

IBM Software

# Connect2014

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ENERGIZING LIFE'S WORK

## BP301: An Introduction to Working with the Activity Stream


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@me

- Developer for OnTime Group Calendar
- Works with IBM Notes, Domino, Sametime, Java, DB2, Websphere Application Server, Web
- Lover of plugins – plugins are cool! – but slowly becoming the widget guy
- IBM Champion since program inception
- Blog: **lekkimworld.com**
-  **@lekkim**



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## What is this session about?

*“The future of business is social and the activity stream is the way events and messages are communicated in the social business. In this session you'll learn all there is to know about the activity stream including exactly what it is and how to interact with it using your favorite development environment whether that be JavaScript, XPages, Java or even the plain vanilla HTTP based REST API. This session is for you if you want to start working the Activity Stream.”*

 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



# Agenda

- What's this session about
- What's the activity stream and what is it not
- REST 101
- Anatomy of an activity stream post
- Posting, working with roll ups and impersonation
- Fun and laughter...



## The activity stream concept

Activity stream was added in IBM Connections v. 4.0.

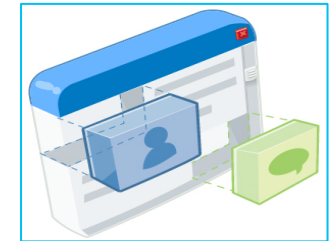
*“An activity stream is a **list of recent activities** performed by an individual, typically on a single website. For example, Facebook's News Feed is an activity stream. Since the introduction of the News Feed on September 6, 2006 other **major websites** have introduced similar implementations for their own users. Since the proliferation of activity streams on websites, there have been calls to **standardize the format** so that websites could interact with a stream provided by another website.”*

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# What is the Activity Stream

- **River of news** – it's like water flowing by you
- Notifications about "stuff" happening in (other) systems – we refer to these notifications as **entries**
- Entries may be **saved** for future reference and entries may be **actionable** i.e. indicated that it must be acted upon
- Typically **you** decide what goes into your stream
- A replacement for email notifications (although you can have those too...)
- **Standards based** – like – meaning – IBM took the standard and added IBM Connections specific stuff to it



*Activity Streams*

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## What is the Activity Stream NOT

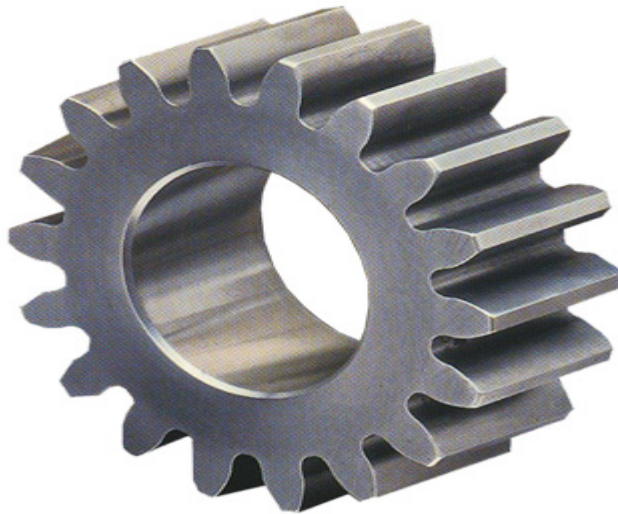
- A new inbox – doesn't replace email
- A perpetual data store – entries are deleted based on a server defined purge interval (default is 30 days) unless **saved** or **actionable**
- Meant as a content repository
- Something that implies that you must read it all – it's notifications – treat it as such...
  - If an entry is "**must read**" it should be marked actionable





## Demo

- Let's look at the activity stream in IBM Connections
- See options for filtering (saved/actionable)



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InsideHomeProfilesCommunitiesAppsMikkel Flindt HeisterbergShareEnglish

Home

All ConnectionsSearch

Getting Started

I'm Following

Status Updates

My Notifications

Action Required

Saved

Discover

My Page


Administration

I'm Following

View updates for people and things you are following, and responses to your content.

What are you working on right now?


Filter By: All



Gitte Boe Harter

Så er det Connect Danmark og DanNotes de næste dage - på kontoret igen fredag.


Today at 4:14 PMLike



Mikkel Flindt Heisterberg


Opdaterer OnTime GC Social til v. 3.5.0 beta 1

Today at 1:28 PMLike



Jens Overgaard Dinesen

edited the file Kickstart med IntraVision.docx.

Kickstart med IntraVision.docx

Malene Carstens Clausen | Tags: kickstart, connections

Friday at 3:29 PM


Show all 2 comments

To Do List


You do not have

Go to my to do list

Recommend


Opsætning af

1 related pers


Opgaver i fo

event


1 related pers

Ønske om fo

1 related pers

OnTimeGC 3.5.0

2 related peop

Ny mail signal


logo

2 related per

1 - 5 of 15

# No content stored in the stream

[Profile Wikis](#) | [Communities Files](#) | [Blogs Bookmarks](#) | [Forums Activities](#)




**Chris Holmes**  
Marketing Director  
[ch@intravision.dk](mailto:ch@intravision.dk)

[Send Email](#) | [More Actions](#)


	08 Man 07/2013	09 Tir 07/2013	10 Ons 07/2013	11 Tor 07/2013
9:00				
10:00				
11:00	<input checked="" type="checkbox"/> Meeting on Project X Mikkel Flindt Heisterberg			
12:00				
13:00				
14:00				
15:00				




 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne




Chris Holmes commented on their own message.




Chris Holmes Getting ready for he Project X launch event at 4pm - fireworks at the ready! :)


Today at 10:38 |  Like


Show all 3 comments




Jerry Hartmann Today at 10:38 |  Like

Fireworks?! Sounds like I should have accepted that event invite after all :)



Chris Holmes Today at 10:38 |  Like


Oh yes - we're going all out. It's gonna be a night to remember



Chris Holmes created [meeting](#) in IBM Notes Calendar.


Sales Meeting on 21 May 2013

Meeting on Project X on 22 May 2013

 Today at 07:06




Mikkel Flindt Heisterberg created a blog entry named [OnTime Group Calendar v. 3.5.0 beta 1](#) og understøttelse af navneformater, alternative navne og alternativ sortering in the [lekkimworld](#) blog.

- 

Mikkel Flindt Heisterberg I version 3.5.0 af OnTime Group Calendar er der kommet 3 store nye funktioner:

  1. Kunden kan nu selv definere det navneformat brugernes navne vises efter
  2. Understøttelse af alternative navne
  3. Understøttelse af alternativ sortering

 Yesterday at 20:47



## REST API's 101 (1)

- HTTP is much more than what a web browser reveals
- The request
  - has a method (GET, POST, PUT, DELETE)
  - may have headers that describe the request such as a Content-Type (text/html), cookies and authentication information.
  - may have a body data
- The response
  - has a return code (200 = OK, 301 = Moved, 404 = Not found)
  - may carry body data
  - may have headers that describe the response (e.g. Content-Type, charset and new location)





## REST API's 101 (2)

- You will mainly use the POST and PUT methods to send JSON data (Content-Type: application/json) to the API
- JSON is super simple key/value data format. It has simple datatypes (strings, numbers, booleans), objects and arrays

```
{  
  "email": "mh@intravision.dk",  
  "niceGuy": true,  
  "age": 37,  
  "name": {  
    "first": "Mikkel Flindt",  
    "last": "Heisterberg"  
  },  
  "Lotuspheres": [2006, 2007, 2008, 2009, 2010, 2011, 2012],  
  "IBMConnects": [2013, 2014]  
}
```



## REST API's 101 (3)

- HTTP is pure text and easily done using telnet but there are cool tools to make it easier:
  - RESTClient in Firefox
  - Advanced REST Client in Chrome
  - cURL if you're a command line guy/gal
  - Standalone REST client
- Recommend standalone REST client such as CocoaRESTClient in combination with a proxy such as Charles Web Proxy, <http://www.charlesproxy.com>



