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# **Introduction to Shindig & Social applications' development**



# Agenda

- Introduction to Shindig
- Social applications' development
- Conference development



## Introduction to shindig

- Apache Shindig
  - was originally started by Google in 2007
  - Since December 2007, it became an Apache project
- Apache Shindig's objectives
  - Provide an infrastructure to host OpenSocial applications
  - Be language neutral and cover multiple languages
    - Currently, Java and PHP versions are available



## Introduction to shindig

- Apache Shindig is a reference implementation of the OpenSocial API specifications versions 0.8.x and 0.9.x
- OpenSocial API is a standard set of Social Network APIs
  - <http://www.opensocial.org/page/specs-1>
  - It includes:
    - Profiles
    - Relationships
    - Activities
    - Shared applications
    - Authentication
    - Authorization



## Introduction to shindig

- Implemented OpenSocial APIs
  - OpenSocial REST
  - OpenSocial RPC (Remote Procedure Call)
  - Javascript



## Introduction to shindig

- Apache Shindig exposes four resources
  - *people*
  - *appdata*
  - *activities*
  - *groups*
- More information can be found at
  - <http://shindig.apache.org/overview.html>
  - <http://sites.google.com/site/opensocialarticles/Home/shindig-rest-java>



## Introduction to shindig

- REST interface:

Resource	URI	Description
Poeples	/social/rest/people/{guid}/@self e.g. <a href="http://localhost:8123/social/rest/people/john.doe">http://localhost:8123/social/rest/people/john.doe</a>	Profile record for user {guid}
	/social/rest/people/{guid}/@friends	Collection of all friends of user {guid}; subset of @all
	/social/rest/people/{guid}/@all	Collection of all people connected to the user {guid}
	/social/rest/people/{guid}/@all/{pid}	Individual person record for a specific person known to {guid}; shows {guid}'s view of {pid}
	/social/rest/people/@me/@self	Profile record for requestor
	/social/rest/people/{guid}/{groupid}	Collection of all people connected to user {guid} in group {groupid}



## Introduction to shindig

- REST interface

Resource	URI	Description
Appdata	/social/rest/appdata/{guid}/@self/{appid}	All app data for user {guid}, app {appid}
	e.g. <a href="http://localhost:8123/social/rest/appdata/john.doe">http://localhost:8123/social/rest/appdata/john.doe</a>	
	/social/rest/appdata/{guid}/@friends/{appid}	All app data for friends of user {guid} and app {appid}; read-only (only GET and HEAD supported)
	/social/rest/appdata/{guid}/@self/{appid}?fields=count	Just the count field for user {guid}, app {appid}





## Introduction to shindig

### Installation

- **Use OpenSocial Development Environment (OSDE)**
  - Can be installed from Eclipse using the update site:
    - <http://opensocial-development-environment.googlecode.com/svn/update-site/site.xml>
  - A step-by-step installation procedure can be found at:
    - <http://sites.google.com/site/opensocialdevenv/user-guide/install>

