



AGPager
Advanced Display Management
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Track Two



Background

- AccessGrid has a lot of Windows

- Video Windows
- Presentation Slides
- Control Windows



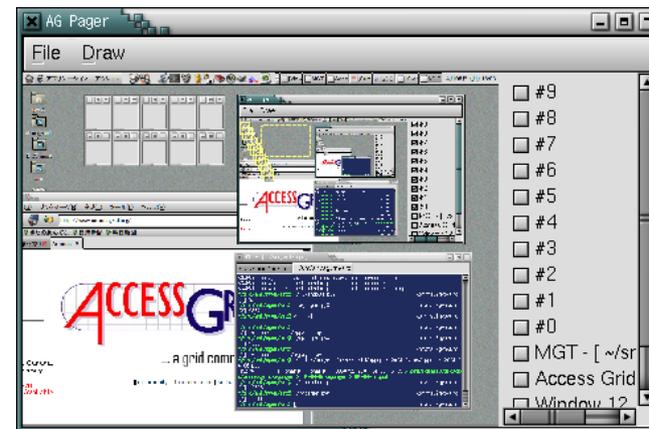
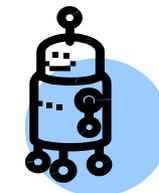
- We have to operate them manually

- Move/Resize/Iconify windows
- Observe the status of windows

It's boring!

AGPager

- Helps us control windows
- Manual manipulation by a user
- Automatic manipulation under an action rule



Manual Manipulation



- Like manipulating icons on the desktop
- Move some windows at once
- Arrange the location of windows

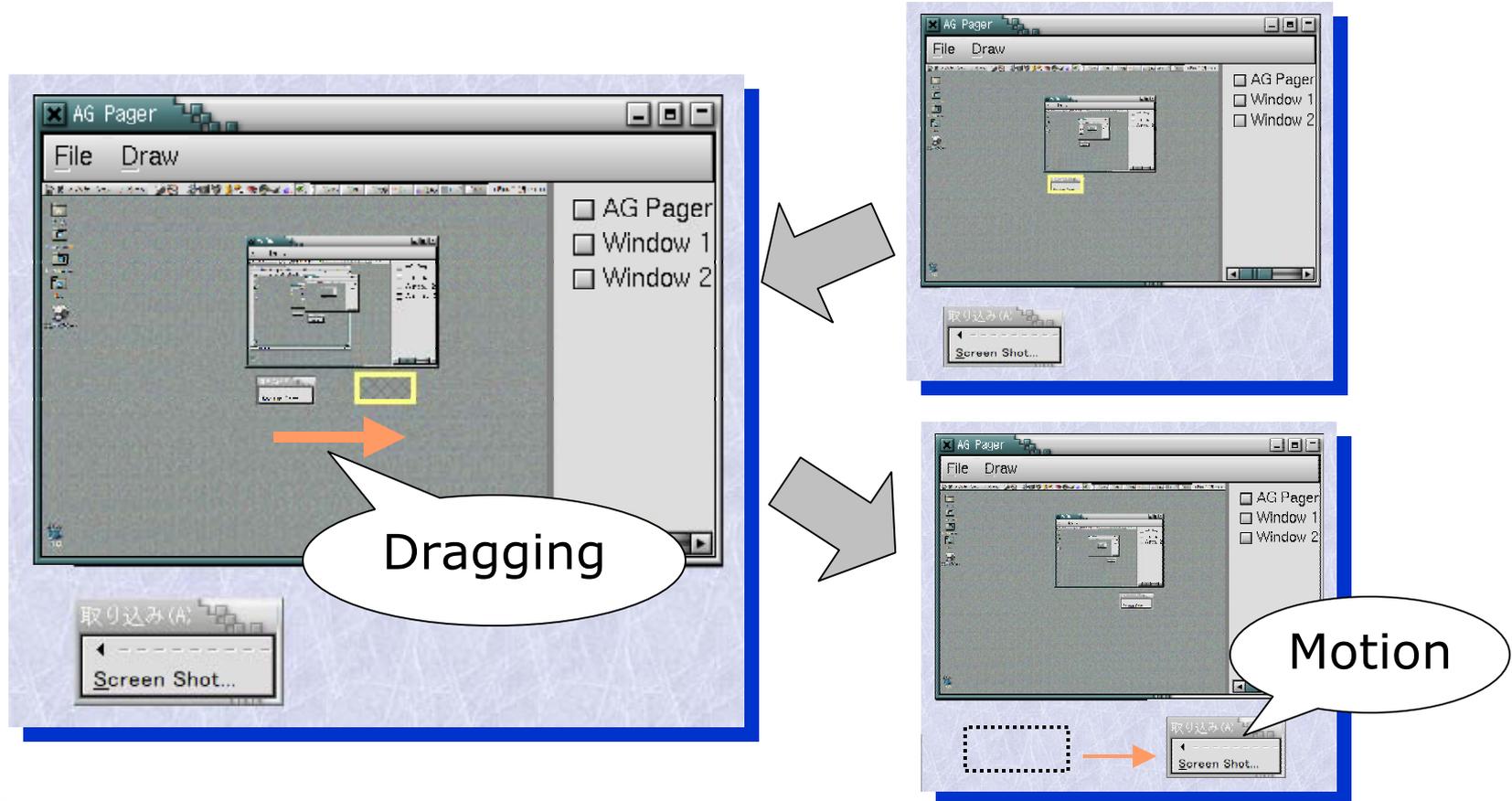
DEMO!