## How many streams are there?

- In my opinion it makes most sense **to not** consider the activity stream as one single stream
- Instead think that
  - Each user has his/her own (**@me**)
  - There is a public stream (**@public**)
  - A community **may** have a stream if the widget has been added by a community owner – if there's no stream for a community posting to it will return a "403 Forbidden"



## Stream URL components

https://<host>/connections/opensocial/<auth>/rest/activitystreams  
/<user ID>/<group ID>/<application ID>/<activity ID>

Component	Meaning
<auth>	<b>(optional)</b> If using form based authentication leave this component out. Otherwise options are anonymos, basic, oauth (last option not covered in this presentation).
<user ID>	The user whose stream you're addressing – use <b>@me</b> for current users stream, <b>@public</b> for public stream or a community ID for the stream in a community.
<group ID>	The group of entries you're addressing – use <b>@all</b> for all posts or options for special meaning such as <b>@saved</b> , <b>@actions</b> , <b>@mentions</b> . Refer for InfoCenter and resources slide for more.
<application ID>	When retrieving entries this refers to the application (or "generator") that created the entry. All the IBM Connections app names can be used ( <b>profiles</b> , <b>blogs</b> , <b>wikis</b> etc.) plus custom ones (e.g. <b>ontimegc</b> ). <b>@all</b> used for all applications.
<activity ID>	Used to reference a specific event e.g. for updating saved status.

 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne





## Stream URL Examples

1. /activitystreams/@me/@all  
List my (current users) entries

2. /activitystreams/@public/@all  
List public stream entries

3. /activitystreams/@me/@actions  
List my actionable events

4. /activitystreams/@me/@saved/blogs  
List my saved events from blogs

5. /@me/@all/@all/urn:lsid:lconn.ibm.com:activitystreams.story:bdb562f...  
Work with entry from my stream based on ID

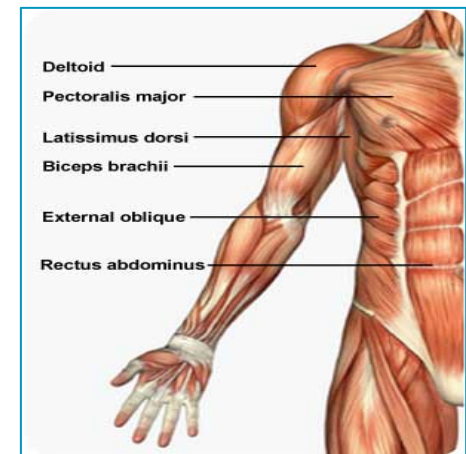
} Also used  
when creating  
new entries  
(e.g. POSTing)

\* All URLs above start with  
<https://<host>/connections/opensocial/<auth>/rest>



## Anatomy of a stream entry

A stream entry reads like *"the current user posted a note to IBM Connections and you should act on it"*



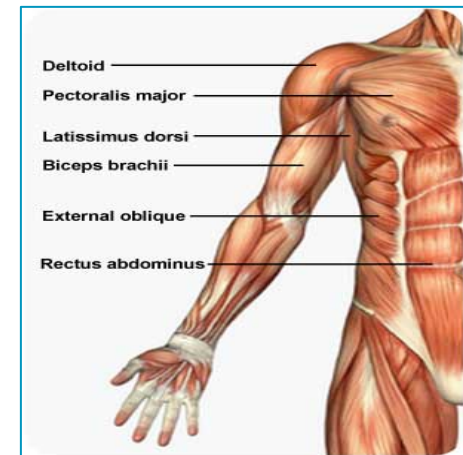
Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Anatomy of a stream entry

A stream entry reads like "*the current user*  
*posted* *connections* and you  
*should*

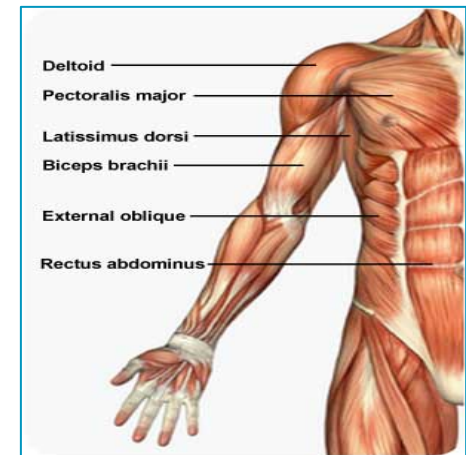
The person doing the posting is called the **actor** and can be a specific user ID but usually the current user (**@me**)



## Anatomy of a stream entry

A stream entry reads like *"the current user posted a note to IBM Connections and you should act on it"*

What the person does is called the **verb** and there's a long list of predefined ones such as **post**, **update**, **create**...



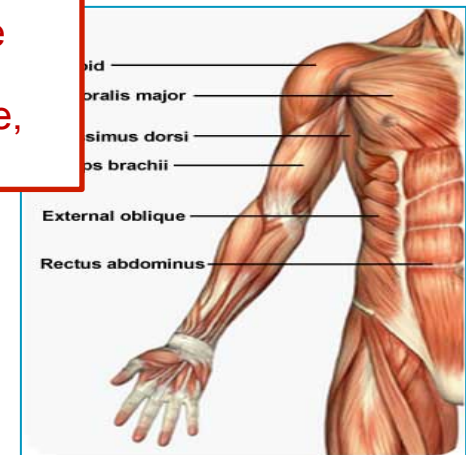
Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Anatomy of a stream entry

A stream entry reads like *"the current user posted a **note** to IBM Connections and you should act on it"*

The object in question is called the **object** and can be anything that represents the target "thing" i.e. file, note, meeting...



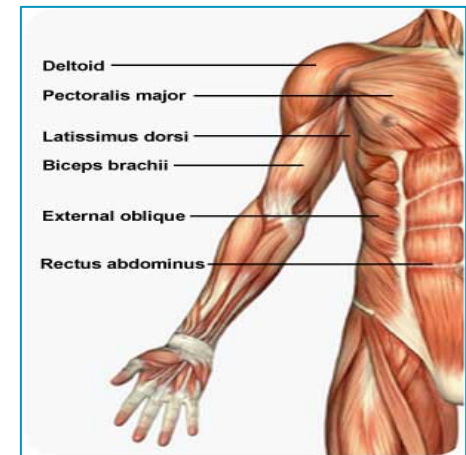
Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Anatomy of a stream entry

A stream entry reads like *"the current user posted a note to **IBM Connections** and you should ..."*

The system the user worked on is called the **target** and can be any system you need to refer to



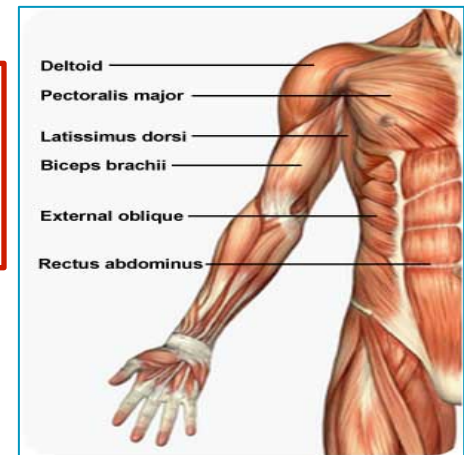
 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Anatomy of a stream entry

A stream entry reads like *"the current user posted a note to IBM Connections and you should **act** on it"*

IBM Connections supports some special properties for entries such as **actionable** and **saved** to allow users to work with entries



Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne

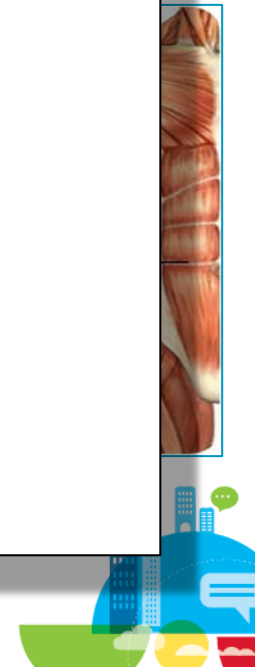


## Anatomy of a stream entry

```
{  
  "actor": {"id": "@me"},  
  "verb": "post",  
  "title": "Some entry title",  
  "updated": "2013-05-17T12:00:00.000Z",  
  "object": {  
    "title": "Some object title",  
    "objectType": "note",  
    "id": "1234567890-1234567890-1234567890"  
  }  
}
```



Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne





## Anatomy of a stream entry

```
■ {  
  "actor": {"id": "@me"},  
  "verb": "create",  
  "title": "Sales proposal for Rockets Inc.",  
  "updated": "2013-05-17T12:00:00.000Z",  
  "object": {  
    "title": "Sales proposal for Rockets Inc.",  
    "objectType": "proposal",  
    "id": "1234567890-1234567890-1234567890"  
  },  
  "target": {  
    "displayName": "Acme Corp. CRM",  
    "url": "https://crm.example.com"  
  }  
}
```

IBM Connections is the implied default target but you can specify your own target in the entry



## Posting an entry\* to the stream

**POST** /connections/opensocial/basic/rest/activitystreams/@me/@all

Host: social.example.com

Content-Type: application/json

Content-Length: xyz

Authorization: Basic xyz123

```
{
  "actor": {"id": "@me"},
  "verb": "post",
  "title": "Some entry title",
  "updated": "2013-05-17T12:00:00.000Z",
  "object": {
    "title": "Some object title",
    "objectType": "note",
    "id": "1234567890-1234567890-1234567890"
  }
}
```

*\* Smallest entry you can/should post to the stream*



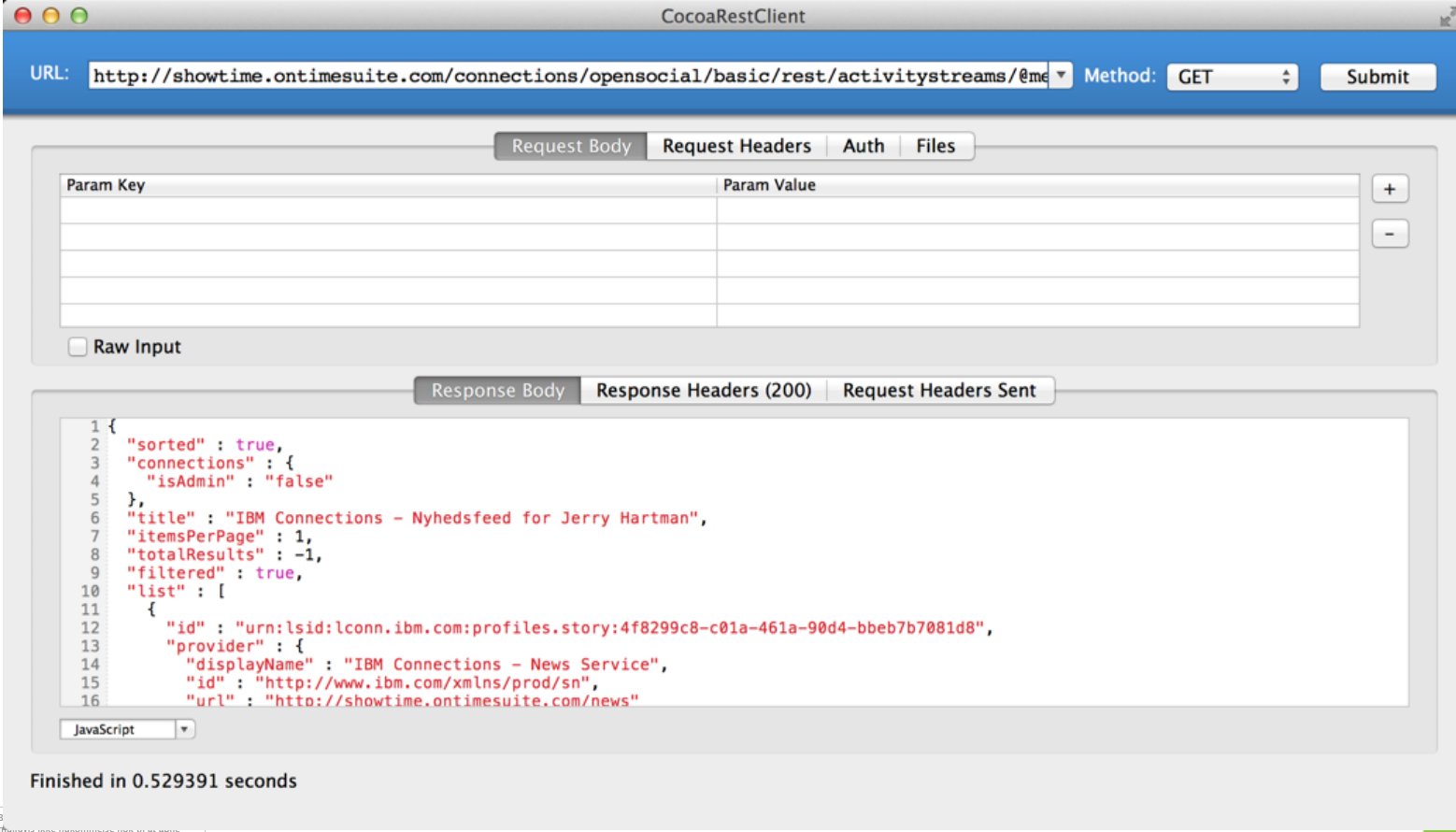
## Demo

- REST client
- Easily work with feeds, authentication, headers etc.
- Use proxy to override cookies



 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne

## Demo safety slide



The screenshot shows the CocoaRestClient application window. The URL bar contains the URL: `http://showtime.ontimesuite.com/connections/opensocial/basic/rest/activitystreams/@me`. The Method is set to GET. The Request Body tab is selected, showing a table with Param Key and Param Value columns. The Response Body tab is selected, showing a JSON response. The response is formatted as JavaScript. The status bar at the bottom indicates "Finished in 0.529391 seconds".

URL: `http://showtime.ontimesuite.com/connections/opensocial/basic/rest/activitystreams/@me` Method: GET Submit

Request Body Request Headers Auth Files

Param Key	Param Value

☐ Raw Input

Response Body Response Headers (200) Request Headers Sent

```
1 {
2   "sorted" : true,
3   "connections" : {
4     "isAdmin" : "false"
5   },
6   "title" : "IBM Connections - Nyhedsfeed for Jerry Hartman",
7   "itemsPerPage" : 1,
8   "totalResults" : -1,
9   "filtered" : true,
10  "list" : [
11    {
12      "id" : "urn:lsid:lconn.ibm.com:profiles.story:4f8299c8-c01a-461a-90d4-bbeb7b7081d8",
13      "provider" : {
14        "displayName" : "IBM Connections - News Service",
15        "id" : "http://www.ibm.com/xmlns/prod/sn",
16        "url" : "http://showtime.ontimesuite.com/news"
17      }
18    }
19  ]
20 }
```

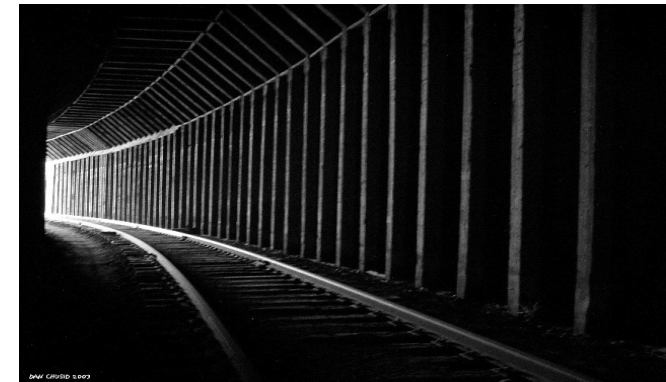
JavaScript

Finished in 0.529391 seconds



## Deleting from the stream

- In short you can't – up to IBM Connections v. 4.5 you cannot delete from the activity stream – you'll just get an 403 Forbidden back
- There is some light at the end of the tunnel though – this directly from the developers at IBM: *"We are however adding 'propagateDelete' at the moment, which deletes all events related to a given object on receipt of a delete event (if so specified). This will be protected by a trusted role."*



 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



# Action required!

**Home**

Getting Started

**I'm Following**

Status Updates

My Notifications

**Action Required** 1

Saved

Discover

My Page

Administration

**I'm Following**

View updates for people and things you are following, and responses to your content.

