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11
I/O

Scalable Structured Markup

Timothy Jordan
May 11th, 2011

Scalable Structured Markup
Putting more knowledge into your site

Timothy Jordan
May 11th, 2011

#publisher #io2011

Feedback: goo.gl/SIrGz

Session: goo.gl/N8C15

Hashtags and links

Google I/O 11

Hello

Timothy Jordan
Developer Advocate, Google

timothyjordan.com

@timothyjordan

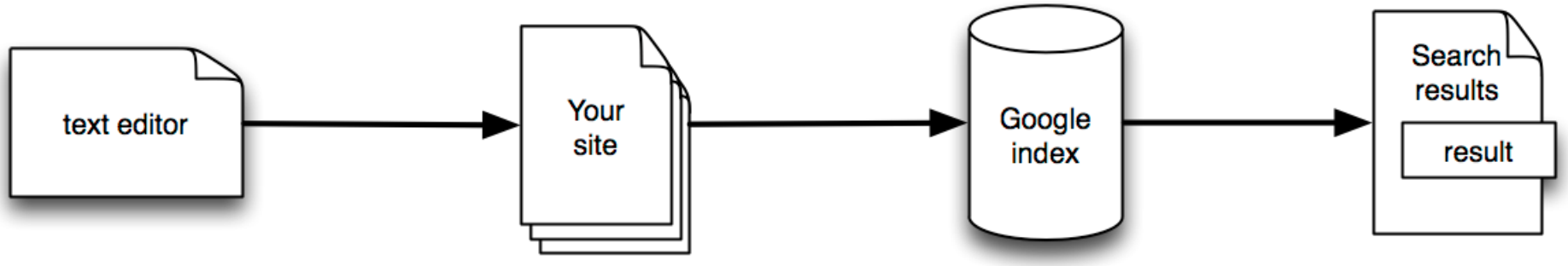
Today's menu

- Past
- Present
  - Rich Snippets
  - Sitemaps
- Future

Google I/O 11

The past

The web, circa 2000



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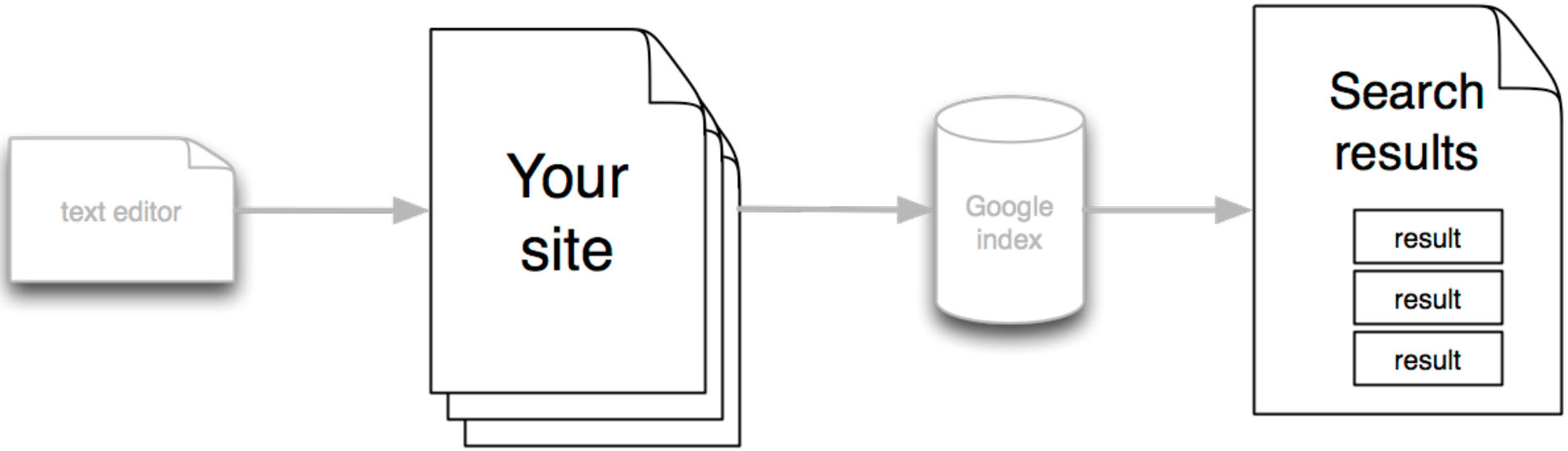
The web, circa 2000



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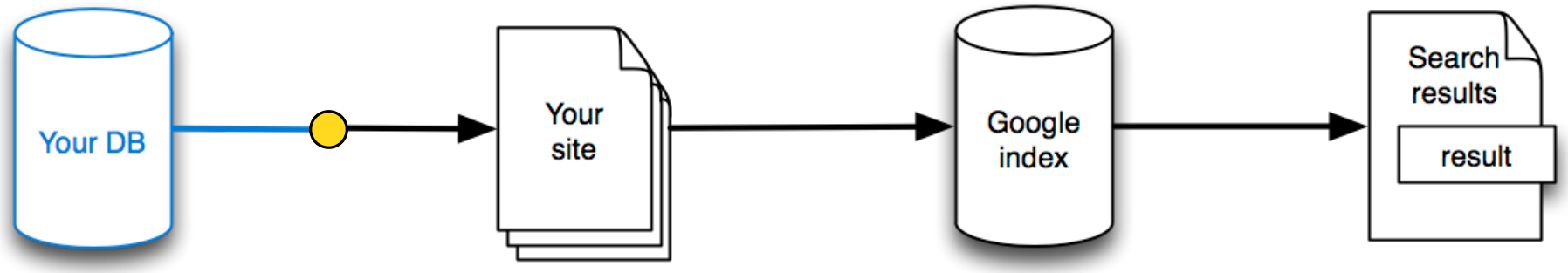
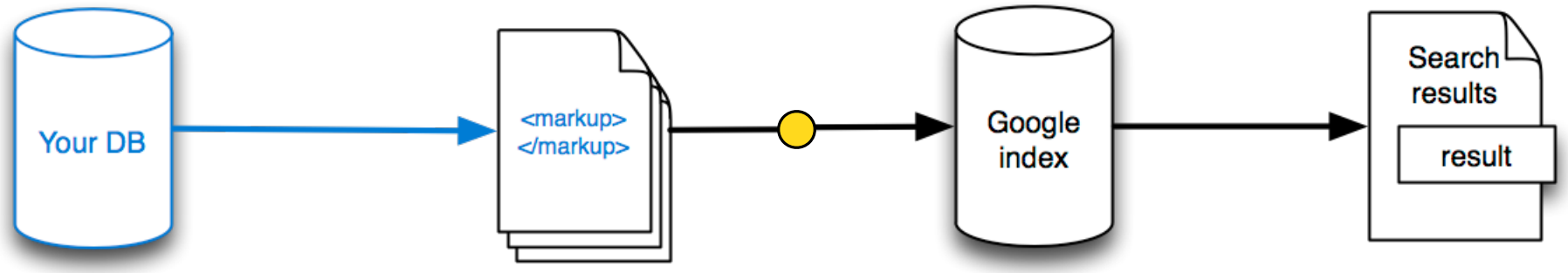
The present

The web, with Rich Snippets



The web, with Rich Snippets



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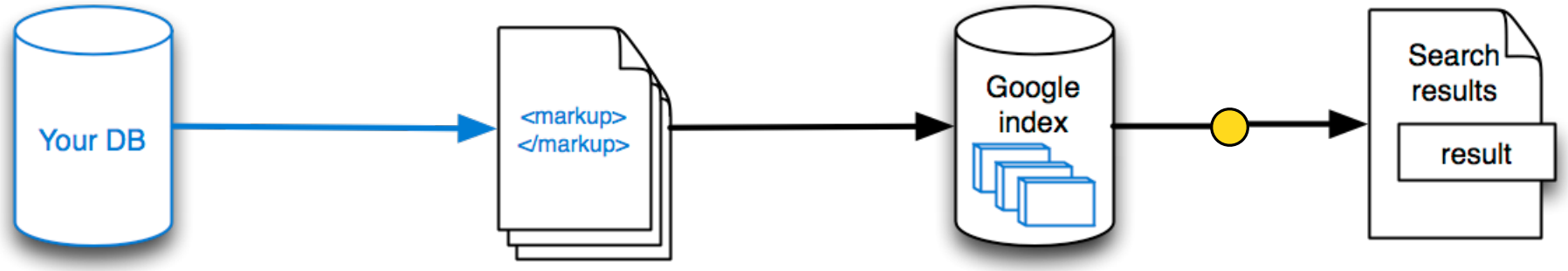
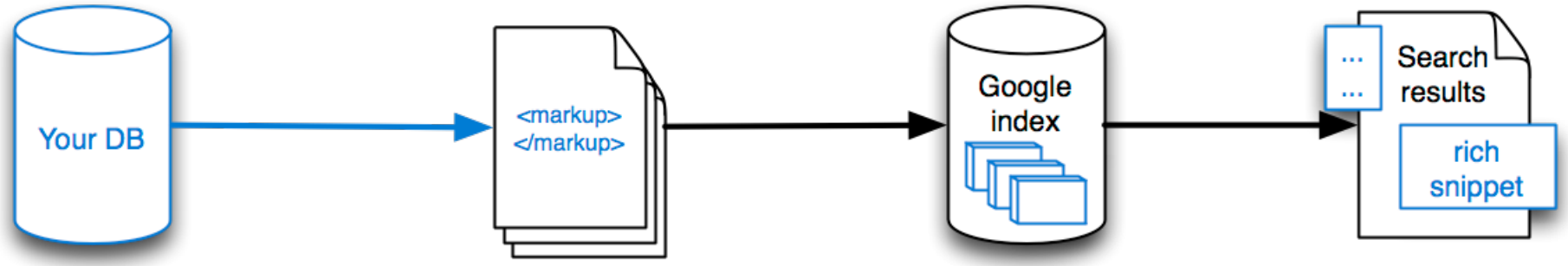
The web, with Rich Snippets



The web, with Rich Snippets



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The present > Rich Snippets

Rich snippets: a timeline

2009/5/12	Introducing Rich Snippets
2009/9/24	Facebook Share and RDFa for videos
2009/10/26	Testing tool, better docs, extended RDFa support
2010/1/22	Events
2010/3/11	Microdata support
2010/4/13	Recipes
2010/4/26	Internationalization
2010/9/2	Testing tool improvements, breadcrumbs
2010/9/22	Local Search
2010/11/2	Shopping sites
2011/2/24	Recipe View
2011/5/7	Prayer times

Google

stuffing ✕ Search

About 20,200,000 results (0.10 seconds) Advanced search

Everything
Images
Videos
News
Shopping
Recipes
More

Mountain View, CA
Change location

Ingredients	Yes	No
turkey	☐	☐
common sage	☐	☐
celery	☐	☐
raisins	☐	☐
olive	☐	☐
rosemary	☐	☐
walnuts	☐	☐
apples	☐	☐

Any cook time
Less than 15 min
Less than 30 min
Less than 60 min

Any calories
Less than 100 cal
Less than 300 cal
Less than 500 cal

More search tools

Thanksgiving **Stuffing** and Dressing Recipes - Allrecipes.com
Looking for **stuffing** and dressing recipes? Allrecipes has more than 160 trusted **stuffing** and dressing recipes complete with ratings, reviews and serving ...
Top 20 - Quick and Easy Stuffing and Dressing - Cornbread Stuffing and Dressing
allrecipes.com/recipes/holidays-and.../**stuffing**-and-dressing/ - Cached - Similar

Stuffing - Wikipedia, the free encyclopedia
In cooking, **stuffing** or filling (specifically for poultry) is an edible substance or mixture, often a starch, used to fill a cavity in another food item. ...
en.wikipedia.org/wiki/**Stuffing** - Cached - Similar

Images for **stuffing** - Report images

Basic Bread **Stuffing** - Turkey or Chicken **Stuffing** Recipe
★★★★☆ 5 reviews
Basic bread **stuffing** recipe with onion, celery, butter, poultry seasoning, and bread. Bake this **stuffing** in the bird or in a greased shallow casserole.
southernfood.about.com/od/**stuffing**recipes/r/bldressing5.htm - Cached - Similar

Mom's Turkey **Stuffing** Recipe | Simply Recipes

Nov 24, 2008 ... I've never tasted any turkey **stuffing** that has come close to as good as mom's. Classic Thanksgiving turkey **stuffing** recipe made with French ...
simplyrecipes.com/.../moms_turkey_**stuffing**/ - Cached - Similar