Manual Manipulation



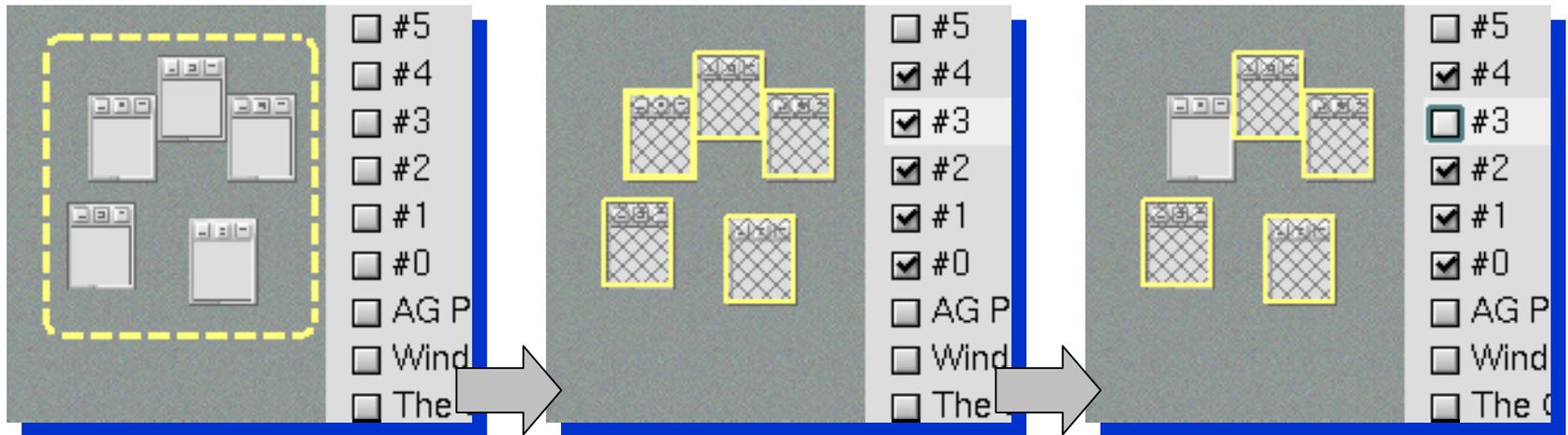
Manual Manipulation (1/3): Motion

- Drag an Image of a Window



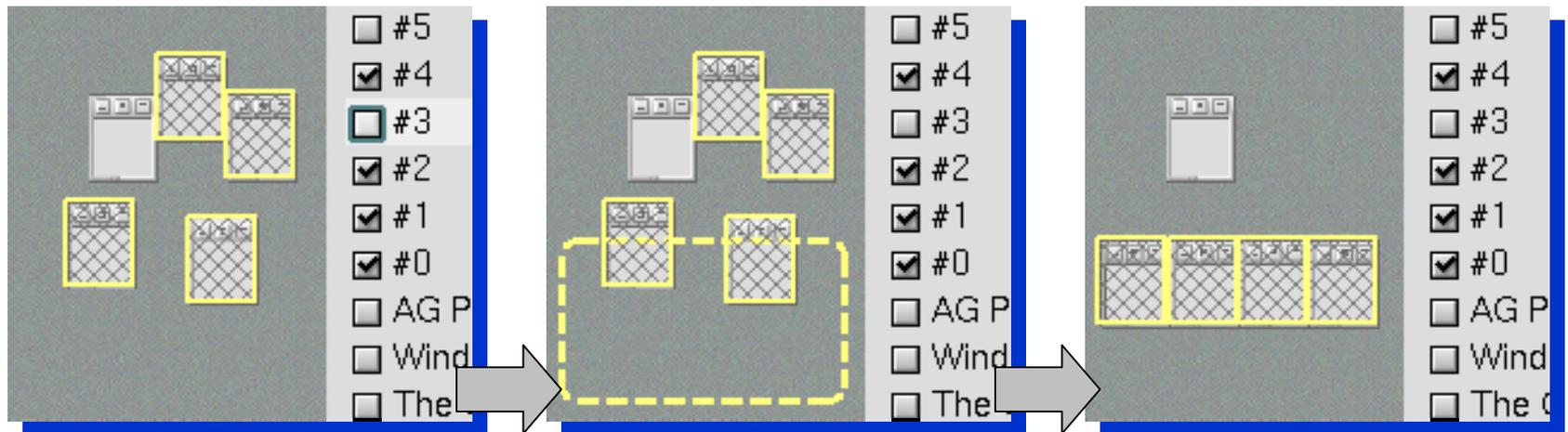
Manual Manipulation (2/3): Selection

- Select Windows with
 - Rubber band
 - Ctrl + click
 - Right panel

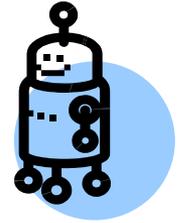


