

# Google™ | Enterprise

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## Overview

Search

Google Earth: Information in Geo-spatial context

SketchUp: Planning, design and virtual worlds

# Google Corporate Overview

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Current Index:	World's largest search engine
Employees:	5,680 as of December 31, 2005, many of whom are technical / engineering
Search Market Share:	More than 60% of worldwide search results served <sup>1</sup>
Enterprise Customers:	More than 3,000 customers to date
Office Locations:	More than 20 offices worldwide including Mountain View, New York, Boston, London, Tokyo, Hamburg, Paris, and Milan
International:	109 interface languages and 113 international domains



# Google's Mission

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Web



Video



Books



News



Corporate Network

Organize the **world's information** and  
make it **universally accessible** and **useful**.

# Google Enterprise

- Dedicated cross-functional team: more than 150 people
  - Leverages Google's core research and development
  - Delivers Google innovation as products
  - More than 3,000 active customers
- More than 100 percent sales growth in 2005 (versus 2004)

## Search



## Geo-spatial



## Collaboration



# Our Enterprise Products

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Google Earth  
Enterprise / Pro



SketchUp from  
Google



Google Desktop  
for Enterprise



Google Toolbar  
for Enterprise



Google Mini



Google Search  
Appliance 1001

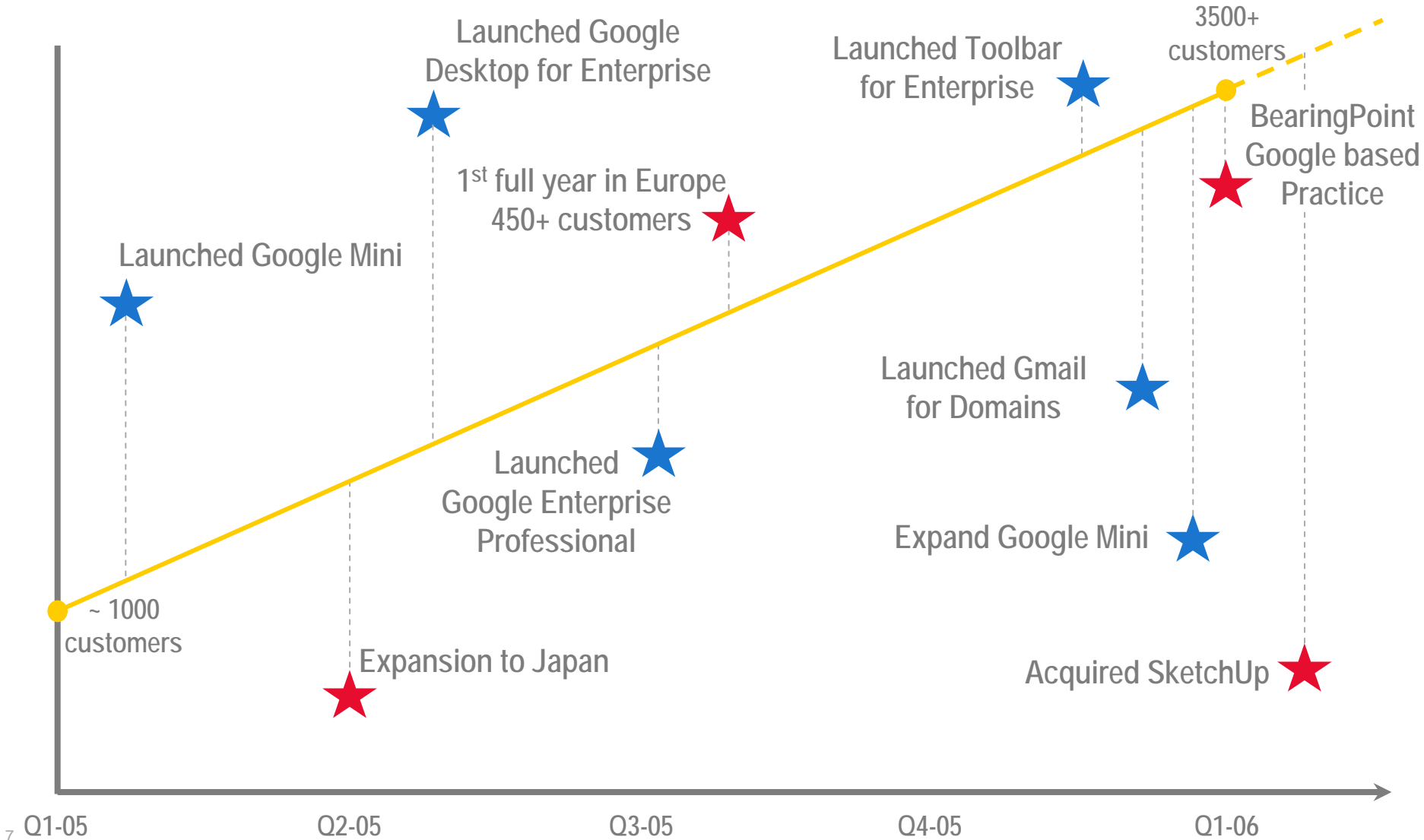


Google Search  
Appliance  
5005/8008

User Perspective

IT Perspective

# Google Enterprise – recent progress...



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Overview

Search

Google Earth

SketchUp



# Search in E-Government

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- Citizen Facing
  - Connecting to Citizens
  - Citizen self-service
  - Understanding what your citizens are searching for
- Employee Facing
  - Employee productivity