Cooks.com - Recipes - Homemade **Stuffing**
In frying pan ... add Pepperidge Farm **stuffing** crumbs to desired ... turkey or cook (bake) in oven at 350 degrees for about 30 minutes. ...
www.cooks.com › Recipes - Cached - Similar

Stove Top
Even with the temperature dropping, Stove Top **Stuffing** makes every day feel warm and special. Easy Chicken Bake is a snap. Read the recipe and download a ...
www.kraftbrands.com/stovetop/ - Cached

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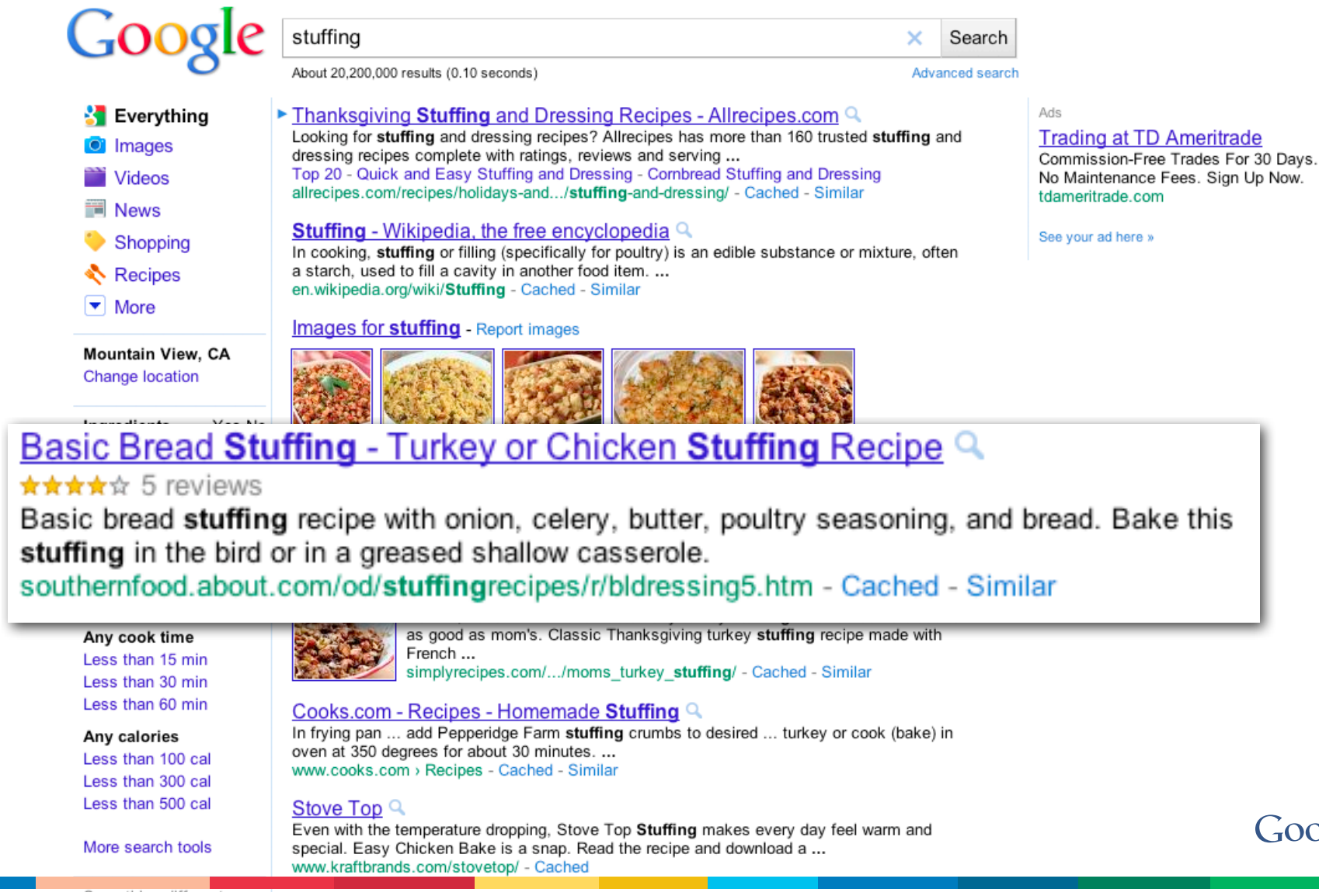
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Looking for stuffing and dressing recipes? Allrecipes has more than 160 trusted stuffing and dressing recipes complete with ratings, reviews and serving ...
Top 20 - Quick and Easy Stuffing and Dressing - Cornbread Stuffing and Dressing
allrecipes.com/recipes/holidays-and.../stuffing-and-dressing/ - Cached - Similar
Stuffing - Wikipedia, the free encyclopedia
In cooking, stuffing or filling (specifically for poultry) is an edible substance or mixture, often a starch, used to fill a cavity in another food item. ...
en.wikipedia.org/wiki/Stuffing - Cached - Similar
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southernfood.about.com/od/stuffingrecipes/r/bldressing5.htm - Cached - Similar
Any cook time
Less than 15 min
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Less than 60 min
Any calories
Less than 100 cal
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as good as mom's. Classic Thanksgiving turkey stuffing recipe made with French ...
simplyrecipes.com/.../moms_turkey_stuffing/ - Cached - Similar
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drooling dog bar b q

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Related searches
Timeline

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Drooling Dog Barbq
Under the name **Drooling Dog Bar BQ**, we brought our own style of BBQ catering to the Foothills of Northern California. We were known for our Tri Tip, ...
www.**droolingdogbarbq**.com/ - Cached - Similar

Drooling Dog Bar B Q - CLOSED - Auburn, CA
★★★★☆ 26 reviews - Price range: $$
26 Reviews of **Drooling Dog Bar B Q** CLOSED "This used to be my favorite stop on the way to Tahoe when they were in Colfax, and I'm glad to see that BBQ is ...
www.yelp.com › Restaurants › Barbeque - Cached - Similar

Drooling Dog BBQ, Colfax, CA : Reviews and maps - Yahoo! Local
Drooling Dog BBQ, Colfax, CA : Reviews and maps - Yahoo! Local, 530.346.8883. Get Ratings, Reviews, Photos and more on Yahoo! Local.
local.yahoo.com/info-21765606-**drooling-dog-bbq**-colfax - Cached - Similar

Drooling Dog BBQ - Colfax, California - Yahoo! Travel
★★★★☆ 6 reviews
Drooling Dog BBQ, Colfax - find photos, descriptions, maps, reviews, and ...
travel.yahoo.com › ... › California › Colfax › Colfax Restaurants - Cached - Similar

Drooling Dog Bar BQ | Facebook
Drooling Dog Bar BQ moved from it's Colfax location Nov of 2009 after 7 years. We offer the finest barbecue in the area. we also cater, where we cook on ...
www.facebook.com/pages/**Drooling-Dog-Bar-BQ**/290169850118 - Cached

Drooling Dog Bar B Q (212 N. Canyon Way, Colfax, CA 95713-9265 ...
Drooling Dog Bar BQ is located on I~80, between Sacramento and Reno at the Colfax/Grass Valley Exit (135). We are "above the fog and below ...
www.famplosion.com/venues/7366-**Drooling-Dog-Bar**-B-Q - Cached

Drooling Dog BarBQ - Auburn | Urbanspoon
Drooling Dog BarBQ, Barbecue Restaurant in Auburn. See the menu. Reviews from critics, food blogs and fellow diners.
www.urbanspoon.com › Sacramento › Greater Sacramento › Auburn - Cached

Drooling Dog BBQ - Colfax, CA, 95713 - Citysearch
Jan 11, 2011 ... **Drooling Dog BBQ** in Colfax. Come to Citysearch® to get information, directions, and reviews on **Drooling Dog BBQ** and other Restaurants in ...
sacramento.citysearch.com › Colfax › Restaurants - Cached

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Causes, Symptoms and Treatment
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www.petmd.com

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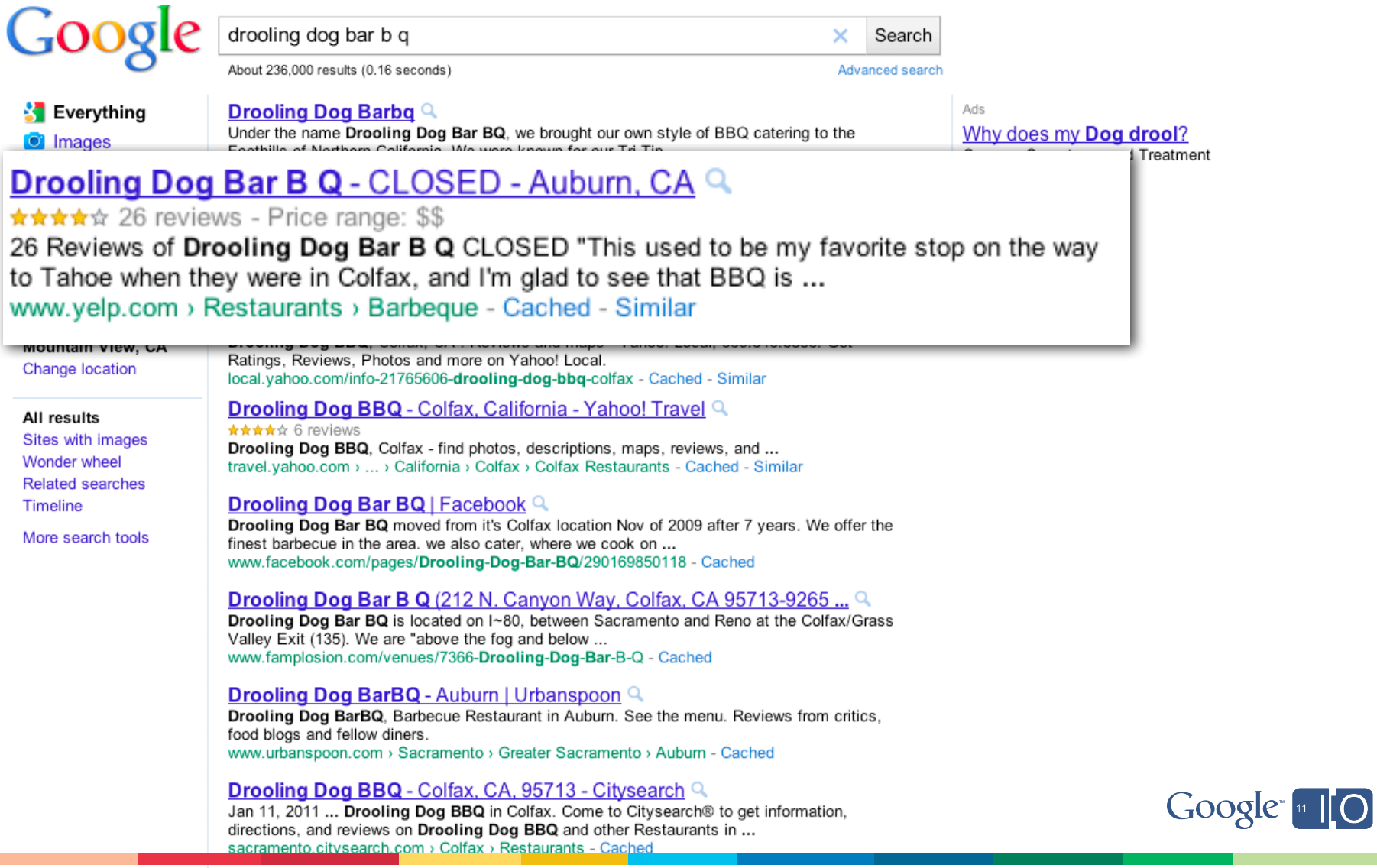
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www.yelp.com › Restaurants › Barbeque - Cached - Similar
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local.yahoo.com/info-21765606-drooling-dog-bbq-colfax - Cached - Similar
All results
Sites with images
Wonder wheel
Related searches
Timeline
More search tools
Drooling Dog BBQ - Colfax, California - Yahoo! Travel
6 reviews
Drooling Dog BBQ, Colfax - find photos, descriptions, maps, reviews, and ...
travel.yahoo.com › ... › California › Colfax › Colfax Restaurants - Cached - Similar
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Jan 11, 2011 ... Drooling Dog BBQ in Colfax. Come to Citysearch® to get information, directions, and reviews on Drooling Dog BBQ and other Restaurants in ...
sacramento.citysearch.com › Colfax › Restaurants - Cached