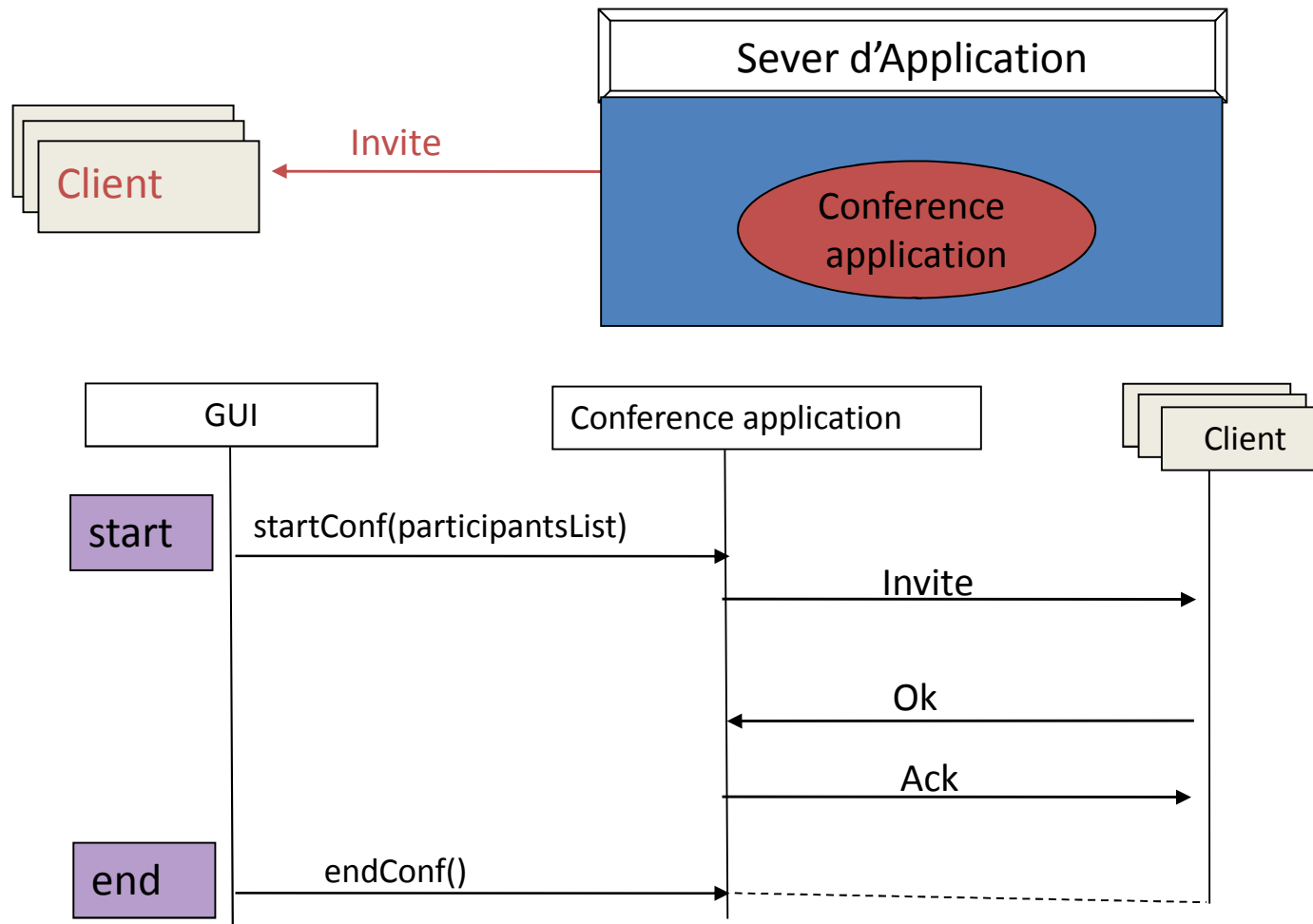


## Social applications' development

- A tutorial can be found at:
  - Video: <http://code.google.com/p/opensocial-development-environment/>
  - <http://sites.google.com/site/opensocialdevenv/user-guide/tutorial>
- Using the real product
  - Start shindig and add sample data
  - Create a social application
  - Create and execute a REST Java client



# Conference development





# Conference development

- Server side
  - An application that will create a conference among given users
    - Uses SIP stack to listen to, receive, process and send SIP messages
      - JAIN SIP
      - SIP Servlet
- Client side
  - Download and use an existing SIP client
    - E.g. X-lite
      - <http://www.counterpath.com/x-lite-download.html>
- Use JMF for media



## How to download JAIN SIP

- API doc and .jar can be downloaded at:
  - <http://jcp.org/aboutJava/communityprocess/mrel/jsr032/index.html>
- Reference implementation .jar can be downloaded at:
  - <http://download.java.net/communications/jain-sip/nightly/>
  - Click: “jain-sip-ri/”, you can find all nightly build implementations .jar
  - You can also find sdp implementations at the same place
- When implementing a conferencing application using Jain SIP stack, add the two jar files (one api, one impl) to your project:
  - jsip\_api\_v1.2.jar
  - jain-sip-ri-1.2.xx.jar
  - Tip: you may need log4j-xxx.jar, depending on the sip impl you use. If you have running errors, add log4j-xxx.jar to your project
    - <http://www.apache.org/dyn/closer.cgi/logging/log4j/1.2.15/apache-log4j-1.2.15.zip>



## References

### Shindig

- <http://shindig.apache.org/>

### OpenSocial Development Environment (OSDE)

- <http://code.google.com/p/opensocial-development-environment/>

### Social application development

- <http://sites.google.com/site/opensocialdevenv/user-guide/tutorial>
- [http://wiki.opensocial.org/index.php?title=Articles\\_%26\\_Tutorials](http://wiki.opensocial.org/index.php?title=Articles_%26_Tutorials)
- [http://wiki.opensocial.org/index.php?title=Social\\_Mashup\\_Tutorial](http://wiki.opensocial.org/index.php?title=Social_Mashup_Tutorial)
- <http://code.google.com/opensocial>  
<http://code.google.com/p/opensocial-resources/>

### OpenSocialClient Class :

- <http://opensocial-java-client.googlecode.com/svn-history/r88/trunk/java/doc/org/opensocial/client/OpenSocialClient.html>

### Specifications

- <http://opensocial.org/>
- <http://groups.google.com/group/opensocial-and-gadgets-spec>



## References

- **JAIN SIP tutorial & examples**
  - *java.sun.com/products/jain/JAIN-SIP-Tutorial.pdf*
  - <http://snad.ncsl.nist.gov/proj/iptel/>
- **SIP Servlet sample applications**
  - <http://wiki.glassfish.java.net/Wiki.jsp?page=SipServletProxyExample>
  - <http://www.ibm.com/developerworks/library/wi-sip.html>
  - <http://docs.sun.com/app/docs/doc/820-3007/gfmqz?l=en&a=view>