# Corporate Network Search Issues

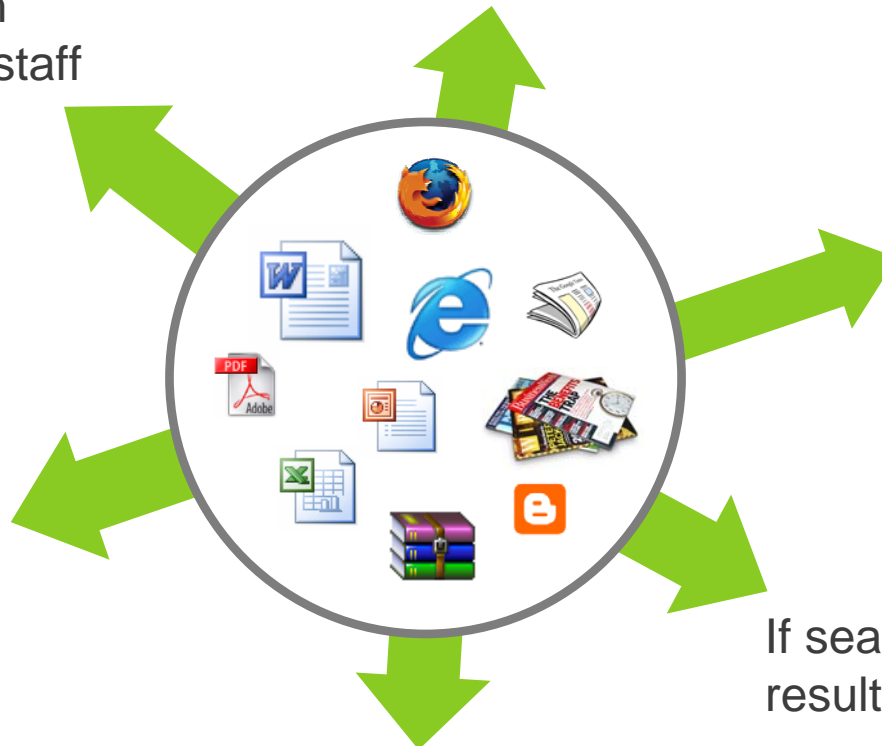
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Too many information silos; issue for both employees and IT staff

Workers spend ¼ of their time looking for information

Volume of email and documents exploding

Too much time spent managing search



If search doesn't deliver results, usage plummets

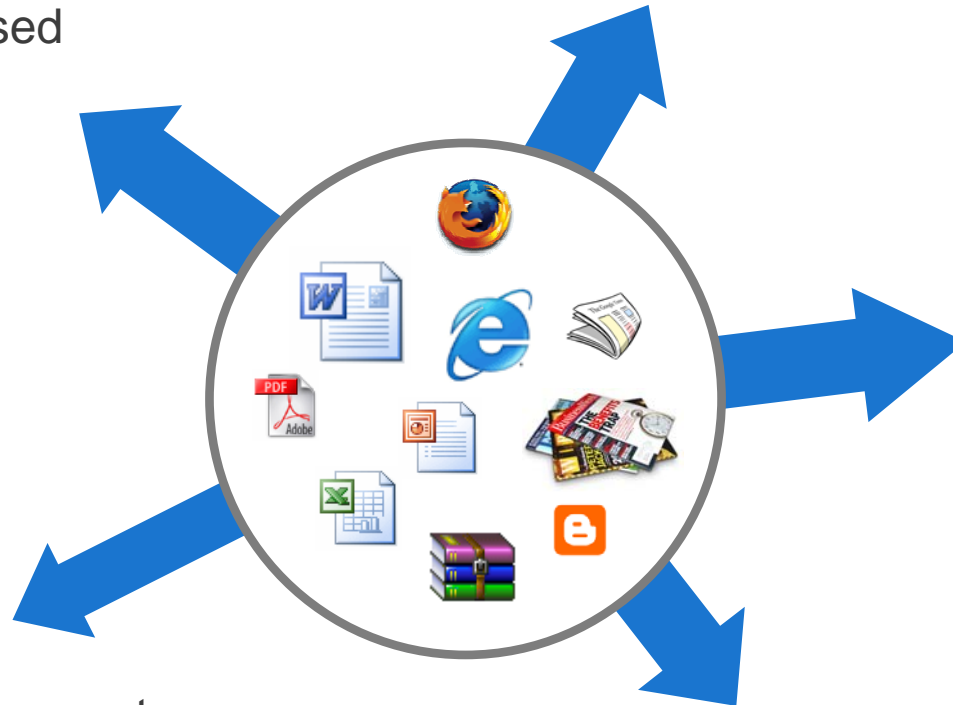
Traditional approaches to search are not working

# Website Search Issues

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Expectations for site search quality have increased significantly

Failed site searches cause visitors to leave your site



Search leads to purchase (online and offline)

Too much time spent managing search

Self-service support increases customer satisfaction and decreases costs

# Google has raised expectations for information access

- "Not only does **Gmail** have 2 GB of space, but it is pleasing to the eye and very easy to use and feel comfortable with. It only took me about 2 minutes before I felt right at home with Gmail and made it my primary e-mail account.