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Jazz music San Francisco
Reviews on **Jazz music** in **San Francisco** - **Jazz** Mafia, Savanna **Jazz**, Rassela's **Jazz** Club & Restaurant, SFJAZZ, The Turnaround **Jazz** Quartet & Trio, ...
www.yelp.com/search?...**jazz+music**...**San+Francisco**%2C... - Cached - Similar

Jazz At Pearl's voted best **Jazz** Club by New York Times, SF ...
San Francisco Columbus **Jazz** Inc wins award for best **Jazz** Club "**Jazz** at Pearl's" ;.
www.**jazz**atpearls.com/ - Cached - Similar

Cafe Claude San Francisco Live Jazz Music
Financial District bistro offering live **Jazz** on the weekends.
www.cafeclaude.com/ - Cached - Similar

A
7 Claude Lane, San Francisco - (415) 392-3505
"Cozy bistro with live jazz Thurs-Sat makes it a great first date place." - zagat.com
yelp.com (865) - opentable.com (364) - tripadvisor.com (126)
★★★★☆ 1646 reviews
Place page

Welcome to BIX Restaurant
Bix Restaurant and Supper Club featuring live **jazz**, famous Martinis and daily ... On a romantic alley in **San Francisco's** charming Jackson Square, a lone neon sign ... Live **Music** From Our Bar. Since its inception in 1988, BIX has been ...
www.bixrestaurant.com/ - Cached - Similar

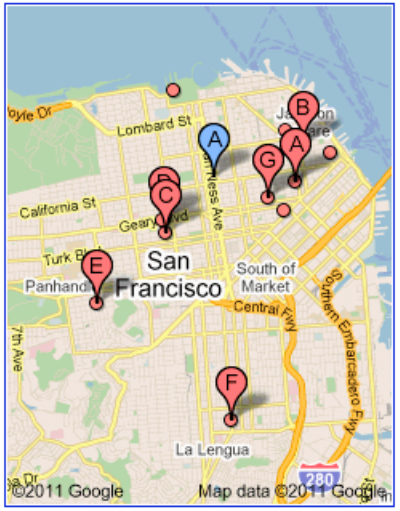
B
56 Gold Street, San Francisco - (415) 433-6300
"Overall, the experience was great from start to finish. The service was very ..." - mysears.com
yelp.com (827) - tripadvisor.com (142) - opentable.com (255)
★★★★☆ 1583 reviews
Place page

Yoshi's San Francisco
Yoshi's **Jazz** Club and Japanese Restaurant | Oakland | **San Francisco**
www.yoshis.com/

C
1330 Fillmore Street, San Francisco - (415) 655-5600
"Overall, the food was good and great quality, but the portions were a tad too small. I would come back for a special occasion." - yelp.com (802)
opentable.com (39) - goldstar.com (85) - tripadvisor.com (23)
★★★★☆ 1170 reviews
Place page

Rasselas Jazz Club And Ethiopian Cuisine
www.rasselas**jazz**club.com/

D 1534 Fillmore Street, San Francisco ★★★★☆



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Hear international performers
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Reviews on **Jazz music** in **San Francisco** - **Jazz** Mafia, Savanna **Jazz**, Rassela's **Jazz** Club & Restaurant, SFJAZZ, The Turnaround **Jazz** Quartet & Trio, ...
www.yelp.com/search?...**jazz+music**...**San+Francisco**%2C... - Cached - Similar

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www.cafeclaude.com/ - Cached - Similar

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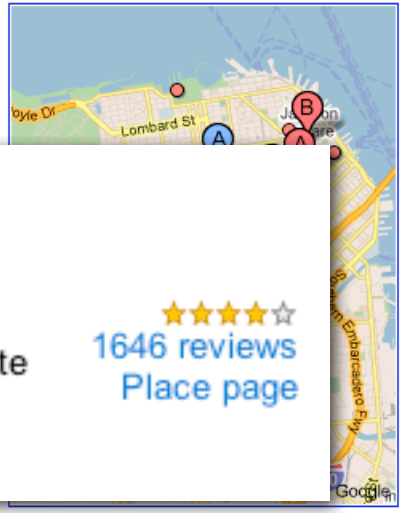
yelp.com (865) - opentable.com (364) - tripadvisor.com (126)

1646 reviews
Place page



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www.bixrestaurant.com/ - Cached - Similar

56 Gold Street, San Francisco - (415) 433-6300
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yelp.com (827) - tripadvisor.com (142) - opentable.com (255)

1583 reviews
Place page

Yoshi's San Francisco
Yoshi's **Jazz** Club and Japanese Restaurant | Oakland | **San Francisco**
www.yoshis.com/

1330 Fillmore Street, San Francisco - (415) 655-5600
"Overall, the food was good and great quality, but the portions were a tad too small. I would come back for a special occasion." - yelp.com (802)
opentable.com (39) - goldstar.com (85) - tripadvisor.com (23)

1170 reviews
Place page

Rasselas Jazz Club And Ethiopian Cuisine
www.rasselas**jazz**club.com/

1534 Fillmore Street, San Francisco

Ads

Concerts in San Francisco
See our eclectic & diverse program
Hear international performers
www.oldfirstconcerts.org
1751 Sacramento Street
(415) 474-1608 - Directions

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The present > Rich Snippets > Markup types

RDF

```
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:dc="http://purl.org/dc/elements/1.1/">
        <rdf:Description rdf:about="http://structured-markup.appspot.com/spinaltap-nomarkup.html">
                <dc:title>Spinal Tap</dc:title>
                <dc:publisher>Structured Markup Examples</dc:publisher>
        </rdf:Description>
</rdf:RDF>
```

- Great design
- Comes from XML tradition

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RDFa

```
<div xmlns:v="http://rdf.data-vocabulary.org/#" typeof="v:Person">
   My name is <span property="v:name">Bob Smith</span>,
   but people call me <span property="v:nickname">Smithy</span>.
   Here is my homepage:
   <a href="http://www.example.com" rel="v:url">www.example.com</a>.
   I work as an <span property="v:title">engineer</span>
   at <span property="v:affiliation">ACME Corp</span>.
   My friends:
   <a href="http://darryl-blog.example.com" rel="v:friend">Darryl</a>,
   <a href="http://edna-blog.example.com" rel="v:friend">Edna</a>
</div>
```

- Great design
- Comes from XML tradition
- Attribute maps of RDF to XHTML
- Difficult with nesting (parent > child entities)

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Microformats

```
<div class="vcard">
   My name is
   <span class="fn">Bob Smith</span>,
   but people call me
   <span class="nickname">Smithy</span>.
   Here is my home page:
   <a href="http://www.example.com" class="url">www.example.com</a>.
   I work as an
   <span class="title">engineer</span> at
   <span class="org">ACME Corp</span>.
   My friends:
   <a href="http://darryl-blog.example.com" rel="friend">Darryl</a>,
   <a href="http://edna-blog.example.com" rel="friend">Edna</a>
</div>
```

- Easier to markup data in existing HTML docs
- Not as general as RDFa, so it can't express as many things

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Microdata

```
<div itemscope itemtype="http://data-vocabulary.org/Person">
  My name is <span itemprop="name">Bob Smith</span>,
  but people call me <span itemprop="nickname">Smithy</span>.
  Here is my homepage:
  <a href="http://www.example.com" itemprop="url">www.example.com</a>.
  I work as an <span itemprop="title">engineer</span>
  at <span itemprop="affiliation">ACME Corp</span>.
  My friends:
  <a href="http://darryl-blog.example.com" rel="friend">Darryl</a>,
  <a href="http://edna-blog.example.com" rel="friend">Edna</a>
</div>
```

- General expression of entities like RDFa
- Also maps more easily to HTML

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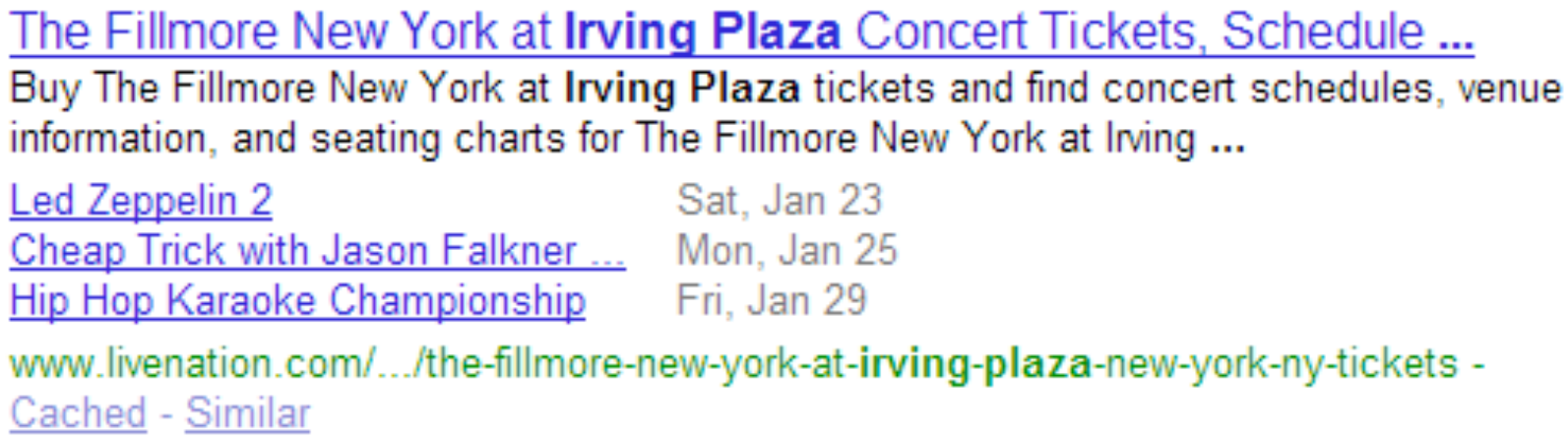
The present > Rich Snippets > Example

Rich Snippets testing tool:
google.com/webmasters/tools/richsnippets

Important link: Rich Snippets

Event



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Properties

Property	Description
summary	**Required**. The name of the event.
`url`	Link to the event details page. Unnecessary if the URL is the same as the page containing the markup.
`location`	The location or venue of the event. Can optionally be represented by nested Organization data, or nested Address data. **Recommended** (unless the page containing the markup is a page about the venue, and the location is the same for every event.)
`description`	A description of the event.
`startDate`	**Required**. The starting date and time of the event in ISO date format.
`endDate`	The ending date and time of the event in ISO date format.
`duration`	The duration of the event in ISO duration format.
`eventType`	The category of the event, such as "Festival", "Concert", "Lecture".
`geo`	Specifies the geographical coordinates of the location. Includes two elements: `latitude` and`longitude`. Optional.
`photo`	A link to a photo or image related to the event.

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Without markup

```
<div>
  <a href="http://structured-markup.appspot.com/spinaltap-nomarkup.html">Spinal Tap</a><br />

  After their highly-publicized search for a new drummer,
  Spinal Tap kicks off their latest comeback tour with a San
  Francisco show.<br />

  When: Oct 15, 7:00PM-Oct 15, 9:00PM<br />

  Where: Warfield Theatre, San Francisco<br />

  Category: Concert
</div>
```


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Required properties

Property	Description
summary	**Required**. The name of the event.
`url`	Link to the event details page. Unnecessary if the URL is the same as the page containing the markup.
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`geo`	Specifies the geographical coordinates of the location. Includes two elements: `latitude` and`longitude`. Optional.
`photo`	A link to a photo or image related to the event.