What are you working on right now?

Filter By: All

**Action Required**

View items that require your response.

What are you working on right now?

Filter By: All

**Chris Holmes** created [meeting in IBM Notes Calendar](#).

**Remove from Action Required**

Do you want to remove this entry from action required?

Remove Cancel

Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Mark/unmark as actionable

**GET /connections/opensocial/basic/rest/activitystreams/@me/@actions**

Host: social.example.com

Authorization: Basic xyz123

**PUT /connections/.../activitystreams/@me/@all/@all/de325123-e269-4a33-b62a**

Host: social.example.com

Content-Type: application/json

Content-Length: xyz

Authorization: Basic xyz123

```
{
  "actor": {"id": "@me"},
  "id": "de325123-e269-4a33-b62a",
  "connections": {
    "actionable": false
  }
}
```

### Response

```
{"entry": {
  "connections": {
    "actionable": "false"
  },
  "id": "unmark actionable:"
}}
```



# Save for later

The screenshot shows a web application interface with a sidebar on the left and a main content area. The sidebar contains a 'Home' button and a list of navigation items: 'Getting Started', 'I'm Following', 'Status Updates', 'My Notifications', 'Action Required', 'Saved' (highlighted), 'Discover', 'My Page', and 'Administration'. The main content area is titled 'Saved' and includes a search bar with the placeholder text 'What are you working on right now?'. Below the search bar is a 'Filter By:' dropdown menu set to 'All'. A modal dialog is open in the foreground, titled 'Remove from Saved'. It contains a question: 'Do you want to remove this entry from saved?' and two buttons: 'Remove' and 'Cancel'. The dialog also shows a small profile picture of a man. In the background, a list of saved items is visible, including one by 'Chris Holmes' titled 'created meeting in IBM Notes Calendar'.

Home

All Connections

Getting Started

I'm Following

Status Updates

My Notifications

Action Required

**Saved**

Discover

My Page

Administration

**Saved**

View the updates you have saved.

What are you working on right now?

Filter By: All

**Remove from Saved**

Do you want to remove this entry from saved?

Remove Cancel

Chris Holmes created meeting in IBM Notes Calendar

Mikkel Flindt Heisterberg | version 3.5.0 af OnTime Group Calendar er der

 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne





## Mark/unmark saved

**GET /connections/opensocial/basic/rest/activitystreams/@me/@saved**

Host: social.example.com

Authorization: Basic xyz123

**PUT /connections/.../activitystreams/@me/@all/@all/de325123-e269-4a33-b62a**

Host: social.example.com

Content-Type: application/json

Content-Length: xyz

Authorization: Basic xyz123

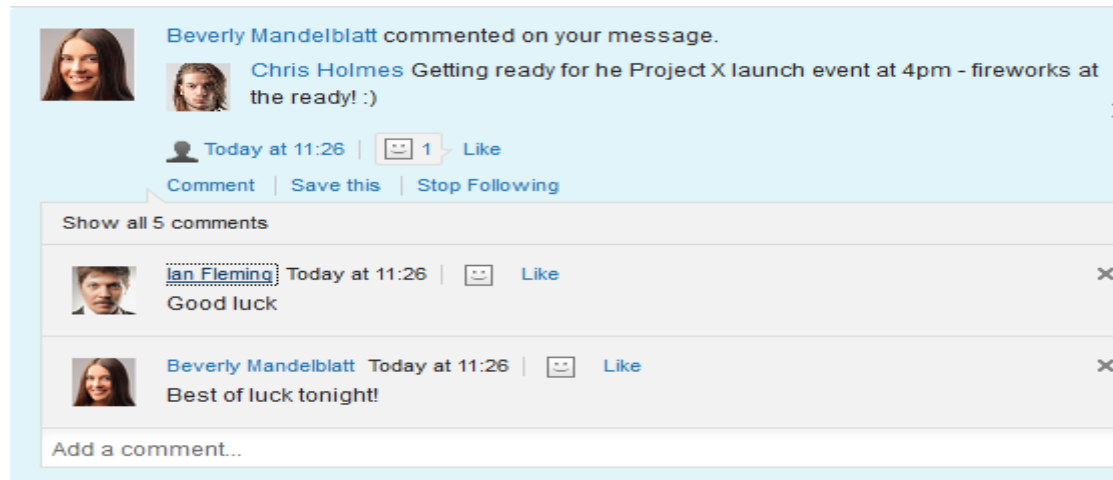
```
{
  "actor": {"id": "@me"},
  "id": "de325123-e269-4a33-b62a",
  "connections": {
    "saved": false
  }
}
```

### Response

```
{"entry": {
  "connections": {
    "saved": "false"
  },
  "id": "unmark saved:"
}}
```

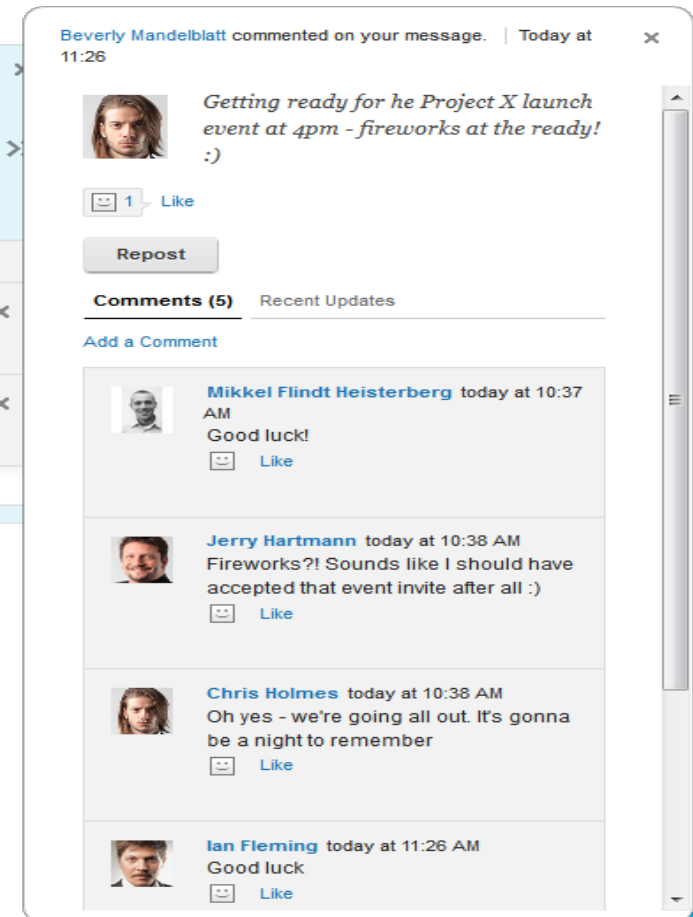


## Rolling it up



- Rollup is telling the stream that an post/ update relates to the same "thing"
- Used to avoid cluttering up the user interface

 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Rolling it up

**POST /connections/opensocial/basic/rest/activitystreams/@me/@all**

Host: social.example.com

Content-Type: application/json

Content-Length: xyz

Authorization: Basic xyz123

```
{
  "actor": {"id": "@me"},
  "verb": "post",
  "title": "Some entry title",
  "updated": "2013-05-17T12:00:00.000Z",
  "object": {"title": "Some object title",
    "objectType": "note", "id": "1234567890-1234567890-1234567890"},
  },
  "connections": {
    "rollupid": "1234567890-1234567890-1234567890"
  }
}
```



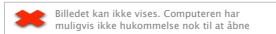
## Rollup id vs. Object id

- May seem similar but not the same...
- **Rollup** is a way of telling the activity stream that **different posts**, with different object ids, **relate** to the same thing i.e. should be rolled into the same post (in the UI)
- Posting with the **same object id** is the **same as specifying the object id as the rollup id**
- In general get into the habit of explicitly using the id of the "thing" (i.e. the object id) you're pointing to as the roll up id.