- **Adam**

- "After searching **Google**, I was able to tell the vet that my sick labrador had Lyme disease and that all he needed was antibiotics."

- **Damian**

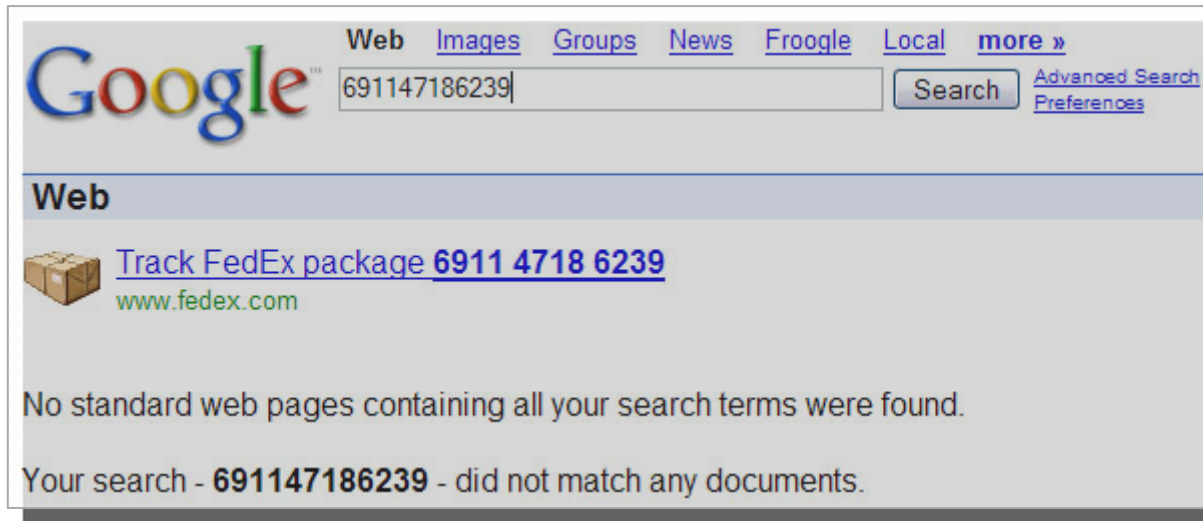
"A great side effect was that **Google Desktop** revealed data I forgot I even had on my hard drive. It was the same effect you feel when you come across old photo albums stashed away in a box."

- **Chevas**

"**Google Maps** is better than looking at a real map. I can easily find places, move around the map, and even see the real satellite image. Its quite possibly the best application I've ever used."

- **Simon**


# And has become a gateway to the world's information



Google Web Images Groups News Froogle Local more »

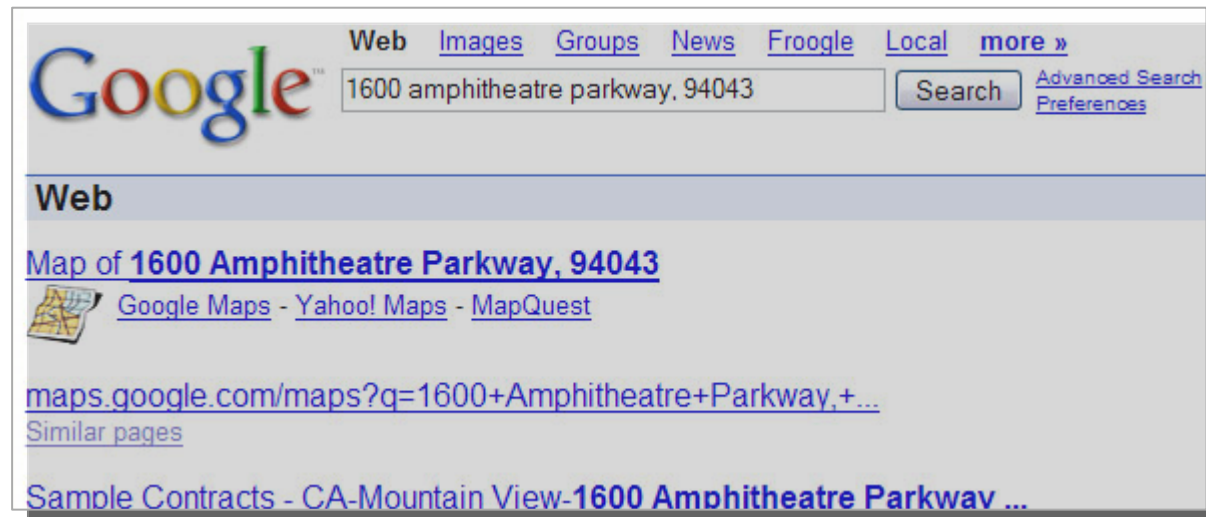
691147186239 Search [Advanced Search](#)  
[Preferences](#)

**Web**

 [Track FedEx package 6911 4718 6239](#)  
[www.fedex.com](http://www.fedex.com)

No standard web pages containing all your search terms were found.


Your search - **691147186239** - did not match any documents.