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Required markup

```
<div itemscope itemtype="http://data-vocabulary.org/Event">
  <a href="http://structured-markup.appspot.com/spinaltap-reqmarkup.html">
    <span itemprop="summary">Spinal Tap</span>
  </a><br />

  After their highly-publicized search for a new drummer,
  Spinal Tap kicks off their latest comeback tour with a San
  Francisco show.<br />

  When:
  <time itemprop="startDate" datetime="2015-10-15T19:00-08:00">Oct 15, 7:00PM</time>-
  Oct 15, 9:00PM<br />

  Where:
  <span itemprop="location" itemscope itemtype="http://data-vocabulary.org/Organization">
     <span itemprop="name">Warfield Theatre</span>, San Francisco
  </span><br />

  Category: Concert
</div>
```


Google I/O 11

Required markup

```
<div itemscope itemtype="http://data-vocabulary.org/Event">
  <a href="http://structured-markup.appspot.com/spinaltap-reqmarkup.html">
    <span itemprop="summary">Spinal Tap</span>
  </a><br />

  After their highly-publicized search for a new drummer,
  Spinal Tap kicks off their latest comeback tour with a San
  Francisco show.<br />

  When:
  <time itemprop="startDate" datetime="2015-10-15T19:00-08:00">Oct 15, 7:00PM</time>-
  Oct 15, 9:00PM<br />

  Where:
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     <span itemprop="name">Warfield Theatre</span>, San Francisco
  </span><br />

  Category: Concert
</div>
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Google I/O 11

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Google I/O 11

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Google I/O 11

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  Oct 15, 9:00PM<br />

  Where:
  <span itemprop="location" itemscope itemtype="http://data-vocabulary.org/Organization">
     <span itemprop="name">Warfield Theatre</span>, San Francisco
  </span><br />

  Category: Concert
</div>
```


Google I/O 11

More properties

Property	Description
summary	**Required**. The name of the event.
`url`	Link to the event details page. Unnecessary if the URL is the same as the page containing the markup.
`location`	The location or venue of the event. Can optionally be represented by nested Organization data, or nested Address data. **Recommended** (unless the page containing the markup is a page about the venue, and the location is the same for every event.)
`description`	A description of the event.
`startDate`	**Required**. The starting date and time of the event in ISO date format.
`endDate`	The ending date and time of the event in ISO date format.
`duration`	The duration of the event in ISO duration format.
`eventType`	The category of the event, such as "Festival", "Concert", "Lecture".
`geo`	Specifies the geographical coordinates of the location. Includes two elements: `latitude` and`longitude`. Optional.
`photo`	A link to a photo or image related to the event.

Google I/O 11

More markup

```
<div itemscope itemtype="http://data-vocabulary.org/Event">
  <a href="http://structured-markup.appspot.com/spinaltap-moremarkup.html" itemprop="url">
    <span itemprop="summary">Spinal Tap</span>
  </a><br />

  <span itemprop="description">After their highly-publicized search for a new drummer,
    Spinal Tap kicks off their latest comeback tour with a San
    Francisco show.</span><br />

  When:
  <time itemprop="startDate" datetime="2015-10-15T19:00-08:00">Oct 15, 7:00PM</time>-
  <time itemprop="endDate" datetime="2015-10-15T19:00-08:00">Oct 15, 9:00PM</time><br />

  Where:
  <span itemprop="location" itemscope itemtype="http://data-vocabulary.org/Organization">
     <span itemprop="name">Warfield Theatre</span>,
     <span itemprop="address" itemscope itemtype="http://data-vocabulary.org/Address">
       <span itemprop="locality">San Francisco</span>
     </span>
  </span><br />

  Category: <span itemprop="eventType">Concert</span><br />
</div>
```


Google I/O 11

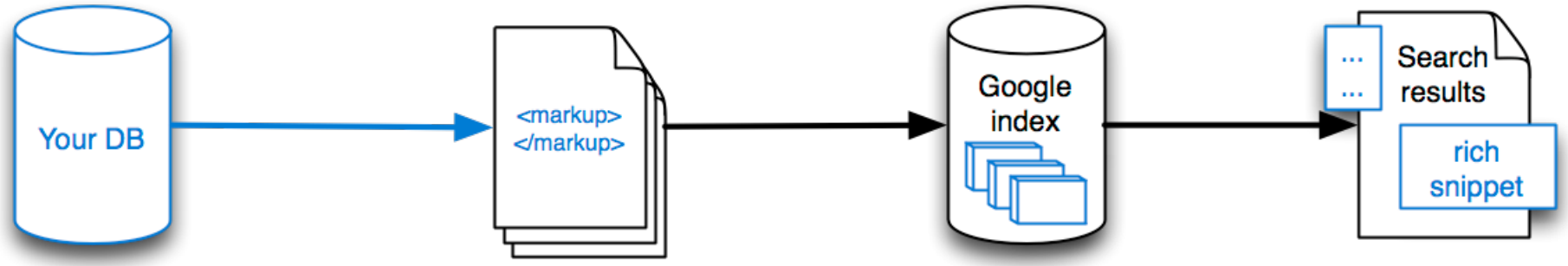
More markup

```
<div itemscope itemtype="http://data-vocabulary.org/Event">
  <a href="http://structured-markup.appspot.com/spinaltap-moremarkup.html" itemprop="url">
    <span itemprop="summary">Spinal Tap</span>
  </a><br />

  <span itemprop="description">After their highly-publicized search for a new drummer,
    Spinal Tap kicks off their latest comeback tour with a San
    Francisco show.</span><br />

  When:
  <time itemprop="startDate" datetime="2015-10-15T19:00-08:00">Oct 15, 7:00PM</time>-
  <time itemprop="endDate" datetime="2015-10-15T19:00-08:00">Oct 15, 9:00PM</time><br />

  Where:
  <span itemprop="location" itemscope itemtype="http://data-vocabulary.org/Organization">
     <span itemprop="name">Warfield Theatre</span>,
     <span itemprop="address" itemscope itemtype="http://data-vocabulary.org/Address">
       <span itemprop="locality">San Francisco</span>
     </span>
  </span><br />

  Category: <span itemprop="eventType">Concert</span><br />
</div>
```


Google I/O 11

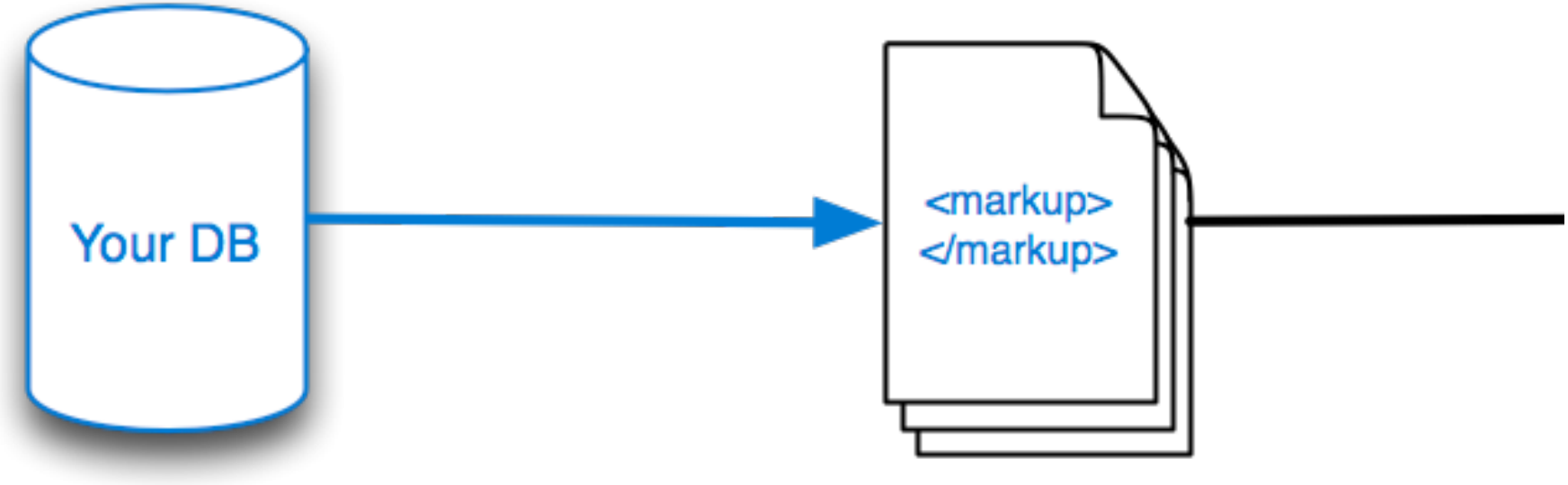
The present > Rich Snippets > Scaling

Scaling



Google I/O 11

Easy with a DB



Google I/O 11

Scaling: The DB

Event

id	summary	location	startDate
343			
344			
345	Spinal Tap	Warfield Theatre	2015-10-15T19:00-08:00
346			
347			

Google I/O 11

Scaling: The template

```
<div itemscope itemtype="http://data-vocabulary.org/Event">
  <a href="http://structured-markup.appspot.com/mtest/spinaltap-reqmarkup.html" itemprop="url">
    <span itemprop="summary">{summary}</span>
  </a><br />

  After their highly-publicized search for a new drummer,
  Spinal Tap kicks off their latest comeback tour with a San
  Francisco show.<br />

  When:
  <time itemprop="startDate" datetime="{startDate}">{startDateReadable}</time>-
  Oct 15, 9:00PM<br />

  Where:
  <span itemprop="location" itemscope itemtype="http://data-vocabulary.org/Organization">
     <span itemprop="name">{location}</span>
  </span><br />

  Category: Concert
</div>
```


Google I/O 11

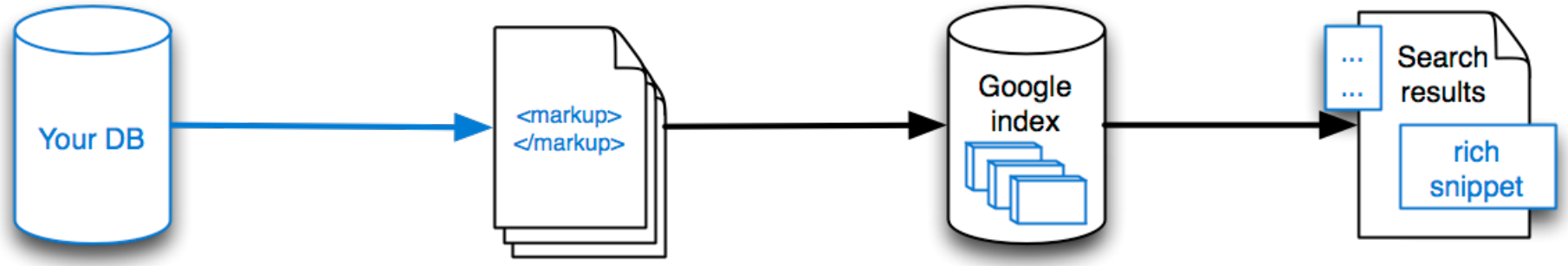
More markup

```
<div itemscope itemtype="http://data-vocabulary.org/Event">
  <a href="{url}" itemprop="url">
    <span itemprop="summary">{summary}</span>
  </a><br />

  <span itemprop="description">{description}</span><br />

  When:
  <time itemprop="startDate" datetime="{startDate}">{startDateReadble}</time>-
  <time itemprop="endDate" datetime="{endDate}">{endDateReadble}</time><br />

  Where:
  <span itemprop="location" itemscope itemtype="http://data-vocabulary.org/Organization">
     <span itemprop="name">{locationName}</span>,
     <span itemprop="address" itemscope itemtype="http://data-vocabulary.org/Address">
       <span itemprop="locality">{locationLocality}</span>
     </span>
  </span><br />

  Category: <span itemprop="eventType">{eventType}</span><br />
</div>
```