Manual Manipulation (3/3): Arrangement

- Select Windows
- Select the Arrangement Place with the Rubber Band



Automatic Manipulation



- Manipulate windows under an action rule
 - Window re-layout
 - Iconify
 - Etc...
- Action rule:
 - Windows → application category
 - Application categories → manipulation

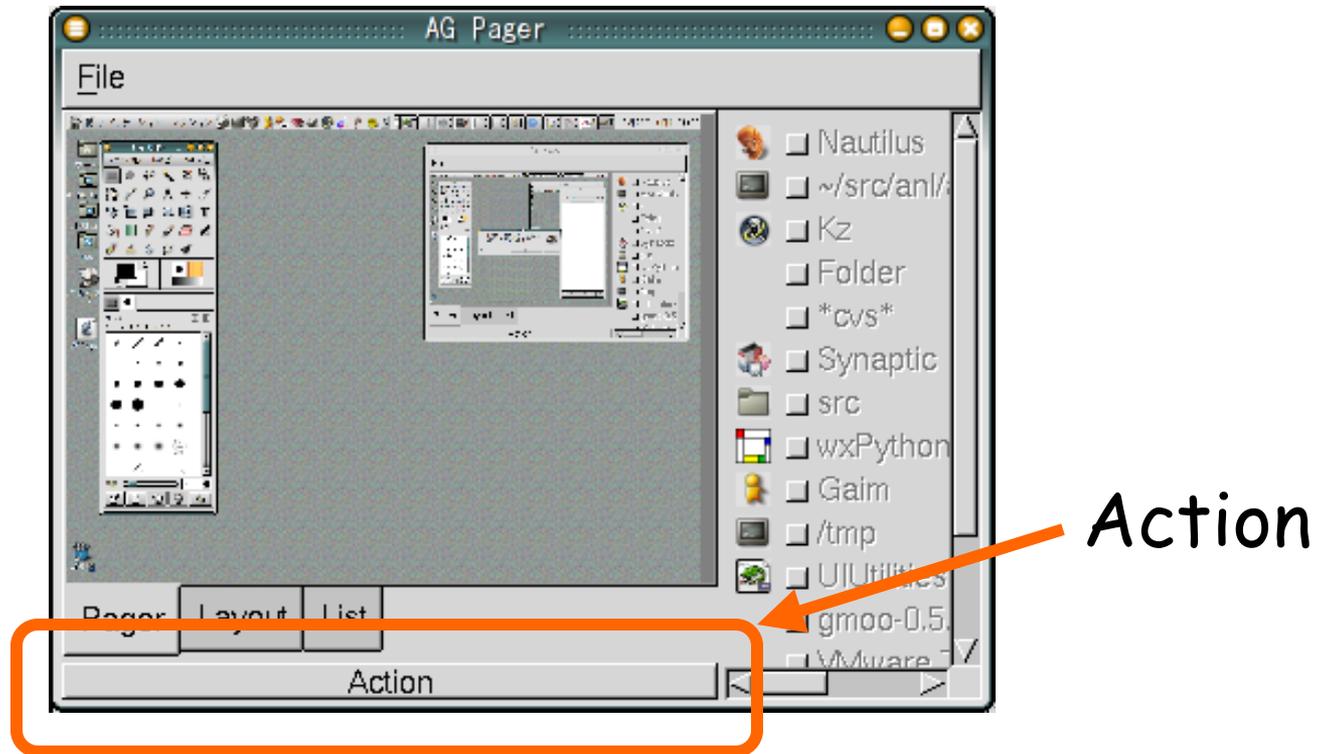
DEMO!