# Templates

- Two main reasons for looking at templates
  - Internationalization (i18n) / translation
  - Getting a standard representation in the UI
- Two types of templates
  - Object Substitution replaces a reference with nice markup – an example is replacing the actor with a HTML reference using the business card
  - Title Template Substitution – uses object substitutions it makes standard titles





# Templates

## ▪ Object Substitution

- `${Actor}` - this is converted into appropriately marked up HTML which displays the Actors name and links to a Business Card
- `${Object}` - if this is a **person** we display as with the Actor above, otherwise the displayName with a link to the url
- `${Target}` - if this is a person we display as with the Actor above, otherwise the displayName with a link to the url

## ▪ Title Template Substitution

- `${created}` = `${Actor}` created `${Object}`
- `${create.target}` = `${Actor}` created `${Object}` in `${Target}`

 <b>Ian Fleming</b> created meeting. Project Z Review Meeting  Today at 1:41 PM	 <b>Ian Fleming</b> oprettede meeting. Project Z Review Meeting  I dag kl. 13.41	 <b>Ian Fleming</b> が meeting を作成しました。 Project Z Review Meeting  今日の 13:41
--	---	---

 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Using templates

**POST** /connections/opensocial/basic/rest/activitystreams/@me/@all

Host: social.example.com

Content-Type: application/json

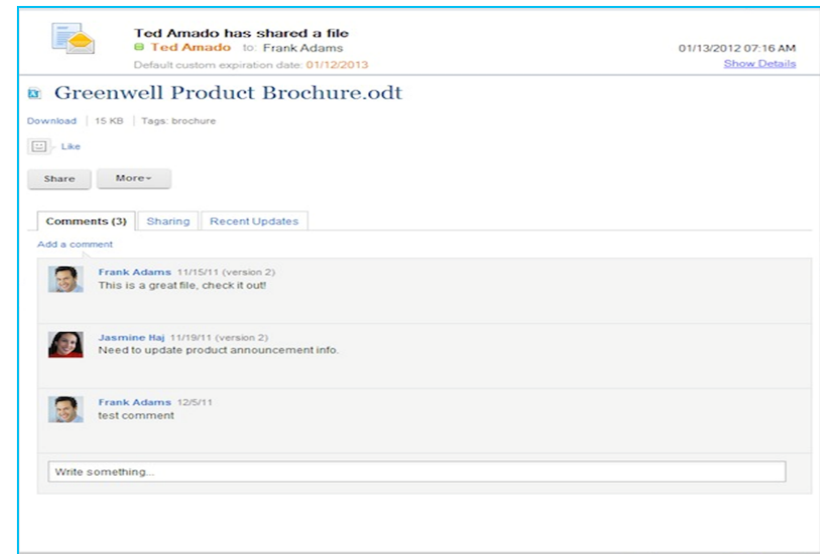
Authorization: Basic xyz123

```
{  
  "actor": {"id": "@me"},  
  "verb": "create",  
  "title": "${create}",  
  "updated": "2013-05-21T12:00:00.000Z",  
  "object": {  
    "summary": "Project Z Review Meeting",  
    "objectType": "meeting",  
    "id": "1234567890123456789012345678900P"  
  }  
}
```



# Embedded Experiences

- EE works a little different in e-mail and in the activity stream
- E-mail
  - Traditional (SMTP) e-mail is using **M**ultipurpose **I**nternet **M**ail **E**xtension (MIME)
  - EE's **adds** an additional "MIME part" – clients in the know will show content based on this data if possible and allowed by policy
- Activity stream
  - Activity stream delivery model is a bit different than in e-mail as we already have a structured payload
  - Application sending the entry adds an openSocial.embed object to the entry with link to the gadget required for rendering the EE and context info



 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne





# Embedded Experiences

```
{  
  "actor": {"id": "@me"},  
  ...  
  ...  
  "openSocial": {  
    "embed": {  
      "gadget": http://ee.example.com/mygadget.xml,  
      "context": {"id": "12345"}  
    }  
  }  
}
```



## Posting to other users stream

- By default you may only post entries to your own activity stream
- Sending to others can be considered as spam
- As with standards there are multiple ways of doing it using either
  - OpenSocial (openSocial: {deliverTo: []})
  - Activitystream (to: [])
  - Just use the second one...
- To send to another users stream you need to either be him/her or be a trusted application (more information later...)



## Posting to other user

```
{  
  "actor": {"id": "@me"},  
  "to": [{"objectType": "person", "id": "A7E718F4-3040-2A00-C125"}],  
  "verb": "create",  
  "title": "${create}",  
  "updated": "2013-05-21T12:00:00.000Z",  
  "object": {  
    "summary": "Project X Review Meeting",  
    "objectType": "meeting",  
    "id": "123456789012345678901234567890MN"  
  },  
  "connections": {  
    "rollupid": "123456789012345678901234567890MN",  
  }  
}
```





## Posting as other user

```
{
  "actor": {"id": "A7E718F4-3040-2A00-C125"},
  "to": [{"objectType": "person", "id": "A7E718F4-3040-2A00-C125"}],
  "verb": "create",
  "title": "${create}",
  "updated": "2013-05-21T12:00:00.000Z",
  "object": {
    "summary": "Project Y Review Meeting",
    "objectType": "meeting",
    "id": "1234567890123456789012345678900P"
  },
  "connections": {
    "rollupid": "1234567890123456789012345678900P"
  }
}
```