Google I/O 11

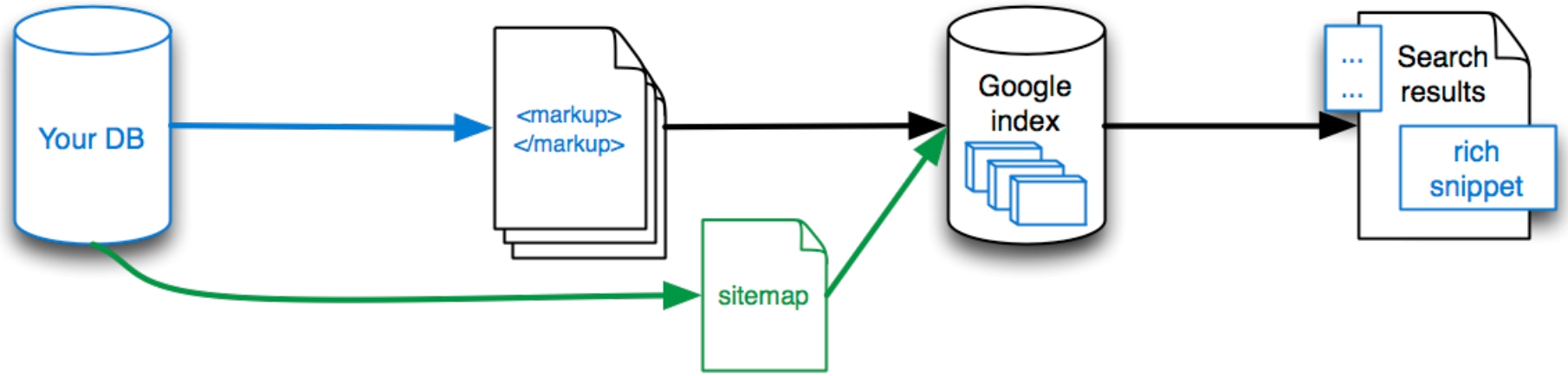
The present > Sitemaps

The web, with Rich Snippets



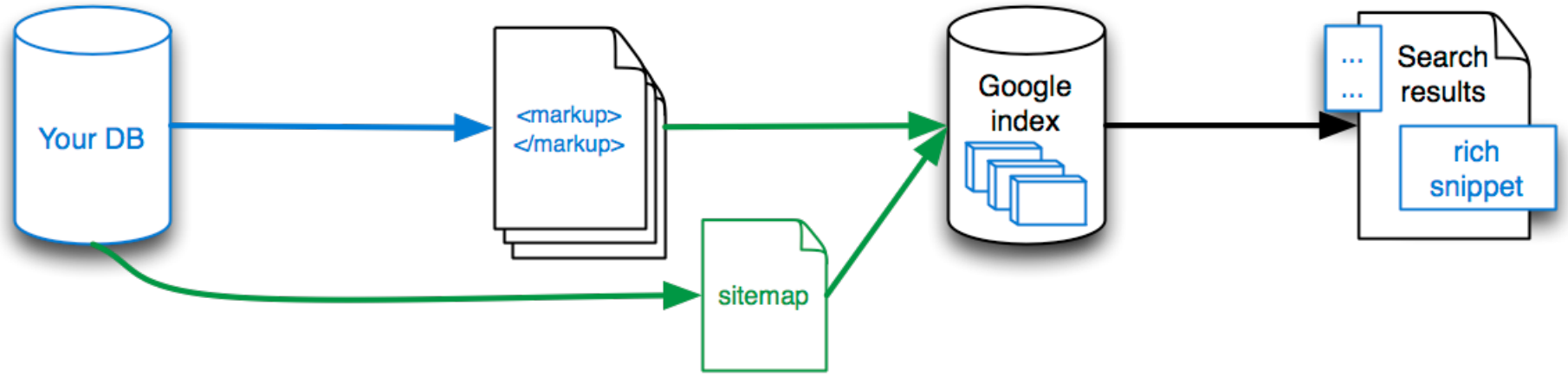
Google I/O 11

The web, with Rich Snippets and Sitemaps



Google I/O 11

The web, with Rich Snippets and Sitemaps



Google I/O 11

The present > Sitemaps > Example

sitemaps.org

google.com/webmasters/tools

Important links: Sitemaps

Tags

Property		Description
<urlset>	required	Encapsulates the file and references the current protocol standard.
<url>	required	Parent tag for each URL entry. The remaining tags are children of this tag.
<loc>	required	URL of the page. This URL must begin with the protocol (such as http) and end with a trailing slash, if your web server requires it. This value must be less than 2,048 characters.
<lastmod>	optional	The date of last modification of the file. This date should be in W3C Datetime format. This format allows you to omit the time portion, if desired, and use YYYY-MM-DD.
<changefreq>	optional	How frequently the page is likely to change. This value provides general information to search engines and may not correlate exactly to how often they crawl the page. Valid values are: always, hourly, daily, weekly, monthly, yearly, never
<priority>	optional	The priority of this URL relative to other URLs on your site. Valid values range from 0.0 to 1.0. This value does not affect how your pages are compared to pages on other sites—it only lets the search engines know which pages you deem most important for the crawlers. The default priority of a page is 0.5.

Google I/O 11

Example

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
   <url>
      <loc>http://structured-markup.appspot.com/</loc>
      <lastmod>2011-05-09</lastmod>
      <changefreq>daily</changefreq>
      <priority>0.5</priority>
   </url>
</urlset>
```


Google I/O 11

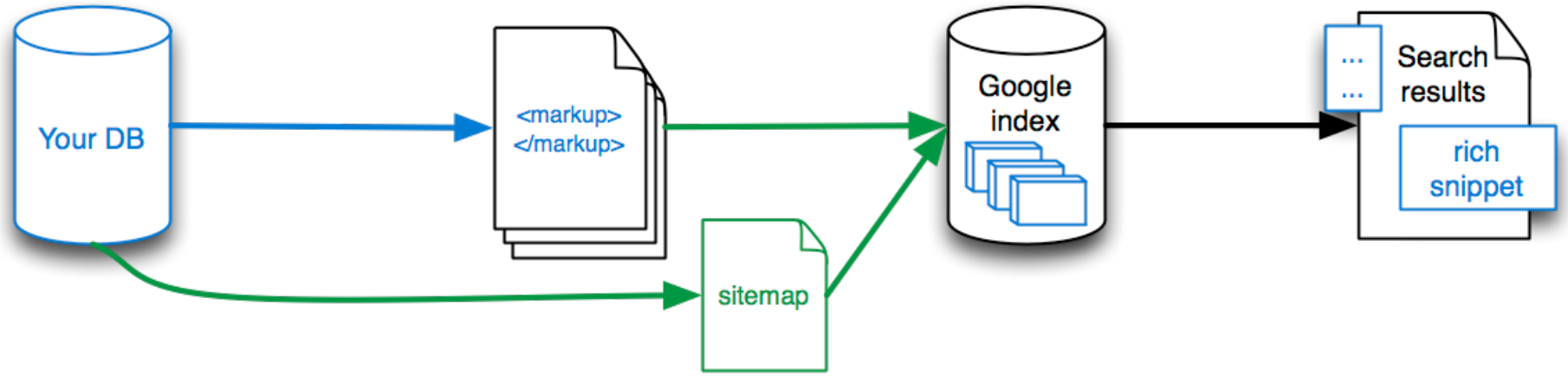
Example

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.sitemaps.org/schemas/sitemap/0.9">
  <url>
    <loc>http://structured-markup.appspot.com/</loc>
    <lastmod>2011-05-07</lastmod>
    <changefreq>weekly</changefreq>
    <priority>0.8</priority>
  </url>
  <url>
    <loc>http://structured-markup.appspot.com/spinaltap-nomarkup.html</loc>
    <lastmod>2011-05-07</lastmod>
    <changefreq>monthly</changefreq>
    <priority>0.7</priority>
  </url>
  <url>
    <loc>http://structured-markup.appspot.com/mtest/spinaltap-reqmarkup.html</loc>
    <lastmod>2011-05-07</lastmod>
    <changefreq>monthly</changefreq>
    <priority>0.7</priority>
  </url>
</urlset>
```