Automatic Manipulation



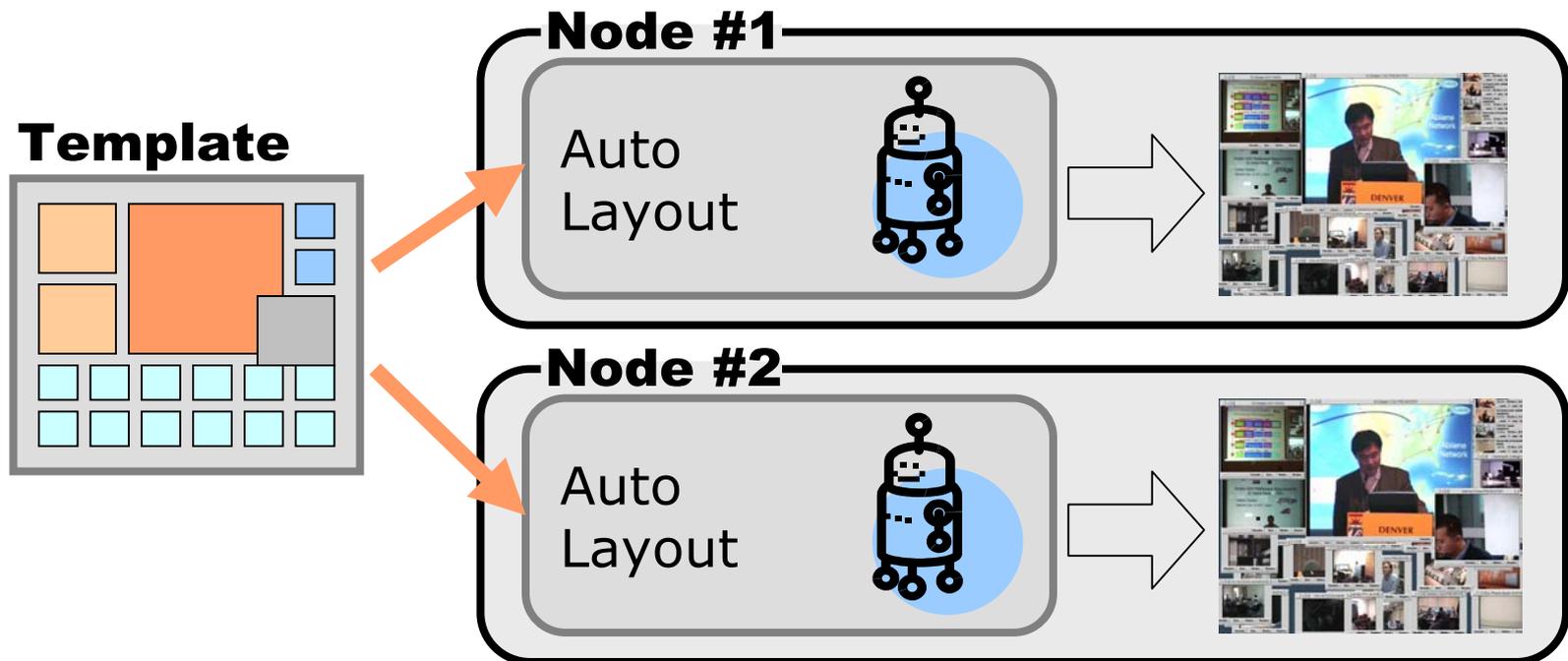
Automatic Manipulation: Usage of this function

