficient authorization.
SAML identity SPI	GSA provides SAML SPI identities. This allows administrators customize access control to meet specific needs.
Secure web content	With GSA, secure searching of information protected by basic HTTP authentication or NTLM is enabled. The GSA is designed to dynamically generate unique login pages and securely pass login information to back-end systems. This feature even works if using heterogeneous authentication protocols.
X.509 client certificates	Users will receive secure results from the GSA by utilizing X.509 client certificates.

Administration and Customization

Feature	Details
Index removal and "backoff" intervals	When the GSA encounters a temporary error while trying to retrieve a document during crawl, it retains the document in the crawl queue and the index and schedules a series of retries after certain time intervals ("backoff" intervals) before removing the URL from the index. In the GSA, users are given the option of using the GSA default settings for index removal and "backoff" intervals or configuring them to suit their individual needs.
Specify URLs to crawl immediately in feeds	GSA provides the ability to specify URLs to crawl immediately in a feed by using the crawl-immediately function.
X-Robots-Tag support	The GSA now supports the X-Robots-Tag directive in the HTTP header response. This functionality can be used to prevent the PSA crawler, as well as other crawlers, from indexing or following links in a specific, non-HTML document.
Administrative API	With the Administrative API, users can streamline and automate common tasks and also integrate with existing system management tools.

Advanced reporting	This feature allows for the viewing and exporting of daily and hourly results, top queries, special feature usage, and more. Users can now generate reports on any query, including which queries receive no clicks, as well as click patterns on sponsored links vs. organic or OneBox results.
Date or metadata blasting	With GSA, users can promote or demote documents based on age and/or metadata.
Filters	Users can easily restrict searches to specific criteria such as languages, file types, websites, and/or meta tags.
Front-end customization	Create customized search results layout pages using XSLT style sheets or the GSA's layout design wizard.
Google Analytics integration for public websites	Understand how visitors are using your website to improve search results.
Google Enterprise Professional	Gain access to GSA experts for specialized assistance with integration and customization.
Localized administration	Manage your GSA around the globe in 27 different languages.
Node and collection biasing	Allows administrators to bias the results from selected search appliances, even across geographies.
RAID support	Provides redundancy to minimize impact from disk drive failures, increasing reliability and uptime.
Ranking framework	Easy-to-use framework enables administrators to feed server logs or other document-related information into the GSA, further improving results.
Real-time diagnostics	Promote greater transparency for debugging and troubleshooting with real-time admin diagnostic tools.
Remote diagnostics	Simplify maintenance through optional remote diagnostics from Google Support.
Sitemap auto-generation for Google.com	Automatically generate a site map for easy submission to Google Webmaster Tools, allowing your public website's content to be crawled and discovered by Google.com.
SNMP monitoring	Monitor system health and appliance crawling via a standard simple network management protocol (SNMP) interface.
Source biasing	Easily identify your organization's authoritative content sources to enhance the relevance of search results. View analysis of all crawled content to quickly identify usage patterns, problematic servers, errors, and sources of content.
Web-based admin console	Easily configure multiple logins and administrative roles for crawling, serving, and monitoring.

Architecture and Scale

Feature	Details
Active-active mirroring	Provide high availability by directing search traffic to both the primary search appliance and replicas in a GSA replica group. Load balancing enables automatic failover to distribute search requests among nodes so that all nodes can produce results. This builds on the GSA's existing mirroring architecture, which allows multiple boxes to process index updates in real time and ensures that crawling only occurs once; replicas can be used to handle additional query loads or serve as hot backup units.
Distributed crawling	Multiple GSAs in a workgroup can distribute tasks intelligently to speed up indexing. Distribution is dynamically recalibrated as additional GSAs are added to networks.
Dynamic scalability	Add scale without disrupting existing deployments. Link multiple appliances, allowing intercommunication and the delivery of unified results while supporting data integration across departments or geographies.