Google Web Images Groups News Froogle Local more »

1600 amphitheatre parkway, 94043 Search [Advanced Search](#)  
[Preferences](#)

**Web**

[Map of 1600 Amphitheatre Parkway, 94043](#)  
 [Google Maps](#) - [Yahoo! Maps](#) - [MapQuest](#)

[maps.google.com/maps?q=1600+Amphitheatre+Parkway,+...](http://maps.google.com/maps?q=1600+Amphitheatre+Parkway,+...)  
[Similar pages](#)

[Sample Contracts - CA-Mountain View-1600 Amphitheatre Parkway ...](#)

# Consumer expectations have spilled into the enterprise

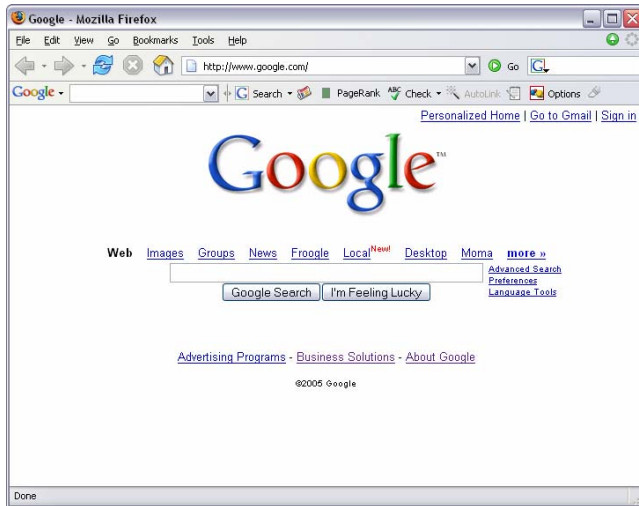
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- **Consumers** and **employees** are one and the same
- Employees are **fed-up** with the **inability to access** information at work
  - Silos of information are the standard
  - Content management not scaling: meta-tagging, foldering, publishing
  - Cross-enterprise standardization & cooperation is difficult and rare
  - Business applications require too much training & expertise
- Enterprise customers and application vendors are searching for the answer

# Our Philosophy: Focus On The User

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Users want the same Google search experience in the company as they have on Google.com



**Outstanding Relevance**

**Intuitive interface**

**Sub-second response times**

**Leverage tens of millions of testers**

# Our Philosophy: **Simplicity for IT**

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We offer a complete search solution –  
not a “toolkit” that you piece together on your own

## **Software does the heavy lifting**

Quality results without requiring meta-tags, customization and algorithm re-writing