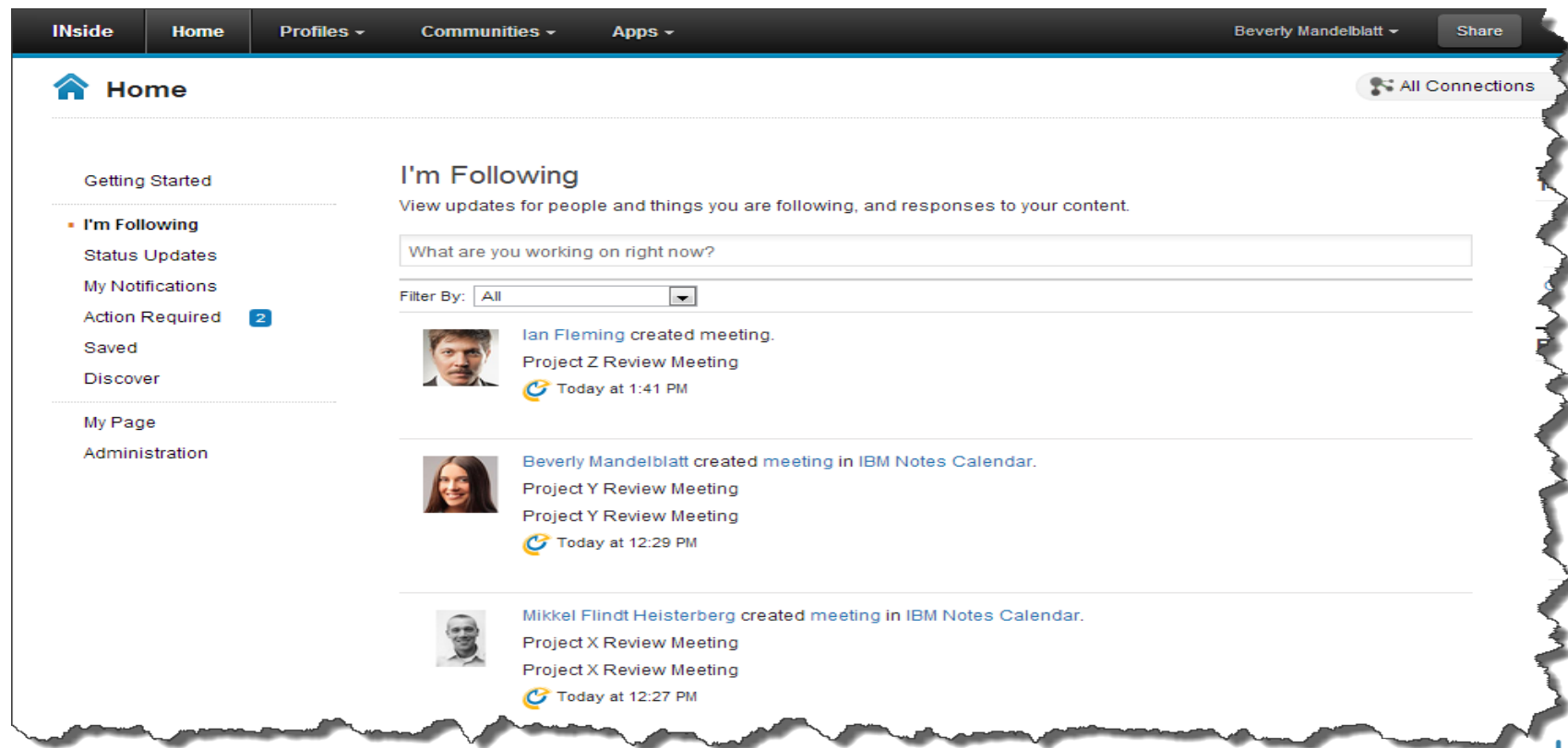


## Posting to & as other user

```
{  
  "actor": {"id": "1E7F44DD-9C20-842A-C125"},  
  "to": [{"objectType": "person", "id": "A7E718F4-3040-2A00-C125"}],  
  "verb": "create",  
  "title": "${create}",  
  "updated": "2013-05-21T12:00:00.000Z",  
  "object": {  
    "summary": "Project Z Review Meeting",  
    "objectType": "meeting",  
    "id": "1234567890123456789012345678900P"  
  },  
  "connections": {  
    "rollupid": "1234567890123456789012345678900P"  
  }  
}
```



# How it looks in the UI

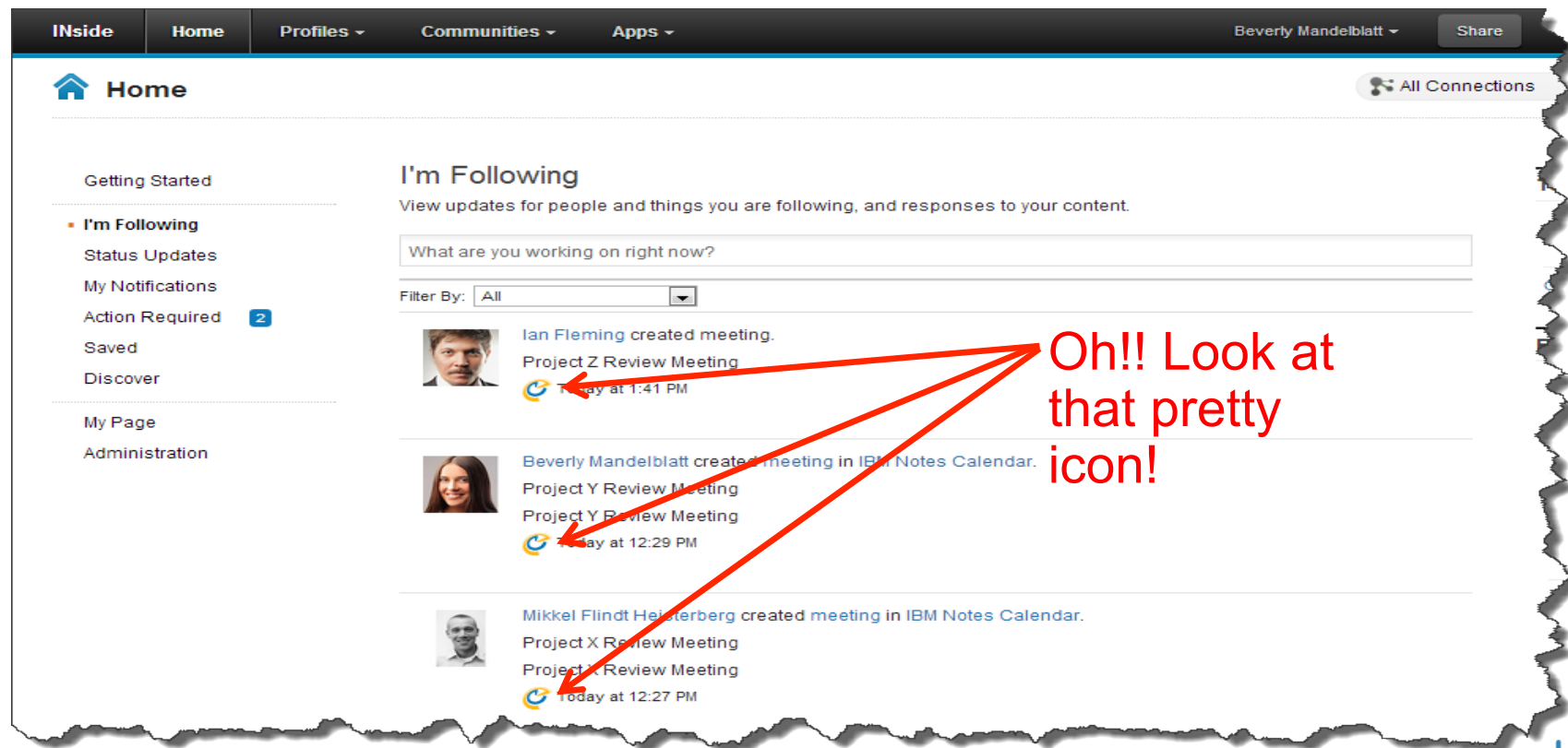


 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne





## How it looks in the UI



Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Using a generator

```
{  
  "generator": {"id": "ontimegc",  
    "image": "http://www.ontimesuite.com/favicon.ico",  
    "displayName": "OnTime Group Calendar",  
    "url": "http://www.ontimesuite.com"},  
  "actor": {"id": "@me"},  
  "verb": "post",  
  "title": "Some entry title",  
  "updated": "2013-05-17T12:00:00.000Z",  
  "object": {  
    "title": "Some object title",  
    "objectType": "note",  
    "id": "1234567890-1234567890-1234567890"  
  }  
}
```



## Using a predefined generator

```
{  
  "generator": {"id": "ontimegc"},  
  "actor": {"id": "@me"},  
  "verb": "post",  
  "title": "Some entry title",  
  "updated": "2013-05-17T12:00:00.000Z",  
  "object": {  
    "title": "Some object title",  
    "objectType": "note",  
    "id": "1234567890-1234567890-1234567890"  
  }  
}
```



