The problem of user actions analysis

Damien Clauzel

American University of Paris

atGentive workshop in Oxford, May 2006

Contents

What do we want to do?

We want to follow the user activity:

- what **exactly** is doing the user?

- why is he doing a precise action?

- how is he doing it?

We want to be able to manipulate the system:

- storing and restoring context

- activating functions and widgets

What do we need to do it?

We need to know what the user is doing

  $\Rightarrow$ activity tracking: high level (search, writing a letter. . .)

   $\Rightarrow$ action tracking: low level (key press, widgets used. . .)

We need to be able to remotely controlling the plat-form

  $\Rightarrow$ communicating software $\Rightarrow$ common interfaces

   $\Rightarrow$ *smart* applications

Hosting application requirements

1. the position of the caret in the last selected text area

2. the coordinates of the pointer

3. the coordinates of a click event, and which application, area and widget were having the focus

4. the coordinate, geometry and status (active, inactive, folded, maximized, z-level) of the windows

5. the status of the menus

6. the time spent on the current focus, the overall task and the activity

7. the time schedule of the user

8. . . .

How do we do it?

Two main possibilities:

- data gathering from operating system $\Rightarrow$ not enough (?)
  $\Rightarrow$ technical problems & few data

- modifying the plat-form & applications $\Rightarrow$ how far can we go?
  $\Rightarrow$ means having atGentive ready software

(Not a) conclusion

- We need right now to make some decisions
- Design will be crucial for future extension