- Just click the “action” button



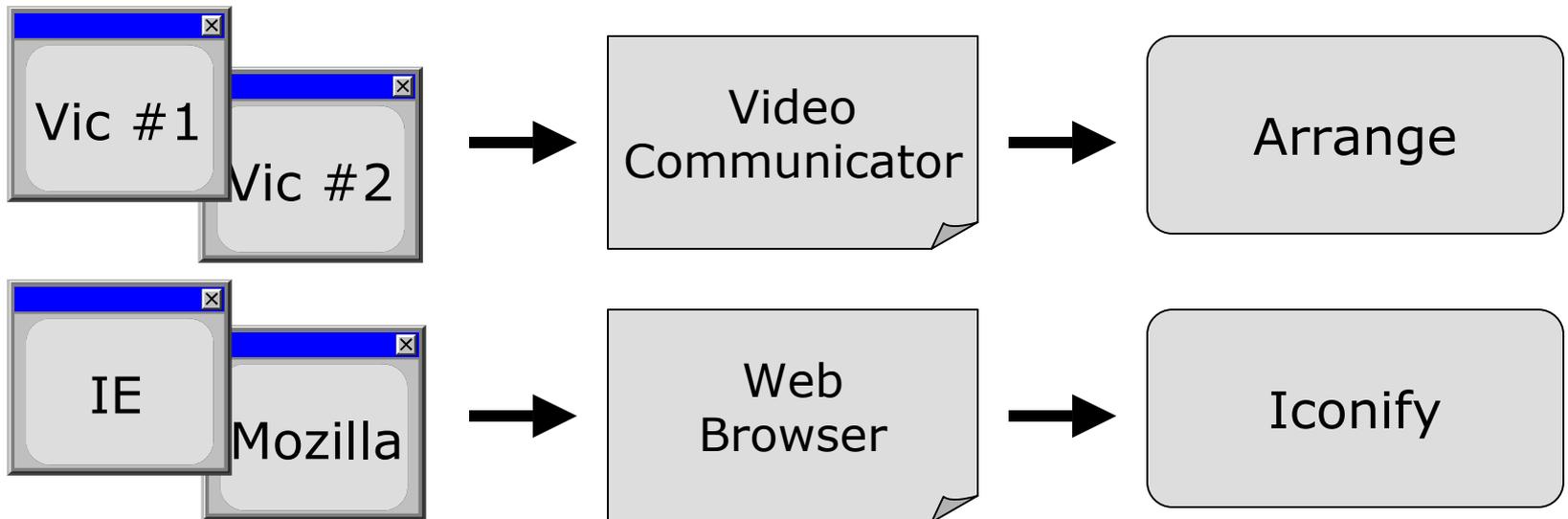
Automatic Manipulation: Layout Templates

- Windows layout based on a Template
 - “What I See Is What You See”
 - Achieve same Layout on each Node



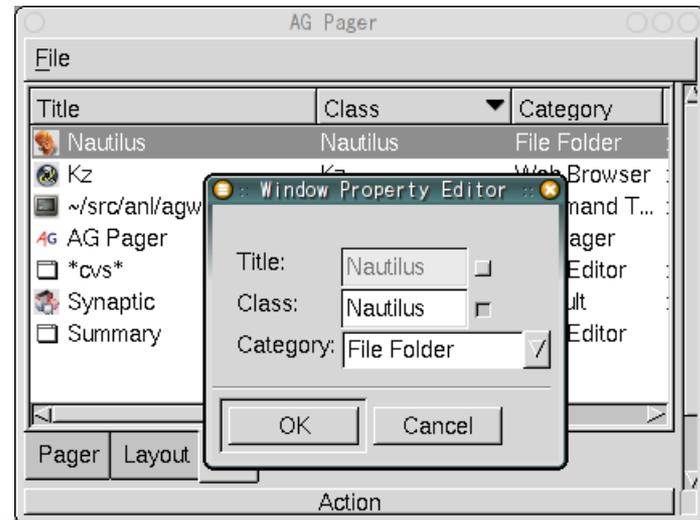
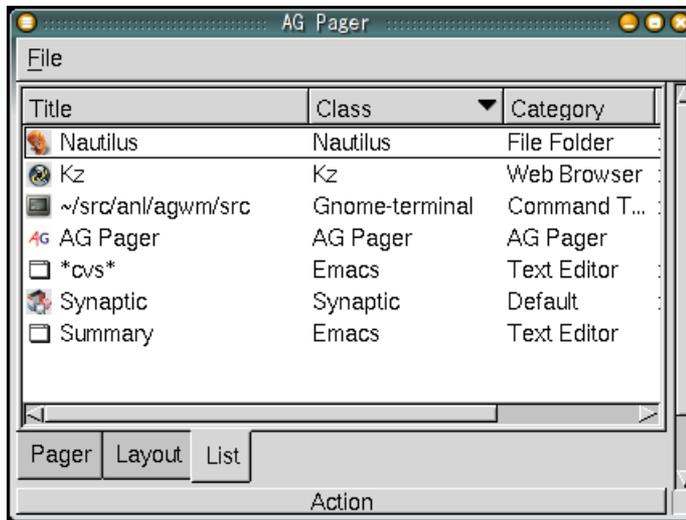
Automatic Manipulation: Action Rule (1/3)

- The user can modify:
 - Matching patterns between **properties of windows and application categories**



