

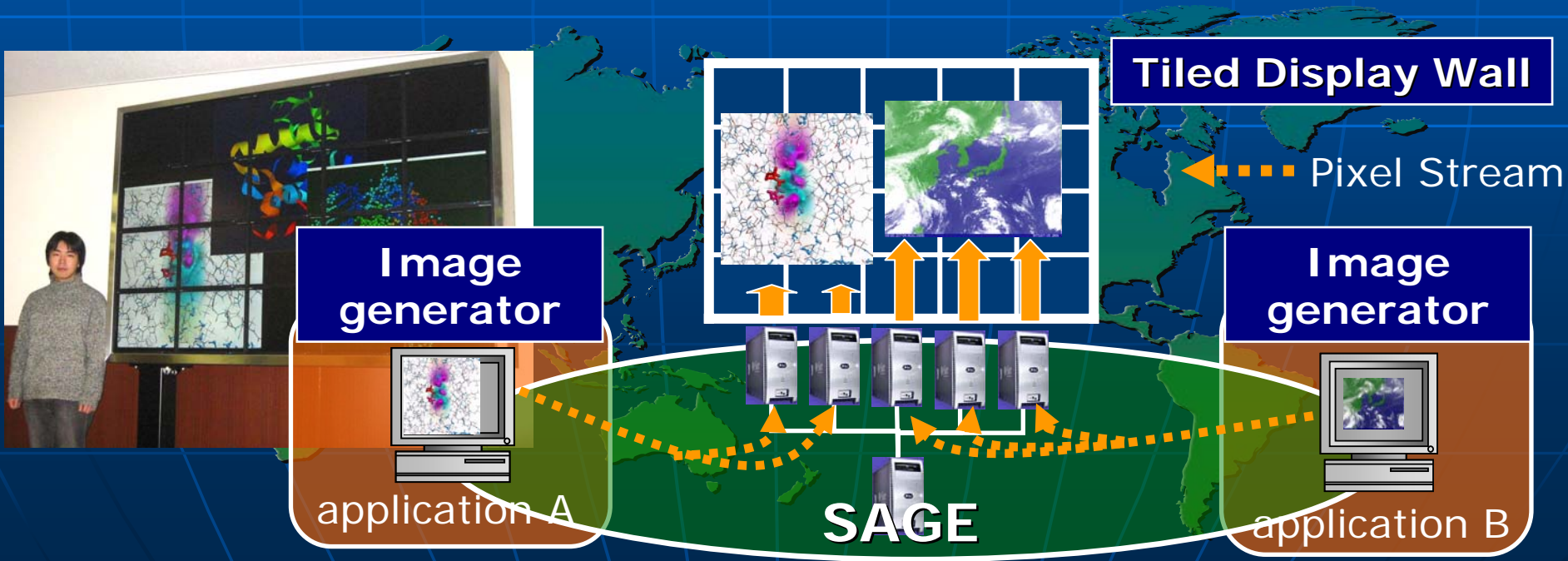
A Study on Event Control Module of User Input for SAGE