## **A plug-and-play appliance**

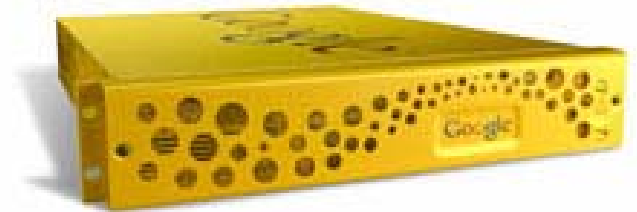
Fast to deploy, minimal maintenance

## **Discovers content automatically**

Come-as-you-are approach to indexing

## **Flat pricing**

Simple contract





# Google's Industry-leading Search Relevance

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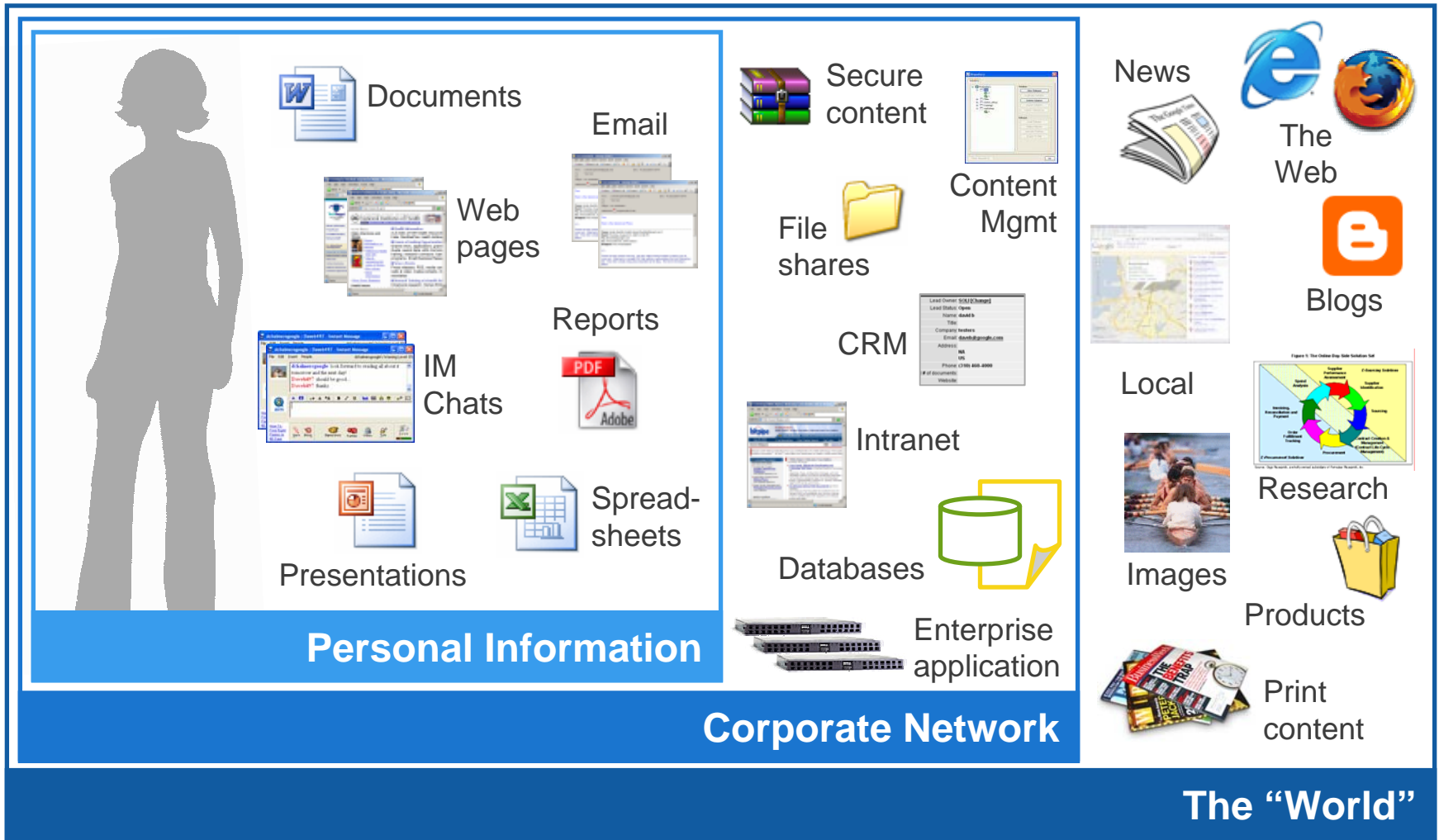
- **Google search experience**
  - Millions of searches per day
  - Hundreds of languages
- **Google search R&D**
  - 1000+ engineers working on search
- **Enterprise relevancy ranking algorithms**
  - Over 100 factors to determine relevancy including advanced hypertext analysis
  - More than just PageRank on the web
- **Google relevancy keys:**
  - Automation
  - Objectivity
  - Sustained improvement (driven by real-life data)

"Right out of the box, without any tweaking at all, the Google Search Appliance was more effective than the system we'd been working on for a year and a half."