## Registering generators

```
wsadmin>execfile("newsAdmin.py")
```

```
wsadmin>NewsActivityStreamService.listApplicationRegistrations()
```

```
{wikis=wikis, communities=communities, general=General, profiles=profiles,  
activities=activities, homepage=homepage, blogs=blogs, forums=forums,  
files=files, dogear=dogear, demoapp=Demo Application, kudos=Kudos}
```

```
wsadmin>NewsActivityStreamService.registerApplication("ontimegc", "OnTime Group  
Calendar", "http://www.ontimesuite.com", "", "http://inside.intravision.dk/  
images/ontime.gif", "", "OnTime Group Calendar", "true")
```

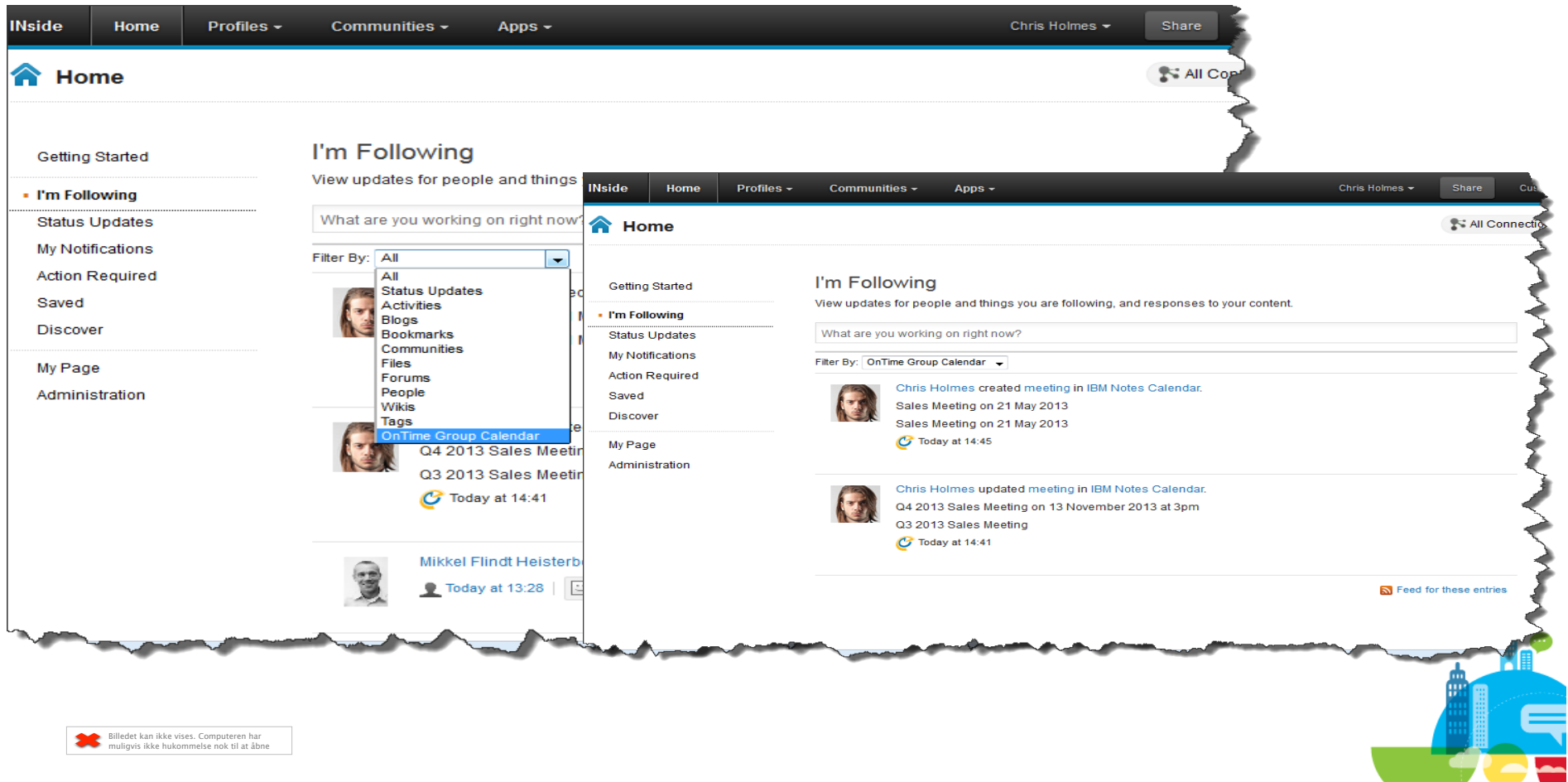
```
wsadmin>
```

After first use of a generator it can be referenced by ID. Purpose of registering is that users may filter by it in the UI.





# Benefit of registering generator



The image displays two screenshots of a web application interface, likely a social or project management tool, showing the 'I'm Following' section. The interface includes a top navigation bar with 'Inside', 'Home', 'Profiles', 'Communities', and 'Apps'. The user is logged in as 'Chris Holmes'.

**Left Screenshot:** The 'I'm Following' section is active. A dropdown menu for 'Filter By' is open, showing options: All, Status Updates, Activities, Blogs, Bookmarks, Communities, Files, Forums, People, Wikis, Tags, and **OnTime Group Calendar** (highlighted). Below the dropdown, a post from 'Mikkel Flindt Heisterb' is visible, dated 'Today at 13:28'.

**Right Screenshot:** The 'I'm Following' section is active, filtered by 'OnTime Group Calendar'. The feed shows updates from 'Chris Holmes' regarding a meeting in the 'IBM Notes Calendar'. The updates include: 'Sales Meeting on 21 May 2013' (dated 'Today at 14:45') and 'Q4 2013 Sales Meeting on 13 November 2013 at 3pm' (dated 'Today at 14:41').

**Error Message:** A small red 'X' icon and text at the bottom left indicate a display issue: 'Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne'.

**Decorative Element:** A colorful graphic of a city skyline is located in the bottom right corner.

## Granting access (1)

- Permission to send to other users are granted using the trustedExternalApplication role
- Granted in the WidgetContainer application using wsadmin or the Websphere Application Server Integrated Solutions Console – the latter is easiest

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## Granting access (2)

Integrated Solutions Console Welcome lc\_wasadmin [Help](#) | [Logout](#)

Cell=LCCell01, Profile=dmgr

**Enterprise Applications**

Use this page to manage installed applications. A single application can be deployed onto multiple servers.

Preferences

Start Stop Install Uninstall Update Rollout Update Remove File Export Export DDL Export File

Select Name Application Status

You can administer the following resources:

<input type="checkbox"/>	<a href="#">Search</a>	➔
<input type="checkbox"/>	<a href="#">WebSphereOauth20SP</a>	➔
<input type="checkbox"/>	<a href="#">WidgetContainer</a>	➔
<input type="checkbox"/>	<a href="#">Wikis</a>	➔

Page: 2 of 2 Total 24

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## Granting access (3)

Integrated Solutions Console Welcome lc\_wasadmin

Cell=LCCell01, Profile=dmgr

**Enterprise Applications**

**Enterprise Applications > WidgetContainer**

Use this page to configure an enterprise application. Click the links to access pages for further configuration of its modules.

Configuration

**General Properties**

- Name: WidgetContainer
- Application reference validation: Issue warnings

**Detail Properties**

- [Target specific application status](#)
- [Startup behavior](#)
- [Application binaries](#)
- [Class loading and update detection](#)
- [Request dispatcher properties](#)
- [Security role to user/group mapping](#)
- [View Deployment Descriptor](#)
- [Last participant support extension](#)

**Modules**

- [Metadata for modules](#)
- [Manage Modules](#)

**Web Module Properties**

- [Session management](#)
- [Context Root For Web Module](#)
- [Initialize parameters for session](#)
- [JSP and JSF options](#)
- [Virtual hosts](#)

**Enterprise Java Bean Properties**

- [Default messaging provider re](#)
- [Stateful session bean failo](#)
- [Application profiles](#)
- [Read EJB User](#)

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## Granting access (4)

**Enterprise Applications** > **WidgetContainer** > **Security role to user/group mapping**

Security role to user/group mapping

Each role that is defined in the application or module must map to a user or group from the domain user registry. accessIds: The accessIds are required only when using cross realm communication in a multi domain scenario. For all other scenarios the accessId will be determined during the application start based on the user or group name. The accessIds represent the user and group information that is used for Java Platform, Enterprise Edition authorization when using the WebSphere default authorization engine. The format for the accessIds is user:realm/uniqueUserID, group:realm/uniqueGroupID. Entering wrong information in these fields will cause authorization to fail. AllAuthenticatedInTrustedRealms: This indicates that any valid user in the trusted realms be given the access. AllAuthenticated: This indicates that any valid user in the current realm be given the access.