Telescience Working Group, PRAGMA12

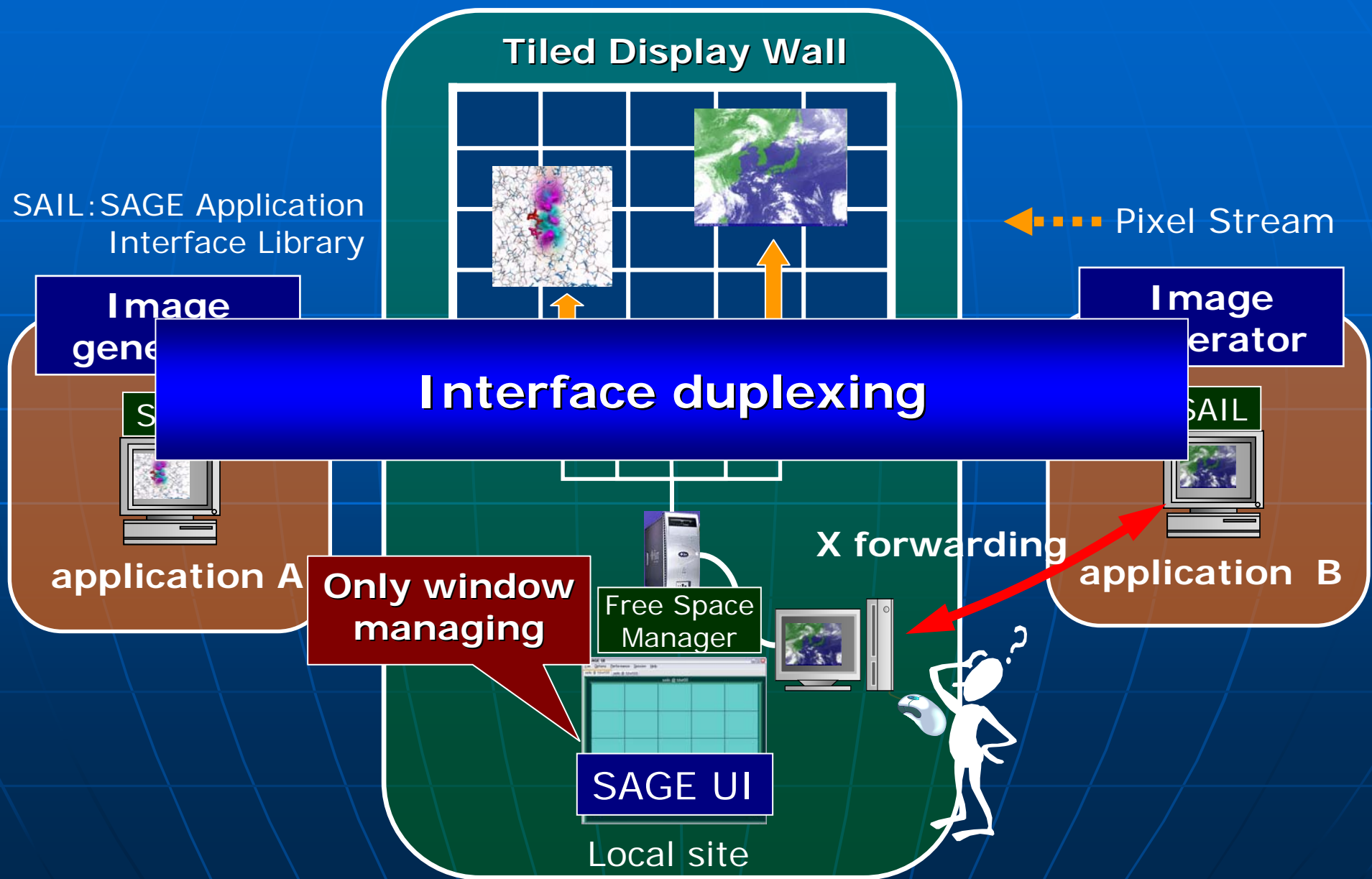
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Background

- Tiled Display Wall (TDW)
 - Large-scale high resolution display
- SAGE (Scalable Adaptive Graphics Environment)
 - Visualization middleware for TDW
 - To share remote visualization resources