Google I/O 11

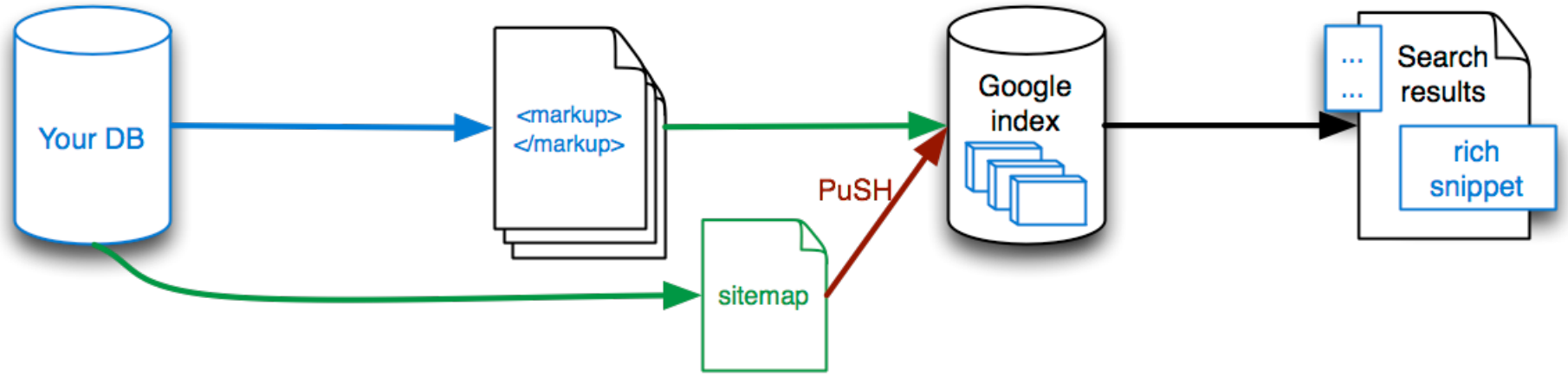
Introducing: Sitemaps via PubSubHubbub

The web, with Rich Snippets and Sitemaps



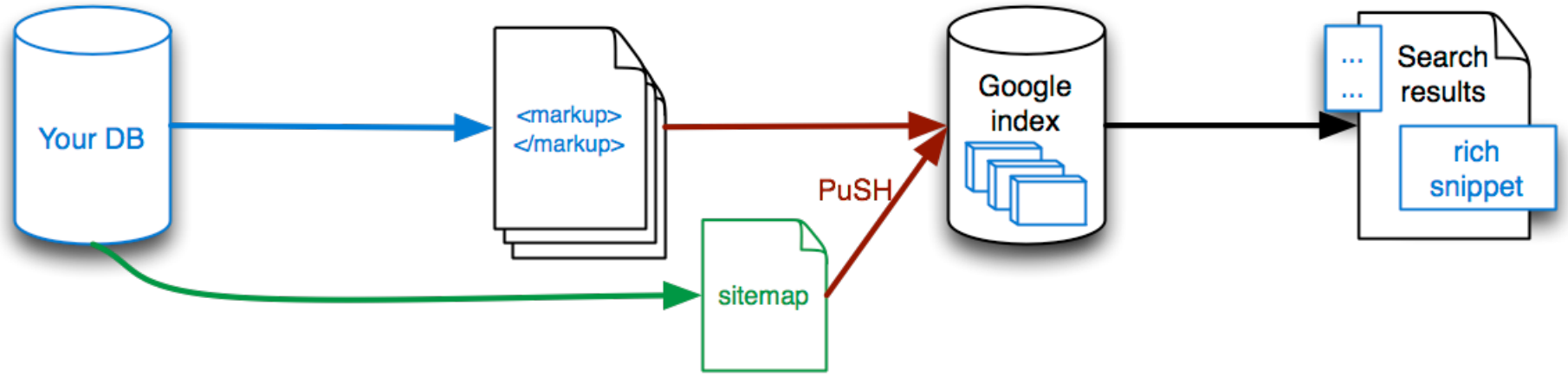
Google I/O 11

The web, with Rich Snippets, and PuSH Sitemaps



Google I/O 11

The web, with Rich Snippets, and PuSH Sitemaps



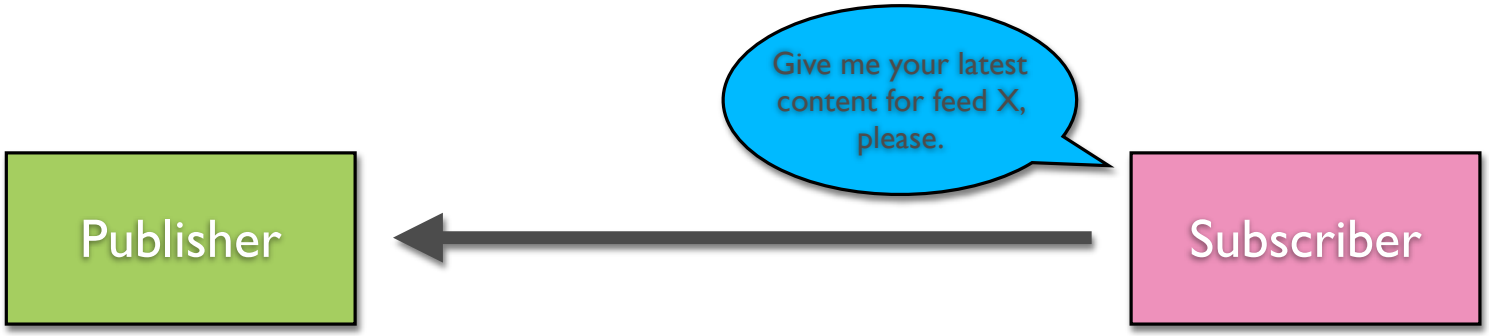
Google I/O 11

code.google.com/p/pubsubhubbub

PubSubHubbub

Google I/O 11

PubSubHubbub



1. Subscriber gets Publisher's feed. The feed contains a link to the Hub.

Google I/O 11

PubSubHubbub

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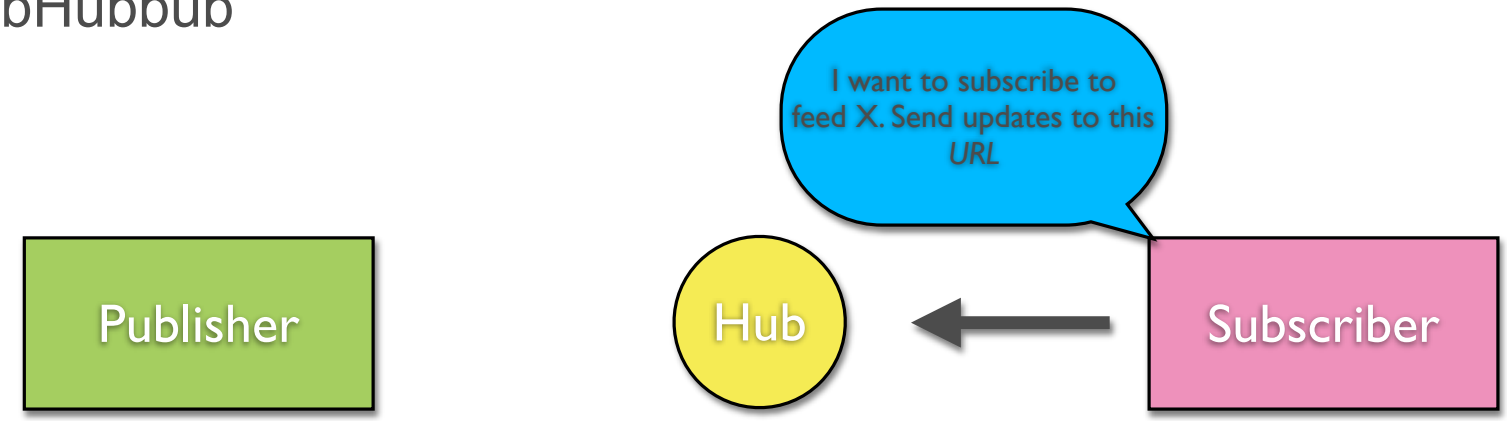
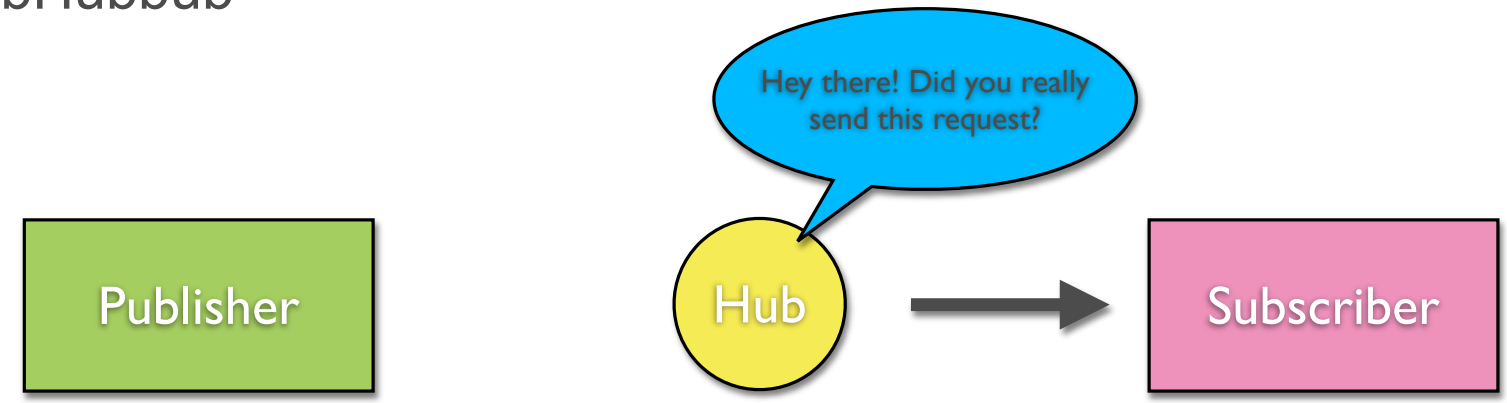
PubSubHubbub



2. Subscriber POSTs subscription request to the Hub. The request contains the URL where the Hub should POST new updates to the Subscriber.

Google I/O 11

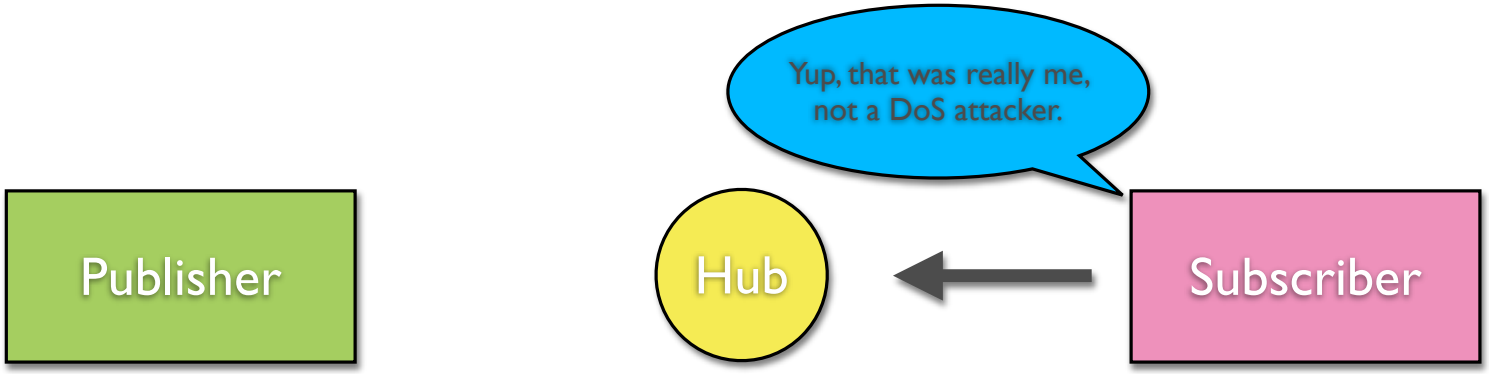
PubSubHubbub



3. Hub hits the URL to verify the request was authentic; Subscriber responds with confirmation to the Hub.

Google I/O 11

PubSubHubbub



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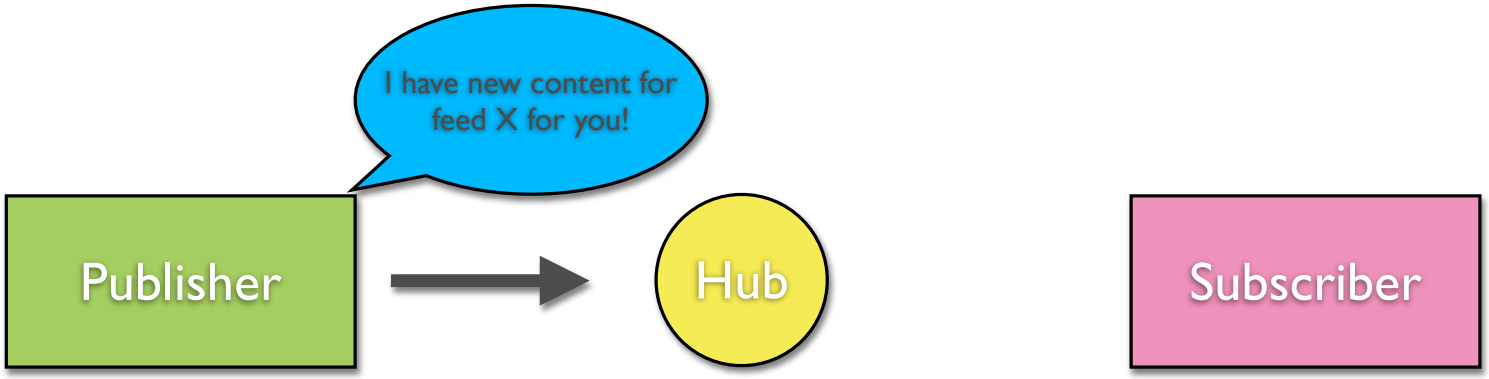
Google I/O 11

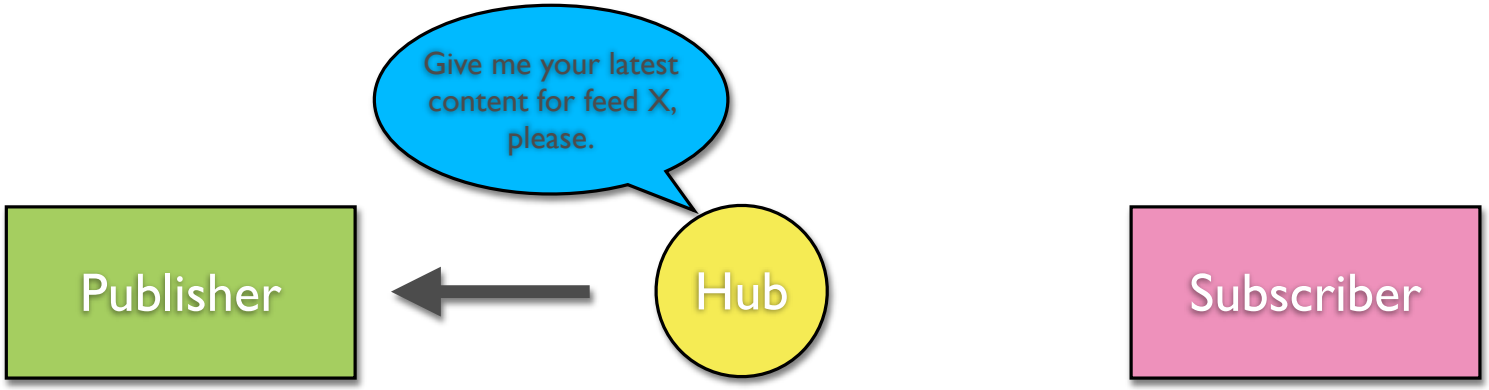
PubSubHubbub



4. a) Publisher notifies Hub about updates by POSTing feed URLs to the Hub; Hub pulls the feed again to find new entries.

Google I/O 11

PubSubHubbub



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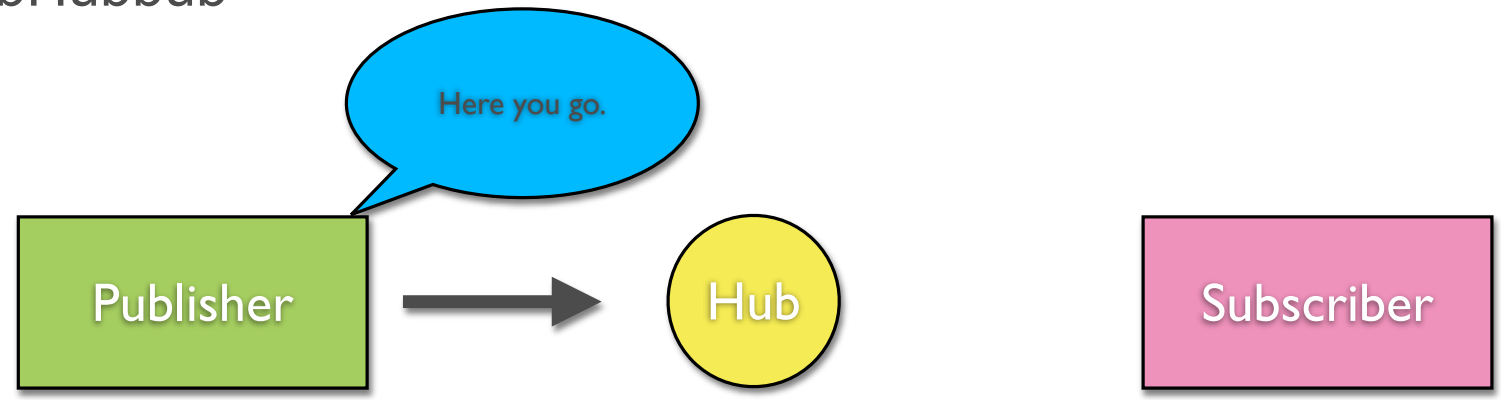
Google I/O 11