*Brad Hochhalter*

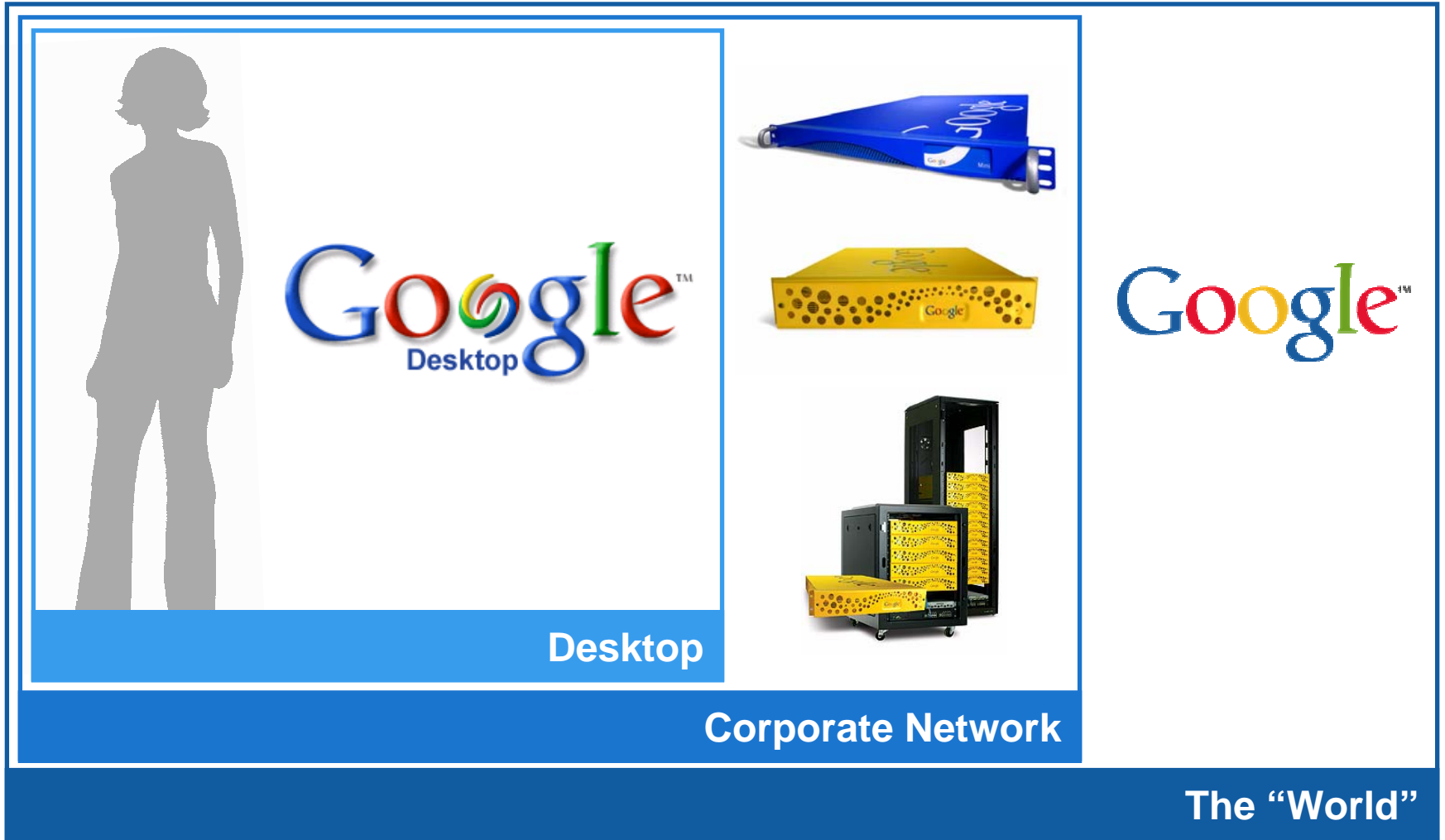


# Our Philosophy: Unified Search



# Our Philosophy: Unified Search

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# All Your Enterprise Content

Enterprise Applications



Portals



File Shares



Secure Content



Content Mgmt



## Content Acquisition:

- Crawls 220 filetypes
- File system crawling
- Direct connection to databases
- Content feed API
- OneBox API

Google Search Appliance



## Query Processing:

- Hypertext analysis
- Automated expansion
- Spellchecker

Results



## Results Display:

- Standard Template
- Wizard
- Output in XML
- Customize with XSLT
- OneBox for Enterprise

# Security

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- Insure users only see documents they have permission to access
- Leverage your existing security system
  - NTLM
  - Basic Authentication
  - Single Sign-on Systems
  - Native LDAP Authentication
  - X.509 client certificates
  - Other systems
- SAML-based Authentication & Authorization API connects directly to other access control systems



# Meta-data Indexing and Searching

- Automatically indexes meta-data in documents
- Indexes externally-stored meta-data in databases or other systems
  - Document and Content management systems store metadata external to the documents
  - Meta-data generated from entity extraction or taxonomical classification
- Search can be restricted by metadata fields

The screenshot shows the getjob.com search results page. The search criteria are 'engineer' for Job Description and 'california' for Location. The page displays 10 results out of 13,100 total. The results are filtered by company and location. The first result is from LAM Research in Fremont, CA, for a 'Process Engineer 3 to Process Engineer Sr.\*'. The second result is from Yahoo! Inc. in Burbank, CA, for a 'Software Engineer (Production Operations Engineer)\*'. The third result is from WFI in Anaheim, CA, for a 'Senior Security Engineer'. The fourth result is from NVIDIA Corporation in Santa Clara, CA, for a 'COMPILER TOOLS ENGINEER'. A small table of area codes is visible in the bottom left of the screenshot.

Area Code	Count
626	650
661	714
760	805
818	931
916	949
951	

# Robust Reporting

## Query Reporting

- Top search queries
- Total query volume
- Zero results queries
- Export to a log server or as a CSV file

## Crawl Diagnostics

- View into upcoming crawl queue
- Status of every URL crawled
- Broken links
- Total number of pages crawled

Google Search Appliance > Status and Reports > Search Reports

Show Search Reports for Collection:

Search Reports provide a summary of search activity for the selected time, as well as the top 100 keywords and queries.

**Report for collection appliance : March 2005**

Total Results Pages: 55 Total Searches: 55 Distinct Searches: 55

# Searches Per Day

March 2005																											
Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
# Searches	4		6					4		5					6		5					3	5	5			

Average # Searches Per Hour

AM	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
									24	5	1	20
PM	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
	2				3							

Google Search Appliance > Status and Reports > Crawl Diagnostics

Crawl Diagnostics (Help) Show Diagnostics

URLs starting with:

URLs in the following state:

[Show URLs](#)

All hosts > <http://www.google.com/alpha/Top/>

Name	Crawl Status
Adult	7479 crawled - 0 errors - 0 excluded
Arts	45342 crawled - 0 errors - 0 excluded
Business	10577 crawled - 0 errors - 0 excluded
Computers	7923 crawled - 0 errors - 0 excluded
Games	11083 crawled - 0 errors - 0 excluded
Health	6191 crawled - 0 errors - 0 excluded
Home	2436 crawled - 0 errors - 0 excluded
Kids_and_Teens	3816 crawled - 0 errors - 0 excluded
News	1814 crawled - 0 errors - 0 excluded

# Google OneBox for Enterprise

Acme [Directory](#) [Rooms](#) [Locations](#) [Desktop](#)

acmeINC intranet

east coast sales  [Advanced Search](#)  
[Search Tips](#) / [Search FAQ](#)

include secure content

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**Acme Enterprise Search** Results 1 - 10 Search took 0.54 seconds.

