

# Social Design with Facebook

## Lessons from Scribd's Integration

**Scribd.**

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# About Scribd

“Where the world comes to read, discover, and share...”

- Over 50M Uniques/month
- 10s of millions of documents published
- 10s of millions of users
- Growing rapidly

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# Why add Social functionality?

Three primary goals for Scribd's integration:

1. Content discovery
2. Content distribution
3. Engagement

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# Why use Facebook?

- Most complete social graph out there
- Moves the burden of verification to Facebook
- Overall, high quality social connections

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# Overview

- Is Social right for your site?
- Facebook Connect for Authentication
- Case study: [Readcasting](#) on Scribd
- Social Immersion

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# Technical preliminaries

- Scribd.com is mostly Ruby on Rails
  - But we don't use the Rails Facebook plugins
- Facebook Javascript SDK
  - <http://developers.facebook.com/docs/reference/javascript>
  - <http://github.com/facebook/connect-js>
- We use both the Graph API and 'Old REST API'

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# Is Social right for your site?

- Deep integration of Social isn't easy
- If your users aren't social network users, maybe you shouldn't concentrate here (yet)
- Let's measure it

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# How many of my users are active on Facebook during their visit?

- `FB.getLoginStatus` – Core API method
- Returns 1 of 3 states for the visiting user:
  - `connected`  
Facebook user who has connected to your app
  - `notConnected`  
Facebook user but not connected to your App
  - `unknown`  
No active Facebook session for the user

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# How many of my users are active on Facebook during their visit?

```
<div id="fb-root"></div>
<script>
  window.fbAsyncInit = function() {
    FB.init({appId: 'YOUR APP ID', status: true, cookie: true, xfbml: true});
    FB.getLoginStatus(function(response) {
      _gaq.push(['_trackEvent', 'Facebook', 'Login Status', response.status]);
    });
  };
</script>
```

Measure % of 'unknown' to 'connected' or 'notConnected'

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# Facebook Connect for Auth

- We discovered that the nodes were there, we just didn't have the edges
- To start, offer Facebook Connect for signup and login.
- Pull in profile details
- Additionally, Follow a user's friends when they Connect

# Offering Facebook Connect

## Sign Up

email address (required)

create username (required)

password (required)

Send me the Scribd Newsletter, and occasional account related communications.

[Privacy policy](#)


You will receive email notifications regarding your account activity. You can manage these notifications in your account settings. We promise to respect your privacy.

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### Other ways to Join Scribd