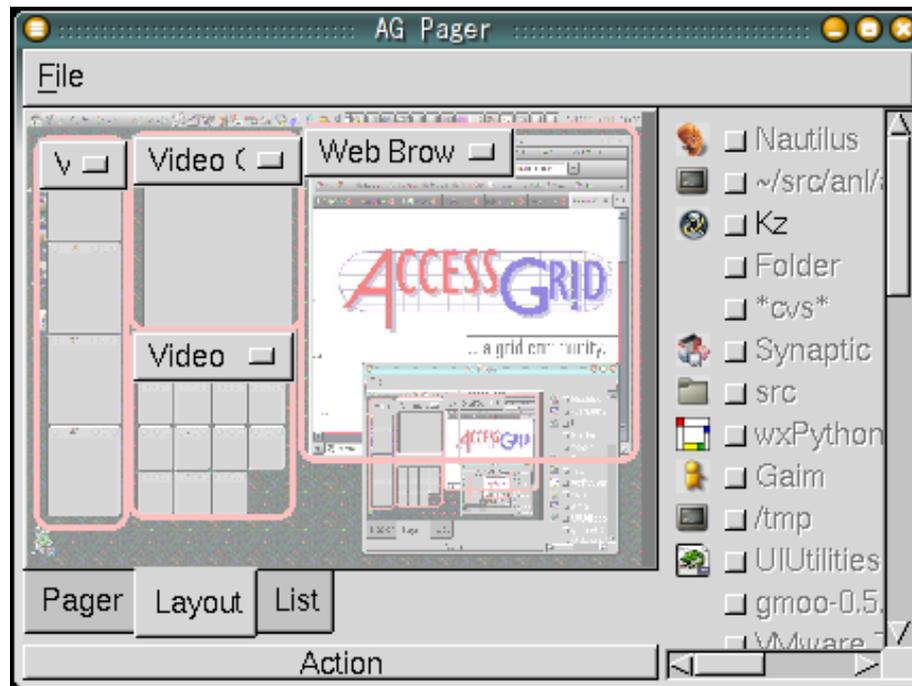
Automatic Manipulation: Action Rule (1/3)

- The user can modify:
 - Matching patterns between **properties of windows and application categories**



Automatic Manipulation: Action Rule (2/3)

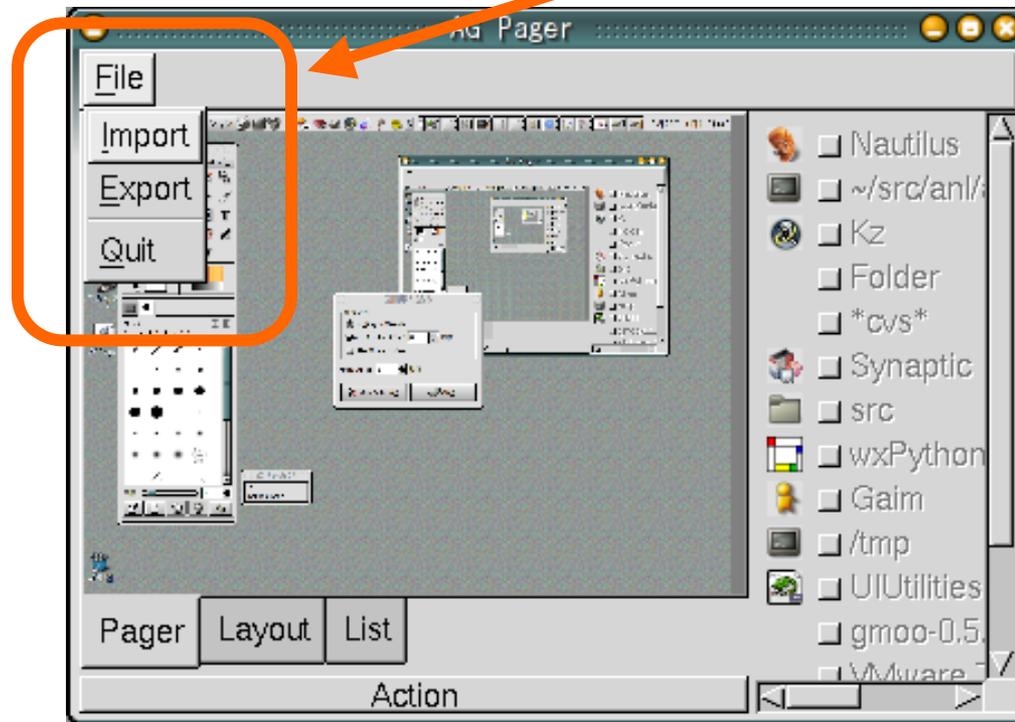
- The user can modify:
 - The layout template of windows



Automatic Manipulation: Action Rule (3/3)

- Save and load the customized action rule

Save & Load



Installation: Setup

- Windows:
 - Run setup.exe (Inno Setup)
- UNIX:
 - ./configure; make; make install