PubSubHubbub



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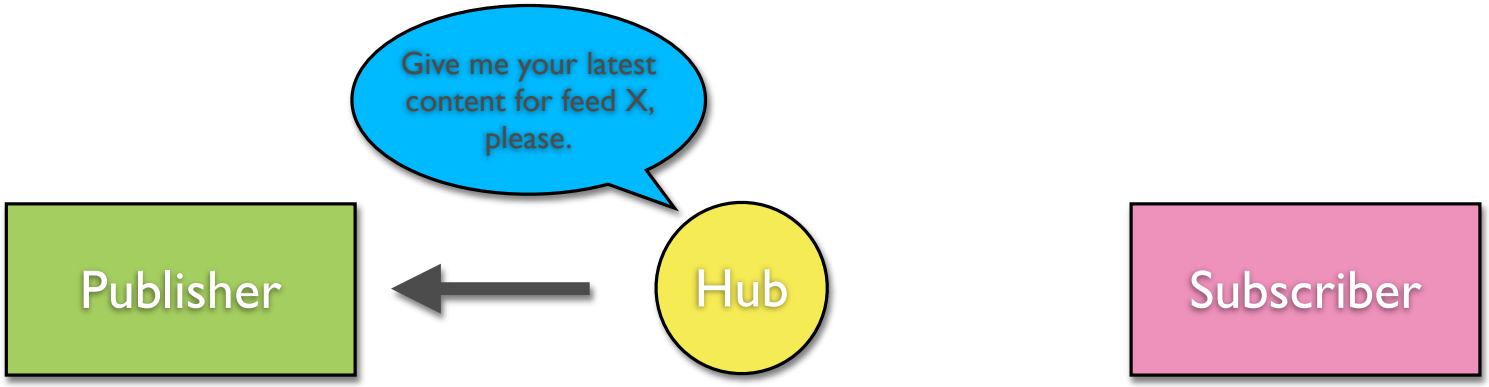
Google I/O 11

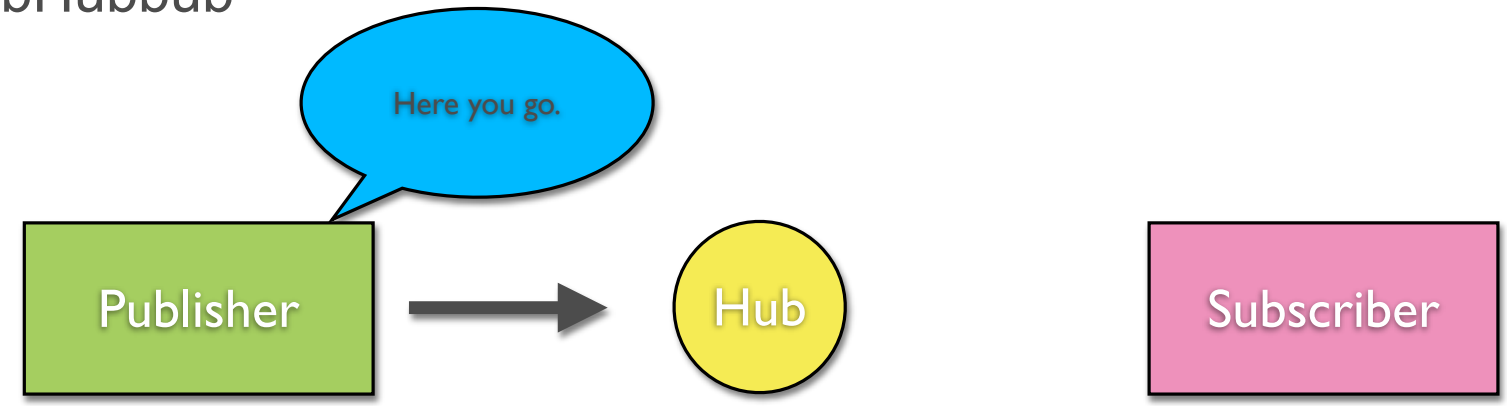
PubSubHubbub



4. b) If the Publisher does not inform the Hub, the Hub will periodically poll the Publisher's feed for new updates.

Google I/O 11

PubSubHubbub



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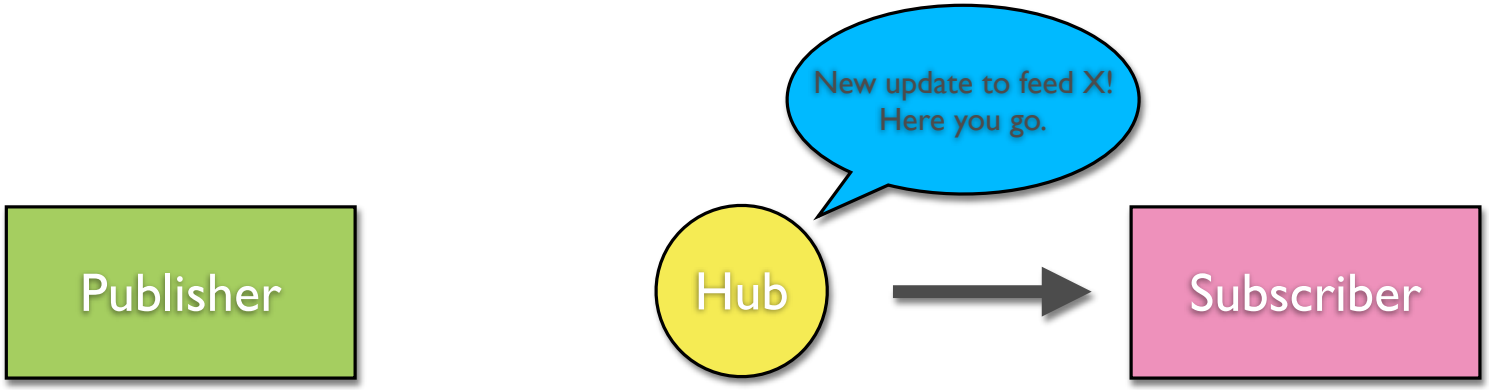
Google I/O 11

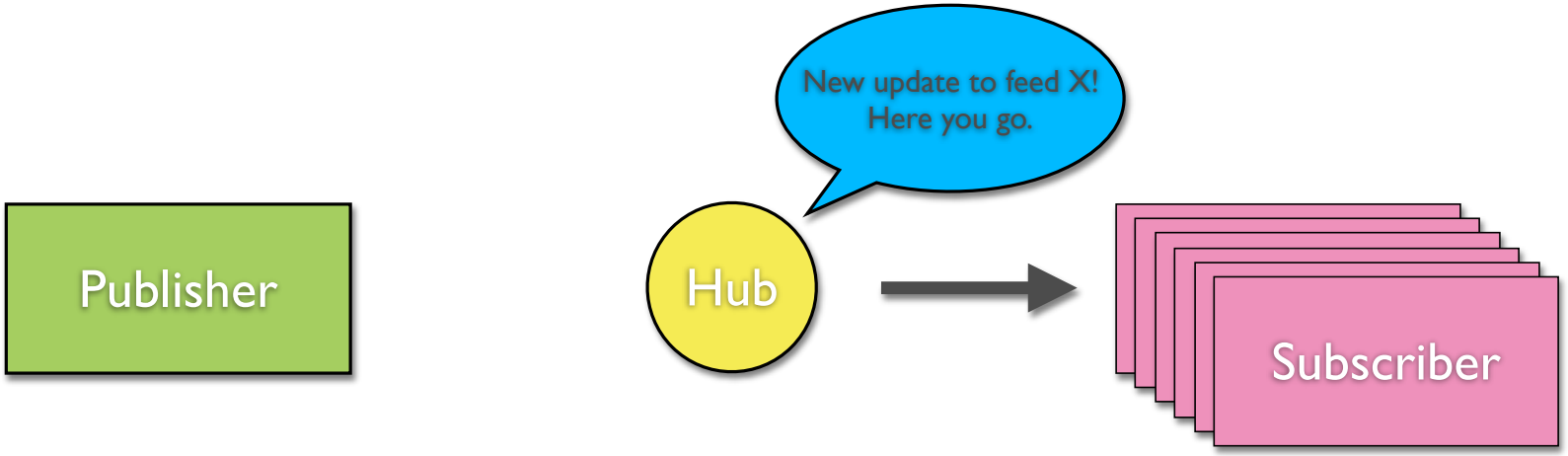
PubSubHubbub



5. When Hub receives new update to feed X, it POSTs the update to the Subscriber's endpoint URL.

Google I/O 11

PubSubHubbub



6. If feed X has multiple subscribers, the Hub sends updates to all of them. This reduces load on the Publisher.

Google I/O 11

Atom feed

```
  <feed xmlns="http://www.w3.org/2005/Atom">
<id>tag:blogger.com,1999:blog-994926592631811436</id>
<updated>2011-05-09T21:13:36.450-07:00</updated>
<title type="text">Structured Markup</title>
<link rel="http://schemas.google.com/g/2005#feed" type="application/atom+xml"
  href="http://structured-markup.blogspot.com/feeds/posts/default"/>
<link rel="hub" href="http://pubsubhubbub.appspot.com/"/>
<author>
  <name>Timothy Jordan</name>
</author>
<entry>
  <id>tag:blogger.com,1999:blog-994926592631811436.post-162301095295322218</id>
  <published>2011-05-09T21:13:00.001-07:00</published>
  <updated>2011-05-09T21:13:36.458-07:00</updated>
  <title type="text">More testing</title>
  <content type="html">...</content>
  <author>
    <name>Timothy Jordan</name>
    <uri>http://www.blogger.com/profile/06704697508101846295</uri>
    <email>noreply@blogger.com</email>
  </author>
</entry>

...
```


Google I/O 11

Atom feed

```
<feed xmlns="http://www.w3.org/2005/Atom">
  <id>tag:blogger.com,1999:blog-994926592631811436</id>
  <updated>2011-05-09T21:13:36.450-07:00</updated>
  <title type="text">Structured Markup</title>
  <link rel="http://schemas.google.com/g/2005#feed" type="application/atom+xml"
    href="http://structured-markup.blogspot.com/feeds/posts/default"/>
  <link rel="hub" href="http://pubsubhubbub.appspot.com/"/>
  <author>
    <name>Timothy Jordan</name>
  </author>
  <entry>
    <id>tag:blogger.com,1999:blog-994926592631811436.post-162301095295322218</id>
    <published>2011-05-09T21:13:00.001-07:00</published>
    <updated>2011-05-09T21:13:36.458-07:00</updated>
    <title type="text">More testing</title>
    <content type="html">...</content>
    <author>
      <name>Timothy Jordan</name>
      <uri>http://www.blogger.com/profile/06704697508101846295</uri>
      <email>noreply@blogger.com</email>
    </author>
  </entry>

...
```

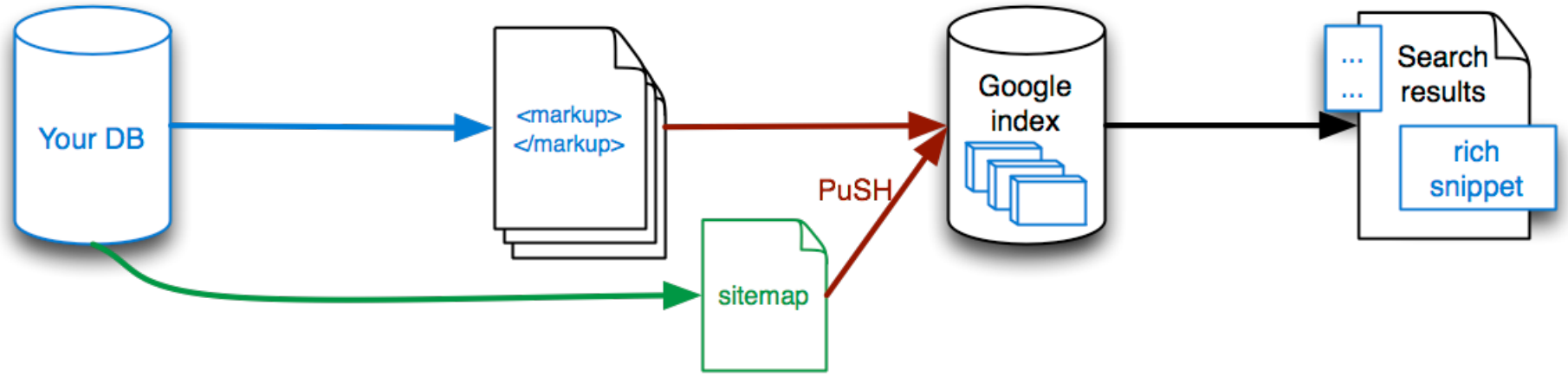

Google I/O 11

Sitemaps via PubSubHubbub

- Create a sitemap feed (RSS, mRSS, and Atom 1.0)
- Use a (PubSubHubbub) hub
- Add the link in Webmaster Tools