Sort by: [Date](#) / [Relevance](#)

[Cognos 8 Report - US East Region Sales](#) - [Hide](#) - [About Cognos 8](#)

COGNOS 8

◆ 91.6% ▼ 2005 Q4 Target: 95.1% Variance: -3.4%

Quarter	Sales (%)
Q1 2004	~200
Q3 2004	~200
Q1 2005	~800
Q3 2005	~1800
Q4 2005	~1400

Secure, real-time access to business information

Christine Stilwell. **East Coast Sales** Dir. Bill O'Sullivan. **West Coast Sales** Dir. David Smith. ... **Sales** Coordinator. **East Coast Sales**. [www.corp.acme.com/NSales%20ORG.ppt - 2003-05-15](#)

[Bill's Q3 objectives](#)  
 ... To promote this information, I will post on acme by 9/30/05. **East Coast Sales Meeting & West Coast Sales Meeting**. Ill. [www.corp.acme.com/Old%20Objectives/2001%20Q3.htm](#)

Acme [Directory](#) [Rooms](#) [Locations](#) [Desktop](#)

acmeINC intranet

contact wick  [Advanced Search](#)  
[Search Tips](#) / [Search FAQ](#)

include secure content

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**Acme Enterprise Search** Results 1 - 10 Search took 0.77 seconds.

Sort by: [Date](#) / [Relevance](#)

1 result available in the Exchange phonebook

**Jim P. Wick** Office: (212) 555-1212 ext.2355  
[jpwick@acme.com](mailto:jpwick@acme.com) Cell: (718) 555-1212

8am 9 10 11 12pm 1 2 3 4 5

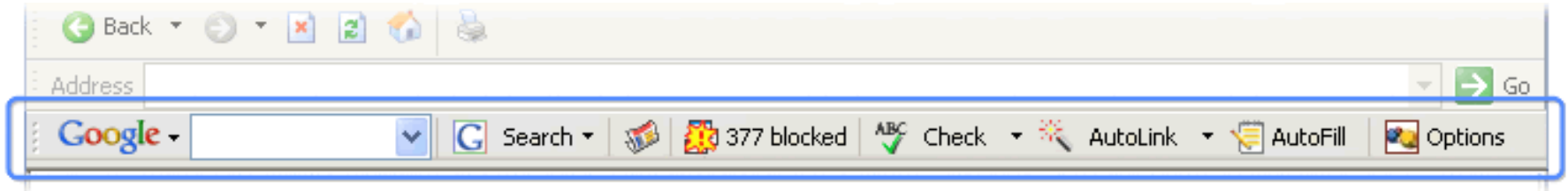
**contact** me at 1-800-555-1122 ext.257. ... 12/13/05, Barry **Wick**, rikwrybac@acme.com, 55577738, The books of Ian McLaren, Beside the Bonnie Briar Bush and The ... [www.corp.acme.com/publicdomain/- 27k - 2006-02-14 - Cached](#)

[AU Phone Messages](#)  
 ... how do we **contact** you? ... Matt. Yes. 1/30/06. AccountLeads. Mr. Wang. 9747-1174 /

Leverages a thoroughly proven UI design and experience

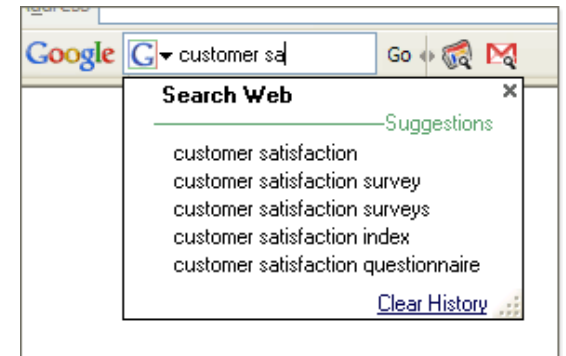
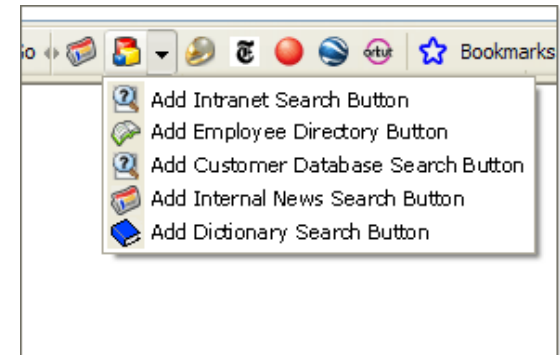


# Google Toolbar for Enterprise



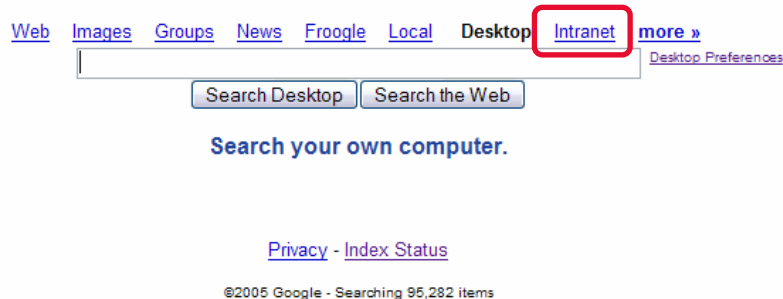
## Google search right from the browser

- Easy access to Google.com or Google Search Appliance results
- Configured by IT to meet corporate standards
- Custom buttons enable search across any other repository
- Offers search suggestions (to complete your query) as you type
- Pop-up blocker
- Free download