Select	Role	Special subjects	Mapped users	Mapped groups
<input type="checkbox"/>	person	All Authenticated in Application's Realm		
<input type="checkbox"/>	allAuthenticated	All Authenticated in Application's Realm		
<input type="checkbox"/>	admin	None		
<input type="checkbox"/>	everyone	Everyone		
<input type="checkbox"/>	reader	Everyone		
<input type="checkbox"/>	metrics-reader	None		
<input type="checkbox"/>	global-moderator	None		
<input type="checkbox"/>	mail-user	None		
<input checked="" type="checkbox"/>	trustedExternalApplication	None		

 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



## Granting access (5)

Enterprise Applications

[Enterprise Applications](#) > [WidgetContainer](#) > [Security role to user/group mapping](#) > **Map users/groups**

Use this page to search for users or groups and add them to the selected roles.

☐ trustedExternalApplication

---

**Search and Select Users**

Select a user realm, specify the number of results to display, enter a search string (use \* for wildcard) and click Search. Select users from the Available list and add them to the Mapped to role list.

User realm  
defaultWIMFileBasedRealm

Display a maximum of  
20 results

Search string  
mh

Available:

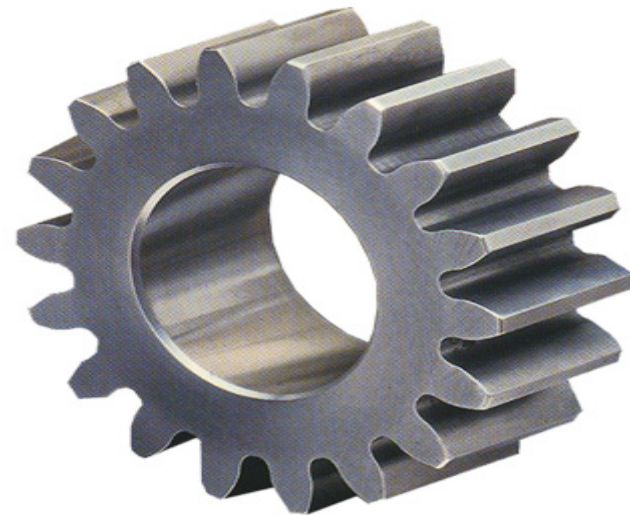
Selected:  
mh

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## Demo

- Tweet'2'stream
  - [https://github.com/lekkimworld/IC14\\_BP301](https://github.com/lekkimworld/IC14_BP301)
- Build script integration



## Demo – safety slide (1)

```
bash BP301 — bash — 105x25
Searching for <#ibmconnect> since <426737292183474176>
{"completed_in":0.01,"max_id":426737361506951200,"max_id_str":"426737361506951168","query":"%23ibmconnect",
"refresh_url":"?since_id=426737361506951168&q=%23ibmconnect&include_entities=1","count":100,"since_id":
426737292183474200,"since_id_str":"426737292183474176"}
Twitter search resulted in <0> result(s).
-----
Searching for <#ibmconnect> since <426737361506951168>
{"completed_in":0.008,"max_id":426737425935659000,"max_id_str":"426737425935659009","query":"%23ibmconnect",
"refresh_url":"?since_id=426737425935659009&q=%23ibmconnect&include_entities=1","count":100,"since_id":
426737361506951200,"since_id_str":"426737361506951168"}
Twitter search resulted in <0> result(s).
-----
Searching for <#ibmconnect> since <426737425935659009>
{"completed_in":0.013,"max_id":426737487256776700,"max_id_str":"426737487256776704","query":"%23ibmconnect",
"refresh_url":"?since_id=426737487256776704&q=%23ibmconnect&include_entities=1","count":100,"since_id":
426737425935659000,"since_id_str":"426737425935659009"}
Twitter search resulted in <1> result(s).
Found match – posting to activity stream.
Posted to activity stream.
Activity Stream entry should be saved.
Saved activity stream entry.
-----
Searching for <#ibmconnect> since <426737487256776704>
{"completed_in":0.005,"max_id":426737552947548160,"max_id_str":"426737552947548160","query":"%23ibmconnect"
```





## Demo – safety slide (2)

### Discover

Discover what people are sharing and make new connections.

What are you working on right now?

Filter By: All



[Gitte Boe Harter](#) Weekenden nærmer sig - god weekend! Og hilsen til Florida.

Today at 3:12 PM | Like



[Gitte Boe Harter](#) Så er 3. punkt på dagens liste også udført :-)

Today at 2:35 PM | Like



[Mikkel Flindt Heisterberg](#) Så er OnTime Group Calendar v. 3.8.0 RC1 bygget :)

Today at 2:05 PM | Like



[Mikkel Flindt Heisterberg](#) posted OnTime Group Calendar - Notes/TAAG BLEEDING build.

OnTime Group Calendar - Notes/TAAG BLEEDING build (3.8.0.201401241358)

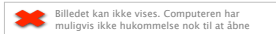
Today at 1:58 PM

[Save this](#)



## Summary

- There's no one stream - @me vs. @public vs. community
- Be patient – wrapping your head around these concepts can be hard in the beginning
- Remember that the data **isn't stored in** the stream but rather is **pointed to from** the stream
- Entries are automatically purged from the stream unless saved or marked actionable
- You cannot delete from the stream (yet)
- Accessed using REST API URL based on user, group, application and activity ID
- When working with the RESTClient in Firefox use "Private Browsing" mode as credentials used and cookies returned in one tab doesn't leak to other "Private Browsing" tabs.
- Pretty easy to use once you grasp the concepts



## Resources

- Activity Streams in the OpenSocial specification, <http://opensocial-resources.googlecode.com/svn/spec/trunk/Social-API-Server.xml#ActivityStreams-Service>
- AppDev wiki, <http://www-10.lotus.com/ldd/appdevwiki.nsf>
- IBM Connections Activity Stream Integration (AD104 from IBM Connect 2013), <http://www.slideshare.net/brianog/ad104-ibm-connections-actiivtystream-integration>
- Activity Stream hands-on lab, <http://www-10.lotus.com/ldd/appdevwiki.nsf/xsp/.ibmmodres/domino/OpenAttachment/ldd/appdevwiki.nsf/82567C415DF5243185257AEE00626F82/attach/5-sdk-workshop-activitystreams.pdf>



## Tools of the trade

- RESTclient in Firefox,  
<https://addons.mozilla.org/da/firefox/addon/restclient/>
- Advanced REST client in Chrome (issues with POSTs),  
<http://bit.ly/advancedrest>
- cURL (for any imaginable operating system),  
<http://curl.haxx.se/>
- **Charles Web Proxy**,  
<http://www.charlesproxy.com>

 Billedet kan ikke vises. Computeren har muligvis ikke hukommelse nok til at åbne



# Thank You!

Your feedback is important!

Access Connect Online to complete your session surveys

- But?, How?, Doesn't that mean...
- Give it to me! (or come talk to me after the session or find me in the hallways...)
- **Twitter:** @lekkim
- **Email:** mh@intravision.dk
- **Blog:** <http://lekkimworld.com>