### Why Sign up?

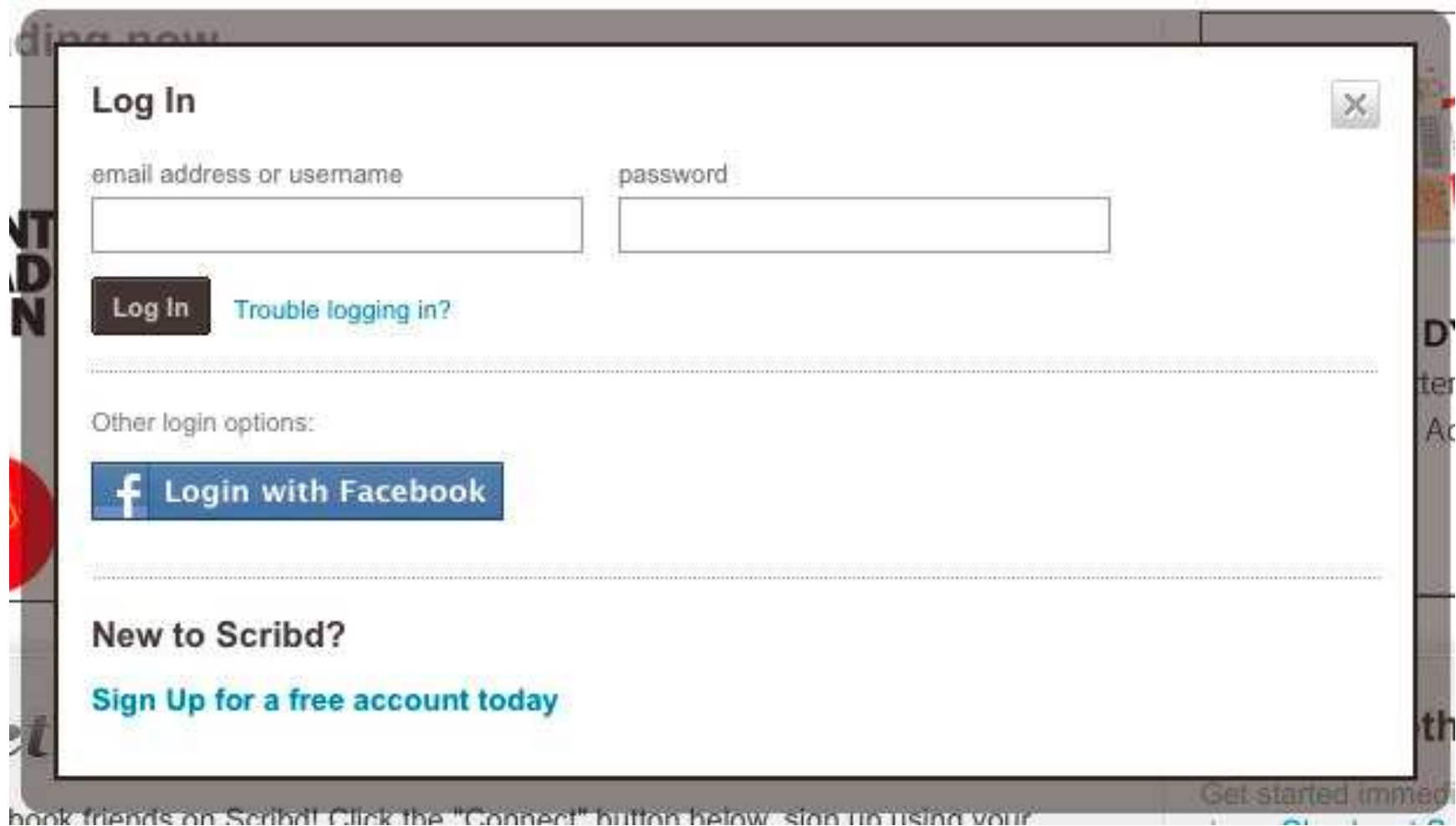
- 1 Discover and connect with people of similar interests.
- 2 Publish your documents quickly and easily.
- 3 Share your reading interests on Scribd and social sites.



# Offering Facebook Connect



# Offering Facebook Connect



The image shows a screenshot of a web browser window displaying a login form for Scribd. The form is titled "Log In" and includes two input fields: "email address or username" and "password". Below these fields is a "Log In" button and a link for "Trouble logging in?". Underneath, there is a section for "Other login options:" which features a blue button with the Facebook logo and the text "Login with Facebook". At the bottom of the form, there is a section for "New to Scribd?" with a link to "Sign Up for a free account today". The entire form is enclosed in a light gray border with a close button in the top right corner. The background of the browser window shows some blurred text from other pages.


Log In

email address or username

password

Log In [Trouble logging in?](#)