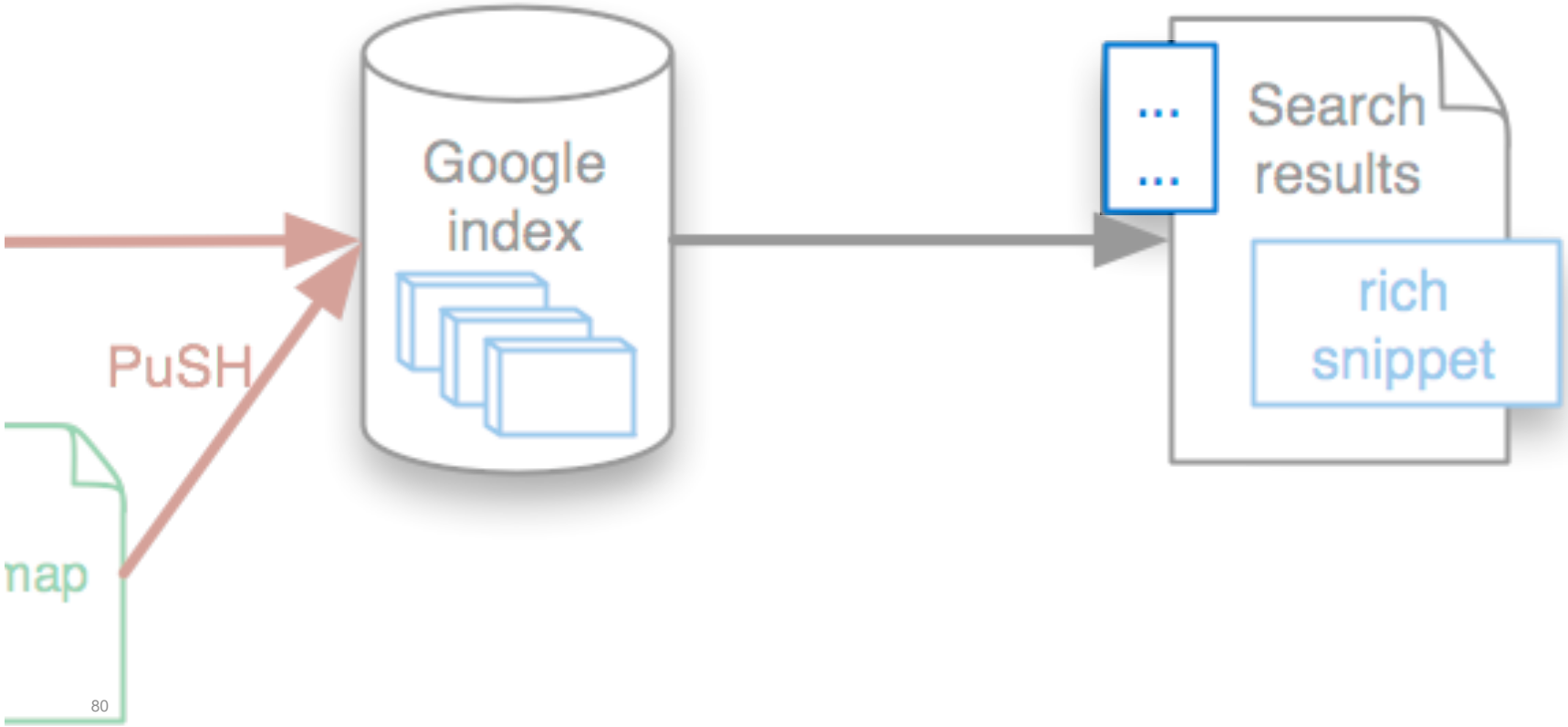
The future

The web, with Rich Snippets, and PuSH Sitemaps



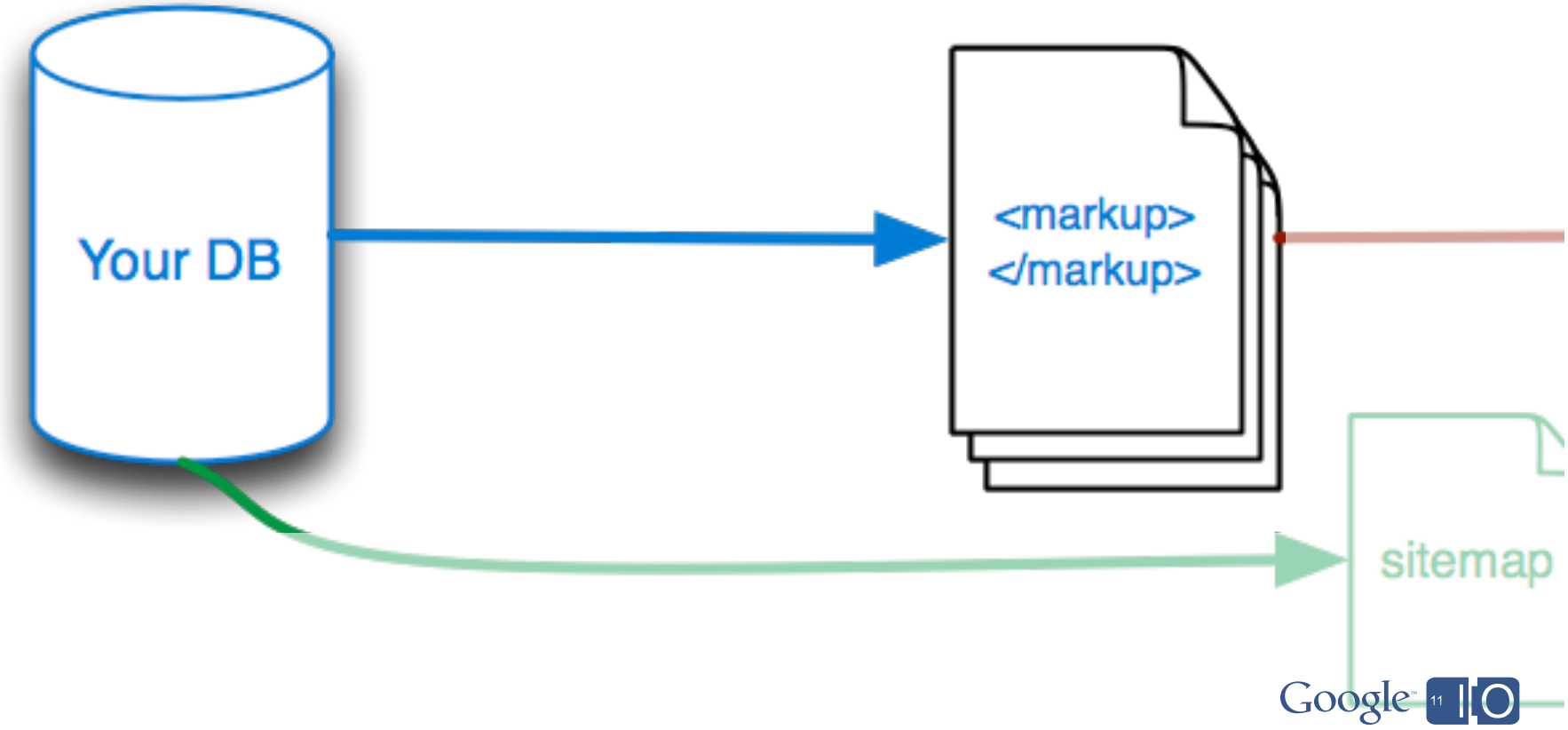
Google I/O 11

The web, with Rich Snippets, and PuSH Sitemaps



Google I/O 11

The web, with Rich Snippets, and PuSH Sitemaps



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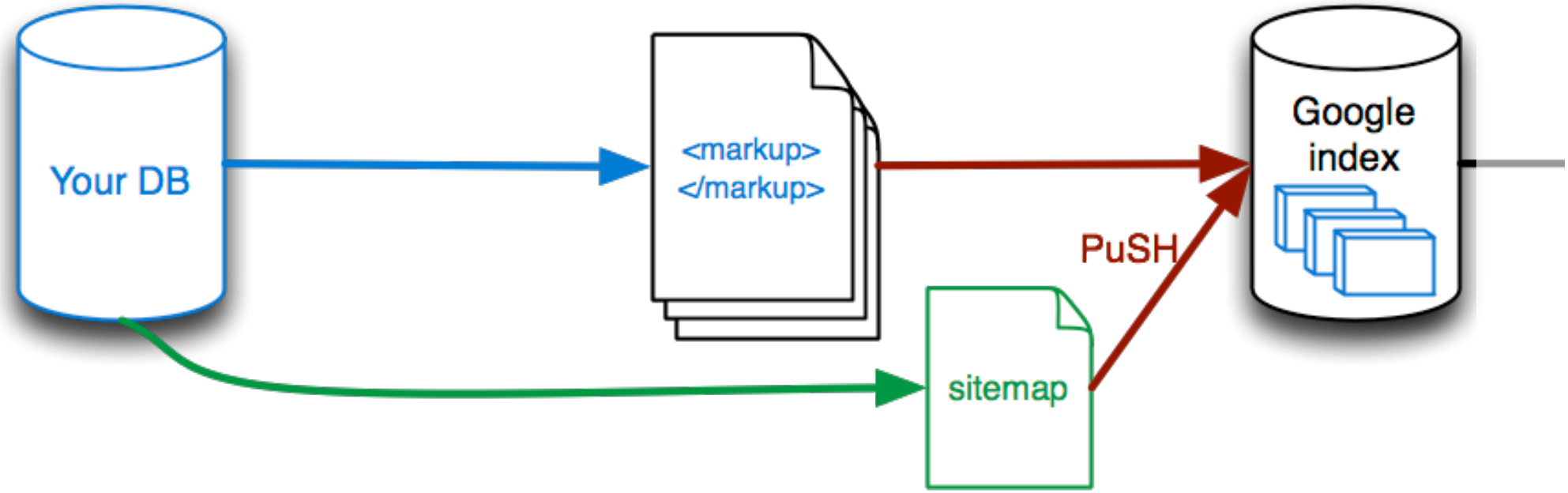

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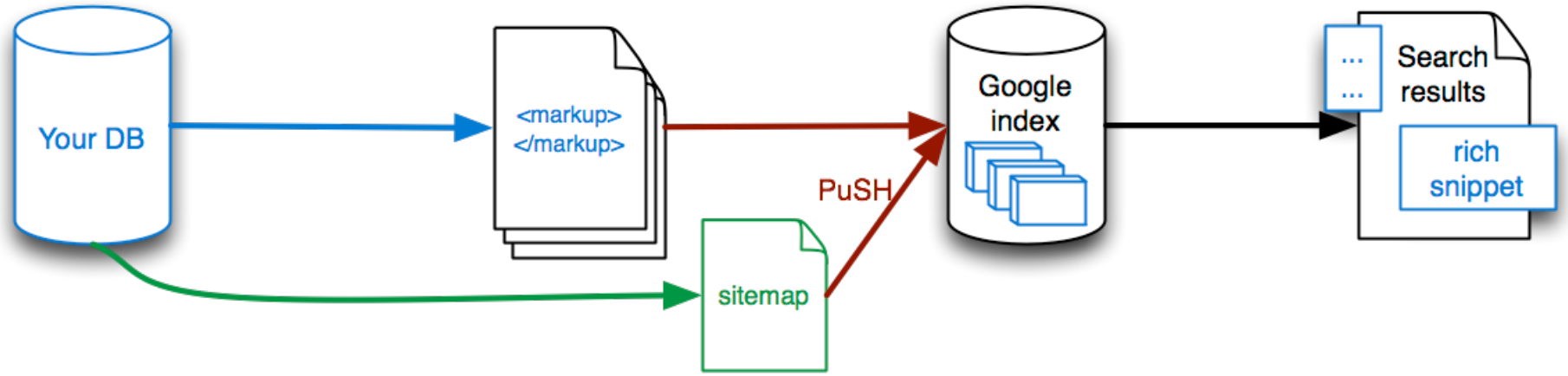

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Summary

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- Markup is easy
  - Don’t add new data
  - Just structure what’s already there
  - Scaling is basic, only requires templating and field-level db
- Markup is good
  - Rich Snippets
  - Vertical searches
- Use sitemaps
  - Make sure Google knows about all your pages so they can be crawled
  - Make sure Google knows when your pages have changed, so they can be updated

Questions and Answers

Hashtags: #publisher #io2011
Feedback: goo.gl/SIrGz
Session: goo.gl/N8C15

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