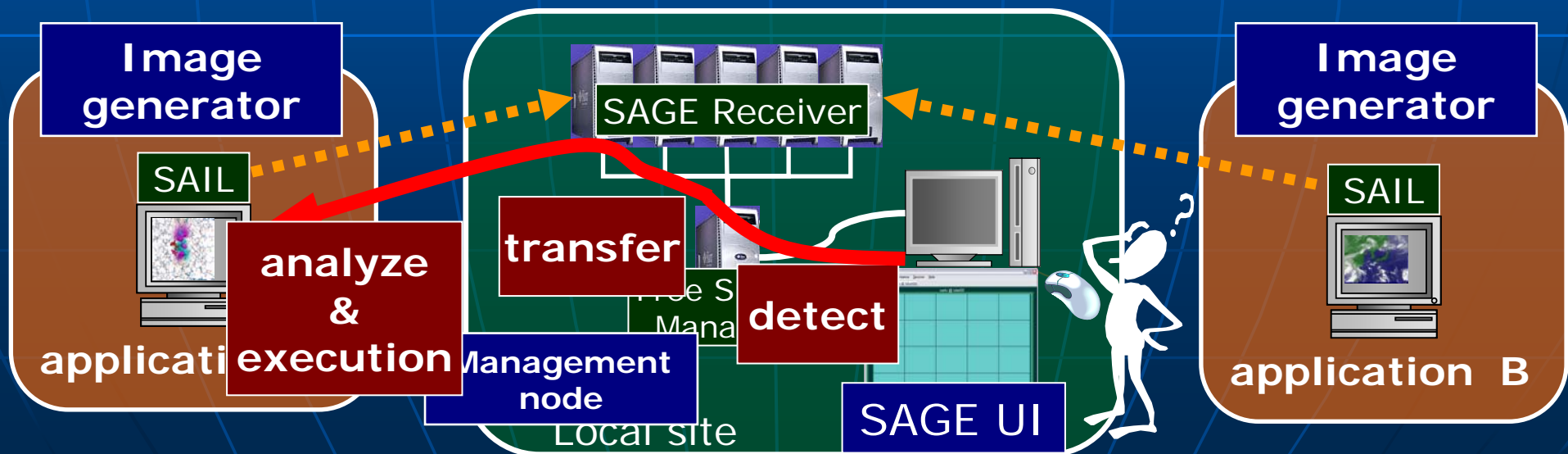


Problem



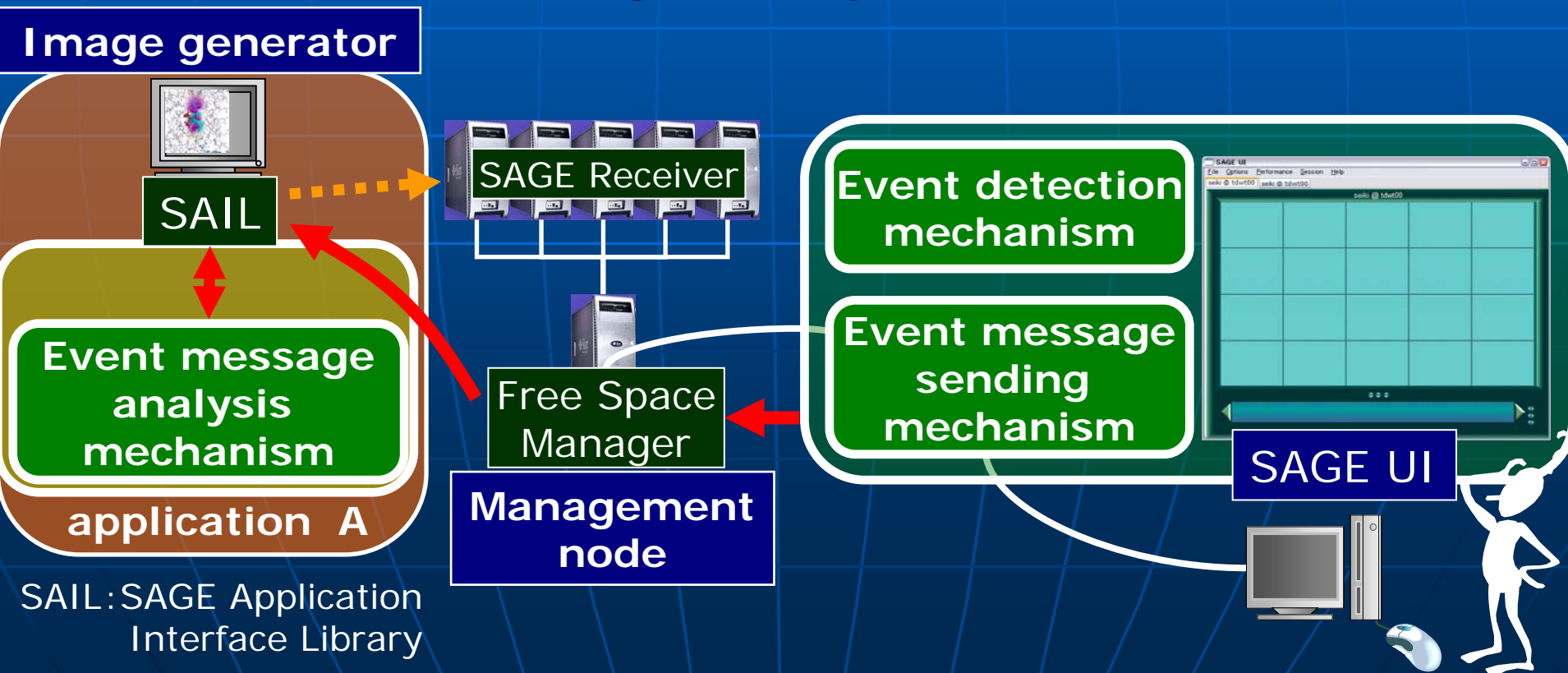
Goal & Assignment

- Enrich the operability of SAGE applications
 - Unification of interfaces
- To realize the function of event processing
 - Detect user input event
 - Transfer the event to application
 - Analyze and execution the event