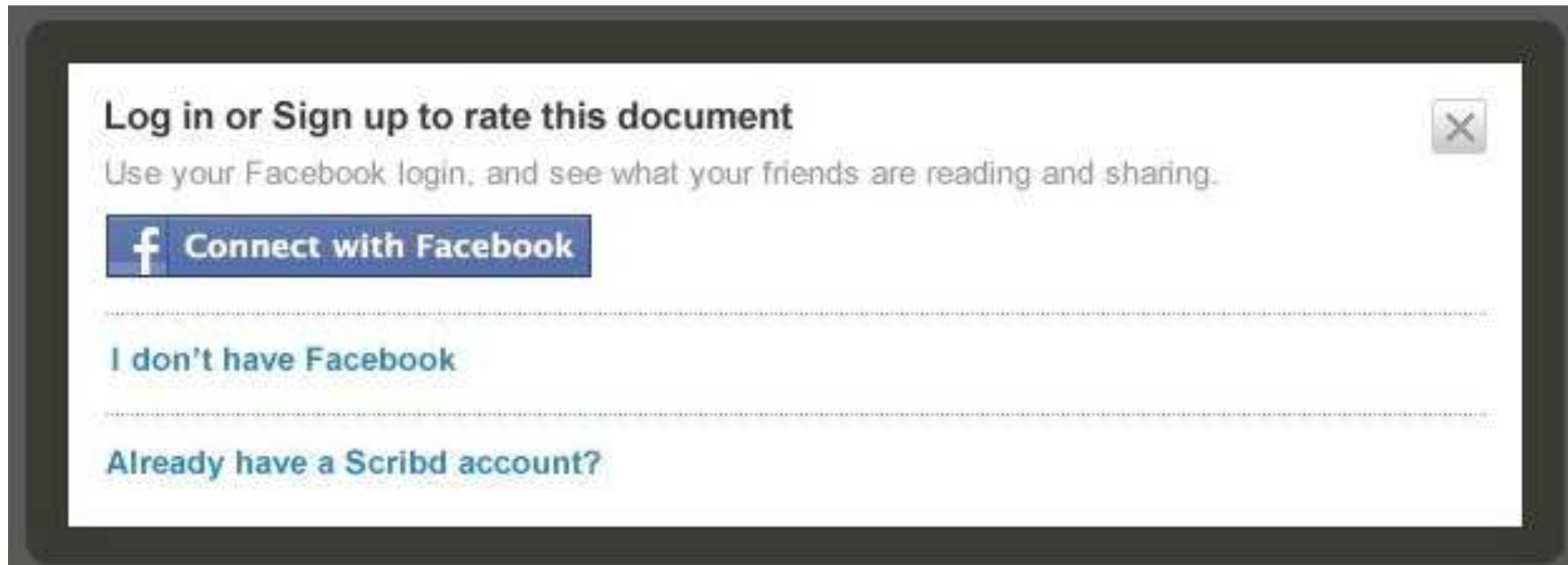
Other login options:

 Login with Facebook

New to Scribd?

[Sign Up for a free account today](#)

# Offering Facebook Connect



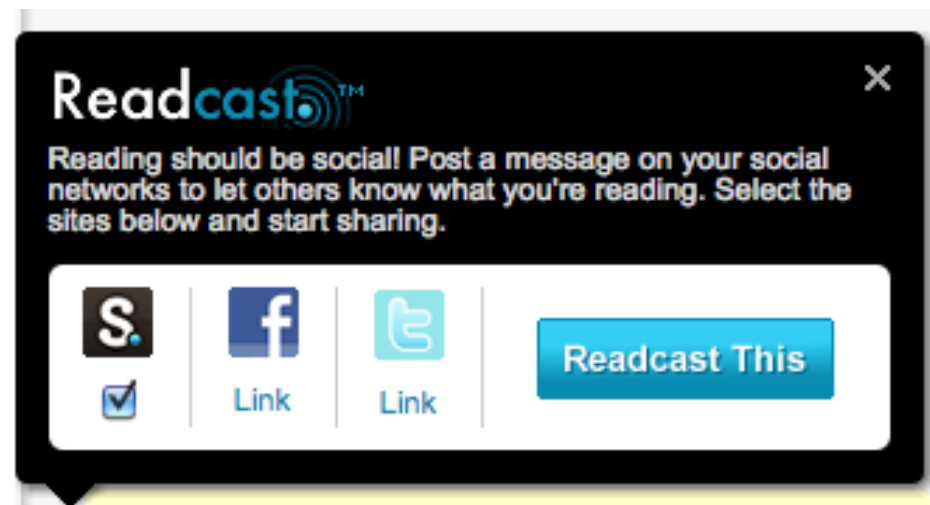
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# Facebook Connect: Insights

- **Users love FBC:** over 50% of new users create accounts via Facebook Connect.
- **We love FBC:** The number of daily signups on Scribd increased over 50% with the introduction of Facebook Connect.
- Friends lists allowed us to start connecting our users
- Tip: don't let the Connect button get too big

# Readcasting

Allows users to broadcast the documents they read to their Scribd followers and to their Facebook and Twitter accounts



# Readcasting

**Readcast™** [Close]

Reading should be social! Post a message on your social networks to let others know what you're reading. Select the sites below and start sharing.

