# Google Web Services

## Google Web Services

- Google Cloud Platform is a suite of public cloud computing services offered by Google.
- The platform includes a range of hosted services for
  - compute,
  - storage and
  - application development that run on Google hardware.
- Google Cloud Platform services can be accessed by
  - software developers,
  - cloud administrators and
- other enterprise IT professionals
- over the public internet or through a dedicated network connection

## Google Cloud Platform offers services for

- compute
- storage
- networking
- big data
- machine learning and
- the internet of things (IoT)
- security and
- developer tools.

## Dark Web

- Online content that isn't indexed by search engines belongs to what has come to be called the "Deep Web".
- content on the World Wide Web that is hidden

## The Deep Web includes:

- Database generated Web pages or dynamic content
- Pages without links
- Private or limited access Web pages and sites
- Information contained in sources available through executable code such as JavaScript
- Documents and files that aren't in a form that can be searched, which includes not only media files, but information in non-standard file formats
- Google now has a procedure that helps the Google engine crawl this information.

### **Alerts**

Sends a periodic e-mail alert to you based on your search term. Search news, blogs, discussions, video, or everything

## **Blog Search**

Displays an aggregation page from blogs.

## **Blogger**

A blogging site for personal blogs.

#### **Books**

A vast library of book content in the public domain and previews of copy\_x0002\_righted material.

### **Calendar**

Calendar service for managing schedules and events and sharing them with /others.

### Chrome

Google's browser and operating system wannabe.

### **Checkout**

A payment processing system.

### Code

Developer tools and resources.

### **Custom Search**

Creates a custom search utility for a particular Web site.

## **Desktop**

Indexes content on your local drive for fast searches.

## **Directory**

Search the Web by topics

#### **Docs**

Online productivity applications.

### **Earth**

An online atlas and mapping service with mashups.

#### **Finance**

A financial news aggregation service and site.

### GOOG-411

A telephone service launched by Google in 2007, that provided a speech-recognition-based business directory search, and placed a call to the resulting number in the United States or Canada

## **Google Health**

Health information management system.

## **Groups**

Discussion groups on specific topics

## iGoogle

AJAX customized home page. A personal portal from Google

## **Images**

Web image search

### **Knol**

Short articles submitted by users.

## Labs

A collection of applications and utilities under development and testing.

## **Orkut**

Social media service with instant. a social networking service

## Maps

Mapping and direction service.

## **Maps for Mobile**

Mapping and direction service. Works with GPS on mobile devices.

### **Mobile**

Mobile search using voice and location.

#### News

News aggregation service and Web site.

## **Pack**

Free Windows-based software selected by Google, including Chrome, apps, Desktop, Earth, Picasa, Adobe Reader,

Talk, RealPlayer, Skype, and others

### **Picasa**

Photo-editing and management software

### **Product Search**

Shopping search function.

#### Reader

platform for serving news and information to people.

### **Scholar**

Search site for research and scholarly work from many disciplines.

### **Search for Mobile**

Google's search application optimized for mobile devices.

#### **Sites**

Web site and wiki creation and staging tool.

## SketchUp

Allows users to create 3D models and share them with others.

### **Talk**

Instant messaging and chat utility. Can be integrated in Gmail.

#### **Toolbar**

Provides search features inside different browsers.

## **Translate**

Language translation utility

### **Trends**

Statistical information on different search terms.

## **Videos**

Searches for videos on the Web.

#### Voice

Free phone service, formerly called Grand Central.

#### Web Search

Google's core Web search engine of indexed pages sorted with page rank.

### **Web Search Features**

A help page for special Web searches in Google.

### YouTube

Flash video sharing site.

## Google Products - Enterprise offerings

## **Google Commerce Search**

This is a search service for online retailers that markets their products in their site searches with a number of navigation, filtering, promotion, and analytical functions

## **Google Site Search**

The user enters a search string in the site's search, and Google returns the results from that site.

## **Google Search Appliance**

This server can be deployed within an organization to speed up both local (Intranet) and Internet searching.