<http://taiyaki.org/agpager/>

Installation: Software Requirement

- Windows:
 - Python only
 - Works on AG Environment
- UNIX (X window system):
 - Python and a backend library
 - Library installation required
 - SWIG, X11 devel-kit

Implementation: Design Model

Target Desktop

Local
Desktop



Remote
Desktop



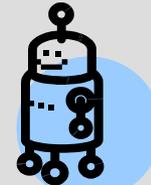
Window Manager

Operating System

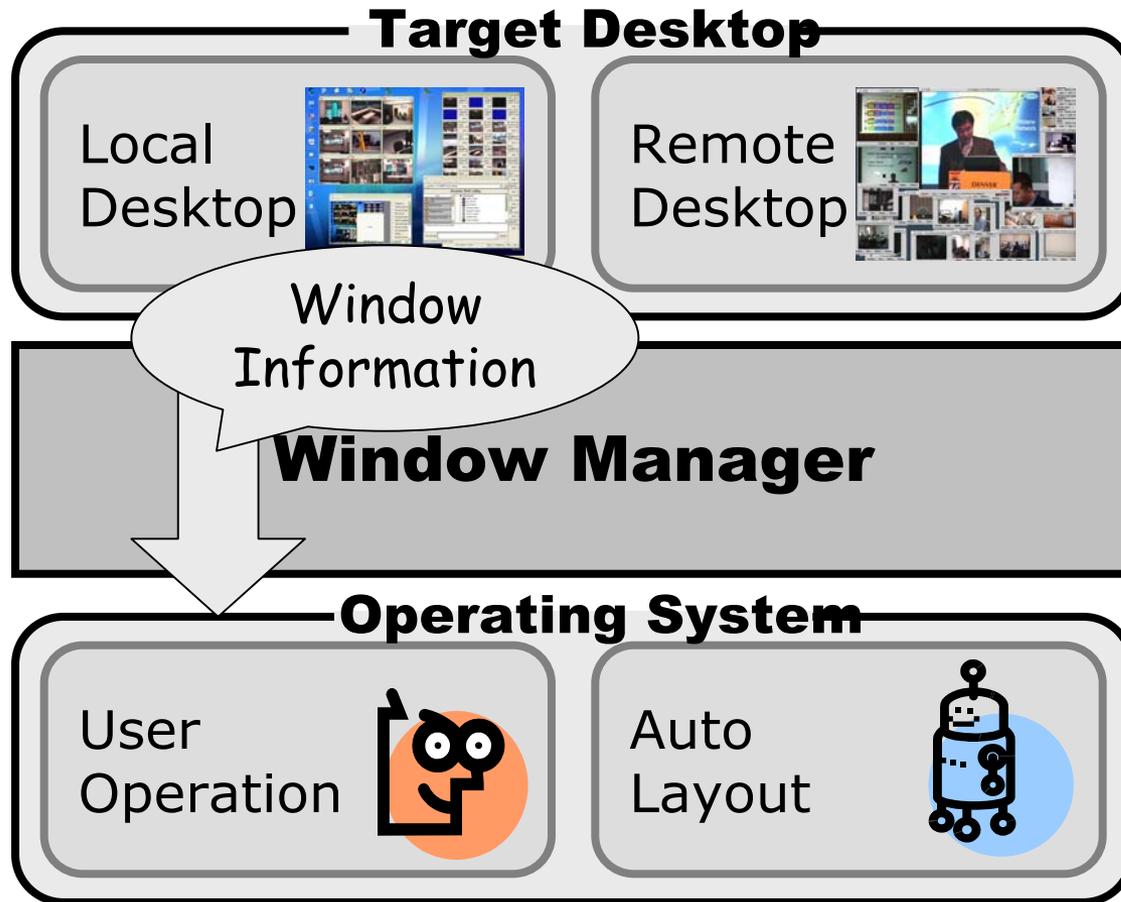
User
Operation



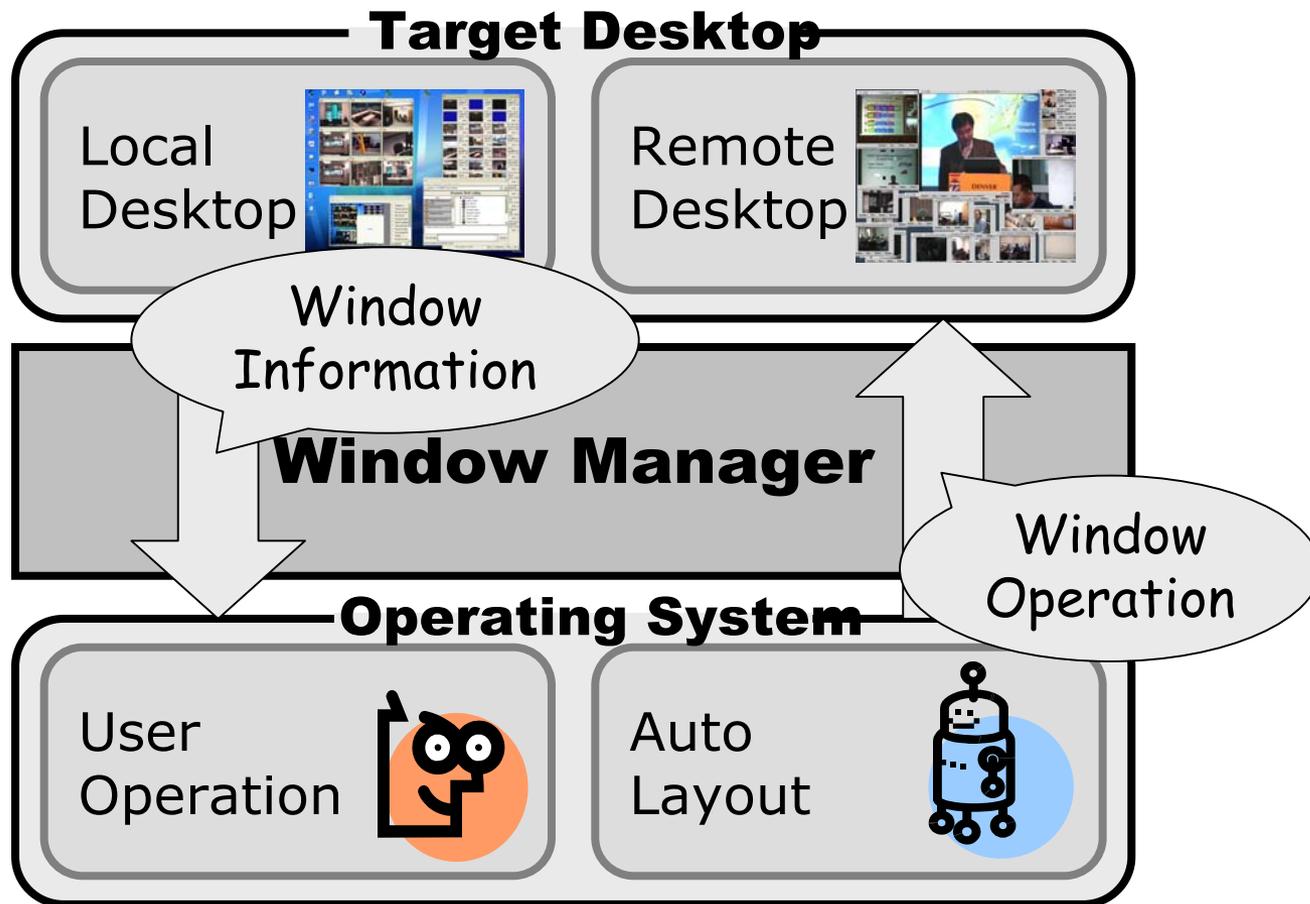
Auto
Layout



Implementation: Design Model



Implementation: Design Model



Implementation: Design Model

Target Desktop

Local
Desktop



Remote
Desktop



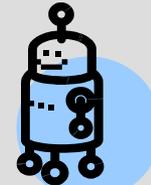
Window Manager

Operating System

User
Operation



Auto
Layout



Implementation: Current Status

Target Desktop

Local
Desktop



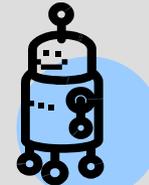
Window Manager

Operating System

User
Operation



Auto
Layout



Next Step

- Remote Control
 - Control your AG Display Machine from your Notebook PC
- Integration with AccessGrid
 - Layout Templates
 - Operators Panel
- Integration with Vic and Rat or VP.
 - Use Information of Participants



The GOAL

- Context Awareness
 - Information of Speakers
 - Understanding Audio/Video Stream

The GOAL:

Context Awareness (1/2)

- Information of Speakers
 - Who is the Speaker?
 - Where is the Speaker?
- What Windows are Important?
 - Presenter?
 - Chair Person?
 - Presentation Slides?



The GOAL:

Context Awareness (2/2)

- Layout based on the Context
 - Enlarge the presenter's window
 - Switch among questioners' windows
 - Shrink unnecessary windows



Conclusion

- What is AGPager
 - Software to help the user control windows
 - The user can operate windows easily
- The Next Step
 - Remote Control
 - Integration with AccessGrid
- The Goal
 - Automatic Layout with the Context

<http://taiyaki.org/agpager/>



Credits

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