Studying the Use of Developer IRC Meetings in Open Source Projects

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Open source developers are distributed

- Mailing lists
- Email
- Bug tracking systems
- IRC channels
- IRC meetings
IRC meetings are ...

Focused and short group discussions held by developers to discuss maintenance issues such as:

• Upcoming releases
• Major bugs
• Task assignments
• etc ...
jdahlin: what about the “root” widget argument issue... it seems everyone uses it and it keeps coming up on the mailing list (gedit, murrayc. muntyan, etc)?...
The role of IRC meetings
Answer questions and brainstorm

maclas: any ideas on how to make the separators non-selectable?
The role of IRC meetings
Substitute physical meetings

I’d really love to go to Boston, but I’m already going twice to the US in less than 2 weeks, I’m afraid homeland security will lock me in for the third time :-(
Studied projects

169 IRC meetings
5 years
26640 IRC messages
130 different participants

Evolution
GTK+
Our study on IRC meetings

Participants

Content

Style
IRC meeting participant groups

**Core group:** Key group members identified by the project

**Dominant group:** Top 20% most active IRC meeting participants

**Casual group:** IRC meeting participants not in the dominant group (casual participants)
1. IRC meeting participants

Who participates?

In 2008 ...

90% of core project members attended at least 1 meeting

More than 50% attended more than half of the meetings
1. IRC meeting participants
How much do participants contribute?

80% of IRC messages are contributed by 20% of participants (dominant group)

60% of the dominant group is made up of core project members
1. IRC meeting participants
How stable are the different groups?

Cosine distance

- **GTK+**
  - **Exact same**: (0.81)
  - **Totally different**: (0.21)

- **Evolution**
  - **Exact same**: (0.98)
  - **Totally different**: (0.51)

Legend:
- Red circle: Dominant group
- Green circle: Casual group
2. IRC meeting contents

What are they talking about?

Common topics across projects
2. IRC meeting contents

What are they talking about?

Project specific topics

Evolution 2008

GTK+ 2008
2. IRC meeting contents
What are they talking about?

GTK+ 2004

GTK+ 2008

Time specific topics
3. IRC meeting style
How are the meetings run?

Three types of meetings:

**Agenda**: Meetings follow a specific agenda

**Update**: Meetings to provide progress updates

**Other**: Meetings to discuss specific topics (i.e. specific bugs or releases)
3. IRC meeting style

How are the meetings run?

<table>
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<tr>
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Different projects follow different meeting styles
3. IRC meeting style
How do participants address each other?

A large number of messages are direct-addressing messages

```
<srag> jony, anything to share with us?
...
<harish> ok. sankar: updates on the proxy feature for GW?
...
<srag> mcrha, anything to share with us?
...
<srag> abharath, anything to share with us?
```

Update meeting in the Evolution project
Implications of IRC meetings study

IRC meetings provide **unmatched features**

**Participants:** More vocal versus deep thinker personalities

**Content:** Priorities of topics worth raising in such limited time

**Style:** How key project members discuss and settle major Project decisions in real-time
Conclusion

IRC meeting participants
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Project specific topics

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