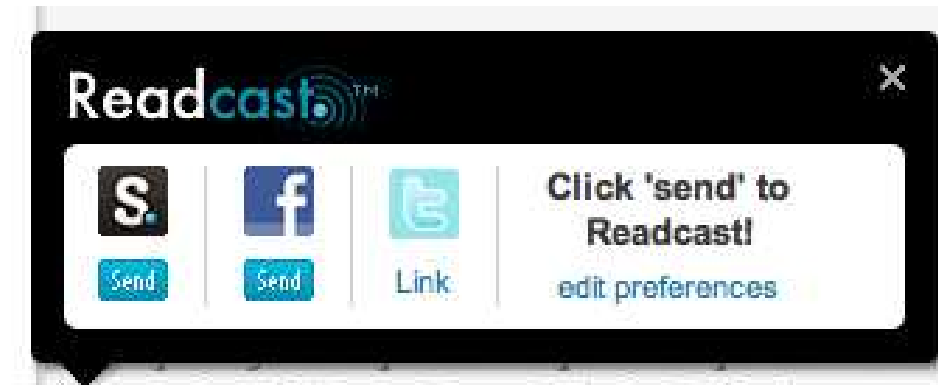
**Readcast Complete!**

**Set your preferences for next time...**  
Choose 'auto' to readcast without being prompted.

	AUTO	ASK
Matt Austin	<input type="radio"/>	<input checked="" type="radio"/>
Matt Austin	<input type="radio"/>	<input checked="" type="radio"/>
Link account	<input type="radio"/>	<input checked="" type="radio"/>

[Save Changes](#) [Advanced](#)

# Readcasting



**Matt Austin** is reading:

Approved Statistical Test for  
Multiple-Choice Memory  
(The Relationship of APT to  
Training)

Send Feedback

**Improved Statistical Test**

[www.scribd.com](http://www.scribd.com)

Scribd is the world's largest social reading and publishing site.

📄 2 minutes ago · Comment · Like · Share

# P ≠ NP

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August 6, 2010

pnp12pt

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## Recent Readcasters



## Add a Comment

Recent comments from people you follow

James Yu left a comment  
I always come back to this. It's great.  
05 / 04 / 2010

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# Engineering Challenges

- Client or server-side API implementation?
- Facebook Sessions are ephemeral - they go bad, lose authentication credentials, etc.
- Keeping the Facebook user we know about on the client-side in sync with the user we know on the server-side is hard

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# Client-side over Server-side

- Ensures the user can grant permissions when needed
  - Asking for permissions in the context of an action converts better
- Ensures we have a fresh Facebook session key
  - Not necessarily the right one, though (more later)
- Simplifies back-end architecture
  - No worker queues or request-cycle trips to FB

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# Session Syncing

Example:

- User changes Facebook sessions within a single Scribd session, then Readcasts.
- Client-side publishing will simply publish to whatever the active Facebook session is.

Solution: force logout -> login sequence

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# Session Syncing

General approach for making sure the user we know about on the **server-side** is the same as the one we have **client-side**:

1. Every request write our server-side session key to a JS variable
2. After loading Facebook JS, check the cookie client-side to make sure they match
3. If no match, update the session key server-side
4. Every Facebook API action should verify session correctness before executing

# Abstract the Session Checking

```
verifyExec: function(fn, force) {
  if (!facebookUser) return;
  var that = this;
  if (!that.correct()) { // check session are in sync
    if (force) {
      FB.getLoginStatus(function(response) {
        if (response.session) { // Mismatched user
          FB.logout(function(response) {
            FB.login(function(response) { that.withValid(fn); });
          });
        } else // Not logged into facebook at all
          FB.login(function(response) { that.withValid(fn); });
      });
    }
  } else { fn(); }
},
ensureValid: function(fn) { this.verifyExec(fn, true); },
withValid: function(fn) { this.verifyExec(fn, false); }
```

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# Success of Readcasting

- Over 10 million sharing activities in August
- Social traffic is doubling every six weeks
- Per day stats:
  - 10,000 comments on Scribd items in Facebook feeds
  - 3,000 "Likes" per day
- Some pretty cool viral documents
  - P != NP paper from IBM Researcher
  - California Prop 8 Ruling

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# Readcasting: Product Insights