# Google Desktop for Enterprise

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“One-stop searching” for corporate users: desktop, enterprise, and the Web from one interface

- Search Lotus Notes, Outlook, MS Office files, PDF, etc.
- Administrative control of preferences
- Encryption of all user data and index files with Encrypted File System (EFS)
- No user data or corporate information communicated back to Google
- Free download; premium support package also available

# Google Desktop for Enterprise

The screenshot shows the Google Desktop interface with search results for 'sales presentation'. The search bar at the top contains 'sales presentation' and a 'Search' button. Below the search bar, there are navigation links: Web, Images, Groups, News, Froogle, Local, Desktop, Moma, and more. The Desktop section shows a summary: 'All - 419 emails - 1,613 files - 646 web history - 1 chat - 0 other'. There are links for 'Remove from Index' and 'Sort by relevance'. The results are sorted by date, as indicated by the 'Sorted by date' label. The first result is 'Search Results: sales presentation' with a '1 cached' link. The second result is 'Search Results: sales preso' with a '1 cached' link. The third result is 'Search Results: investment research' with a '3 cached' link. The fourth result is 'Golden-pitchv4.ppt' with a '1 cached' link. The fifth result is 'Sales - Consumer Products'.

Sort by filetype

Sort by date

View cached copies

View image of documents

View older versions

# Google Desktop for Enterprise

The screenshot shows a search interface for 'moma' (Museum of Modern Art) with the 'inside google' logo. The search bar contains 'sales presentation' and a 'search' button. There are links for 'Advanced Search', 'Search Tips', and 'Search FAQ'. A checkbox for 'include secure content (Moma search)' is present. Below the search bar, it says 'Moma Search Results 1 - 10 of about 16600 Search took 0.88 seconds.' and 'Sort by: Date / Relevance'. A red box highlights the text '3,389 results stored on your computer - Hide - About' and two search results: 'Search Results: sales preso - Cached Sales -Preso Center: Presentation - 10:08pr' and 'Search Results: investmen... - Sales .www.rbc.com/investorrelations/pdf - 9:52pm'. A blue box highlights a search result for 'Sales - Preso Center: Presentation Slide Library' with a description: '... Please forward any questions on existing materials or requests for new materials to fm-team@google.com... Sales presentation templates. PowerPoint Template. ... gweb.corp.google.com/sales/site.cgi?tab=client&sub=preso&page=client\_resources/preso\_center/library\_main.html&side=client\_resources.html - 84k - Cached'. Below this is another result for 'Sales - Preso Center: Presentation Slide Library' with a description: '... Please forward any questions on existing materials or requests for new materials to sales-intell@google.com... Sales presentation templates. PowerPoint Template ... gweb.corp.google.com/sales/site.cgi?tab=client&sub=preso&page=client\_resources/preso\_center/library\_main.html&side=marketing.html - 78k - Cached [ More results from gweb.corp.google.com/sales/site.cgi ]'. At the bottom, there is a result for '[MS POWERPOINT] Building an Effective Sales Presentation' with a description: 'Before You Start; Getting Organized; Presentation Checklist; Best Practices; Workshop. ... Work with sales rep to determine ... What is the audience of the meeting?'.

Desktop  
search results

Intranet search  
results

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Overview

Our Understanding of Your Needs

Google Earth

Google Philosophies

Our Products

# Geospatial Content

## Google Earth

- Unlocks the value of your geospatial information
- Global collection of satellite imagery and mapping data
- Fast, intuitive interface for maximum ease of use



## Editor's Choice 2005

“We were impressed with the technology—so much so we gave it our annual Award for Technical Excellence”

# Google Earth Products

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## Free

- Address lookup, local search, directions
- Advertising supported personal, non-commercial use



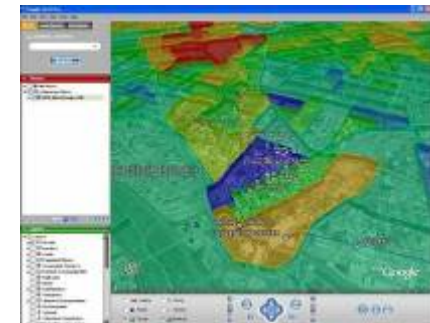
## Pro

- Import data in text or GIS\* formats
- High resolution printing
- Telephone support
- Faster performance (more than 2x Free)



## Enterprise

- Create your own custom Earth
- Integrate large geospatial datasets
- Support thousands of users
- Connected or disconnected systems



\* Data import module required

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Overview

Search

Google Earth

SketchUp



# SketchUp from Google

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## Powerful and Simple 3D Modeling

- Allows order of magnitude increase in the number of people who can create 3D models
- Freely available download from Google

## 3D Warehouse

- Geospatial Wiki
- Enables a Community to contribute to and organise a virtual 'world'

## Tagging and Linking

- Information from other systems can be displayed organised in Geospatial context
- Customize database results display

The logo for SketchUp, featuring the word "Sketch" in a black serif font and "Up" in a red serif font, with a registered trademark symbol (®) at the bottom right of the "p".



Muchas gracias

Questions and discussion...