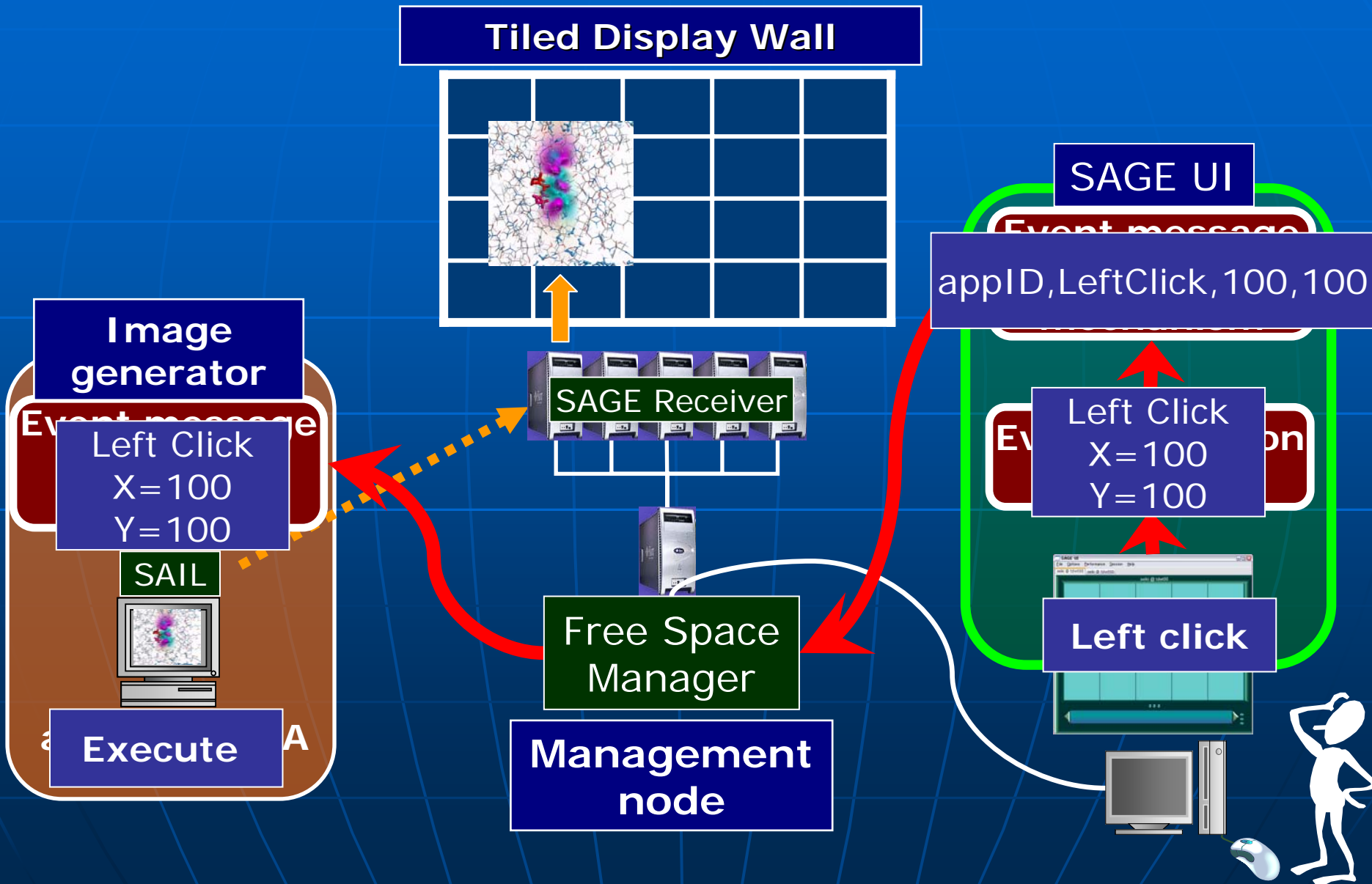


Approach


- Develop the Event Control Module
 - Event detection mechanism
 - Event message sending mechanism
 - Event message analysis mechanism

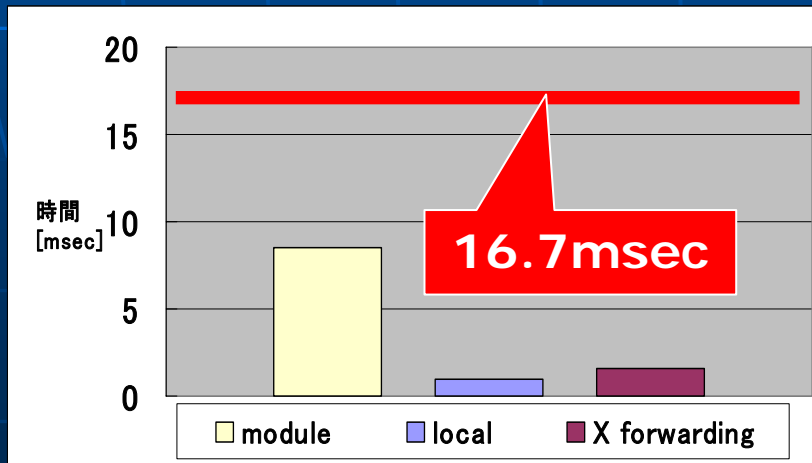


Event Control Module



Experimental results

- Response time was measured
 - Event Control Module
 - Direct control
 - X forwarding
- The renewal interval of movie is 1/60sec (60fps)  16.7msec/frame



Module : 8.49msec
local : 0.93msec
X forwarding : 1.55msec

Environment :
100Mbps LAN
AA of 100 times

Demo Video



Conclusion

- Event Control Module for SAGE was built
 - Achieved the apps control by SAGE UI
 - Unification of interfaces
- The operability of SAGE apps is enriched

This module contribute to the research that uses large scale data

Patch & Paper

- A patch file for Event Control Module will be released
- A paper about Event Control Module will be published

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Thank You !

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