The three versions of the Google Search Appliance can store an index of up to 300,000 (GB-1001), 10 million (GB-5005), or 30 million (GB-8008) documents.

## **Google Mini**

The Mini is the smaller version of the GSA that stores 300,000 indexed documents.

## Adwords

- a targeted ad service based on matching advertisers and their keywords to users and their search profiles.
- Ads are displayed as text, banners, or media and can be tailored based on geographical location, frequency, IP addresses, and other factors.
- Google gets paid for the ad whenever a user clicks it.
- The system is referred to as pay-per-click advertising, and the success of the ad is measured by what is called the click-through rate (CTR).
- Google calculates a quality score for ads based on the CTR, the strength of the connection between the ad and the keywords, and the advertiser's history with Google.

## Google Translate

Make your content and apps multilingual with fast, dynamic machine translation.

Use machine translation to detect more than one hundred languages

Enter text directly into the text box, and click the Translate button to have the text translated.

Enter a URL for a Web page to have Google display a copy of the translated Web page.

Enter a phonetic equivalent for script languages.

Upload a document to the page to have it translated

## Google Toolkit

#### **AJAX APIs**

used to build widgets and other applets commonly found in places like iGoogle.

AJAX provides access to dynamic information using JavaScript and HTML.

#### **Android**

a phone operating system development.

## **Google App Engine**

Google's Platform as a Service (PaaS) development and deployment system for cloud computing applications.

## **Google Apps Marketplace**

offers application development tools and a distribution channel for cloud-based applications.

## Google Toolkit

## **Google Gears**

a service that provides offline access to online data.

Google Gears includes a database engine installed on the client that caches data and synchronizes it.

## **Google Web Toolkit**

a set of development tools for browser-based applications.

## **Project Hosting**

a project management tool for managing source code.

## Google APIs categories

#### **Ads and AdSense**

Google's advertising services to be integrated into Web applications. The most commonly used services in this category are AdWords, AdSense, and Google Analytics.

#### **AJAX**

The Google AJAX APIs provide a means to add content such as RSS feeds, maps, search boxes, and other information sources by including a snippet of JavaScript into your code.

RSS feed: that allows users and applications to access updates to websites in a standardized, computer-readable format.

#### **Browser**

Google Cloud Print API, the Installable Web Apps API for creating installation packages, the Google Web Toolkit for building AJAX applications using Java, and V8, which is a high-performance JavaScript engine.

#### **Social**

Many Google APIs are used for information exchange and communication tools.

Gmail, Calendar, and others, and they provide a set of foundation services.

The popular social APIs are Blogger Data, Calendar, Contacts, OpenSocial, Picasa, and YouTube.

## Google APIs categories

#### **Data**

The Data APIs are those that exchange data with a variety of Google services.

The list of Google Data APIs includes Google Apps, Google Analytics, Blogger, Base, Book, Calendar, Code Search, Google Earth, Google Spreadsheets, Google Notebook, and Picasa

Web Albums.

#### Geo

A number of APIs exist to give location-specific information hooking into maps and geo-specific databases.

Some of the more popular APIs in this category include Google

Earth, Directions, JavaScripts Maps, Maps API for Flash, and Static Maps.

#### Search

The search APIs leverage Google's core competency and its central service. APIs such as Google AJAX Search, Book Search, Code Search, Custom Search, and Webmaster

Tools Data APIs allow developers to include Google searches in their applications and web

sites.

## Google App Engine

GAE is a Platform as a Service (PaaS) cloud-based Web hosting service on Google's infrastructure.

This service allows developers to build and deploy Web applications and have Google manage all the infrastructure needs, such as monitoring, failover, clustering, machine instance management.

#### **GAE** supports the following major features:

- Dynamic Web services based on common standards
- Automatic scaling and load balancing
- Authentication using Google's Accounts API
- Persistent storage, with query access sorting and transaction management features
- Task queues and task scheduling
- A client-side development environment for simulating GAE on your local system
- One of either two runtime environments: Java or Python