- Users are pretty comfortable broadcasting this kind of data
  - Offer good privacy controls
  - Prompt for permissions during the ‘action’
- Visitors from Facebook are 40% more engaged than our average visitor
- Large component of **content distribution** goal

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# Measuring your own success

- <http://www.facebook.com/insights>
- Social statistic summaries for your App
  - Daily Likes
  - Daily Shares
  - Feedback per share
  - Reshare rate
  - Most popular content
  - Demographic info
- Limited web interface, but queryable through the Graph API
- Doesn't give you user-level data (e.g. Like data)

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# Ruby script to dump Insights data

```
http = Patron::Session.new
http.base_url = 'https://graph.facebook.com'
resp = http.post('/oauth/access_token', {
  :type => 'client_cred',
  :client_id => CLIENT_ID,
  :client_secret => CLIENT_SECRET
})
token = resp.body.split('=').last
resp = http.get("/#{CLIENT_ID}/insights?access_token=#{token}")
ap JSON.parse(resp.body)
```

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# Tip: tracking 'Like' button clicks

- Not in Insights panel
- No FQL to query Like data, so you have to track it yourself

Subscribe to the [edge.create](#) Event

```
FB.Event.subscribe('edge.create', function(href, widget) {  
  Log.info('You liked ' + href, widget);  
});
```

Unfortunately, no [edge.destroy](#) Event


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# Social Immersion

- Social Activity Feeds
  - drives content discovery
- Add context wherever possible
  - drives engagement


# Activity Feed

- Activities from your Friends
- Recommended content based on public Facebook Interests


 **Laura Novak** says:

“ That's it! I'm out! It's 94 degrees at 4:40 pm and we don't have AC. Must.Go.Lie.On.Floor! ”

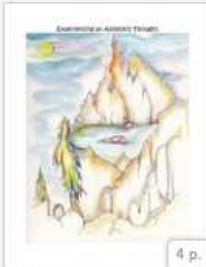
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 **New! MEC 2010**  
2 p.


**Largest Women's Coalition Story**  
Uploaded by: **MegWhitman**  
Reads: 0 Uploaded: 09/28/2010

 **MegWhitman** published this


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 **Experiencing an Atheistic Thought**  
4 p.

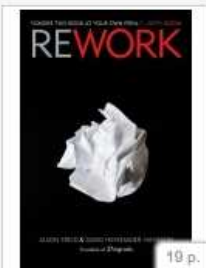
**Experiencing an Atheistic Thought**  
Uploaded by: **Rose** — Something inspired by a SCRIBD discussion, from back in the days before SCRIBD became more “social” and less conducive to ...  
Reads: 136 Uploaded: 09/25/2010

 **Helen Winslow Black** readcast and commented


“ Lovely, Rose. And...I'm pretty conservative about typefaces, but I like what you did with that here, it complements the text. ”

 **Rose** replied  
Thank you so much! I enjoy writing, drawing, and painting. And I have ideas about what I want things to look like, but definitely all the credit for any technical expertise goes to my friend Bill (Kenosis23). He is a great blessing to me!

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 **REWORK**  
19 p.

**Rework by Jason Fried and David Heinemeier Hansson - Excerpts**  
Uploaded by: **Crown Publishing Group** — Most business books give you the same old advice: Write a business plan, study the competition, seek investors, yadda yadda...  
Reads: 4,474 Uploaded: 03/02/2010

 **Alexey Kovyryn** readcast and commented

“ Really loved this book! ”

# Adding Social Context

- Take a cue from the new Facebook widgets - add context wherever possible



# P ≠ NP

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August 6, 2010

pnp12pt

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Scribd Follow  
Facebook Like  
Traditional Share

$P \neq NP$

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Recent comments from people you follow



James Yu left a comment

I always come back to this. It's great.

05 / 04 / 2010



# Recent Readcasters

People I'm following are shown first



Tip: Redis can make your life much easier here!

# Comments

Comments from people I follow are pulled to the top



*Add a Comment*

▼ Recent comments from people you follow

 **James Yu** left a comment  
I always come back to this. It's great.  
05 / 04 / 2010

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 **Tikhon Bernstam** left a comment  
bet you never thought this paper would get half a million people looking at it when you first wrote it.  
03 / 12 / 2010

► Comments from everyone

# Questions?

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