



A Software Defined Networking Based Live Video Streaming Service

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GENI Cinema is an open, live multi-viewpoint video streaming service over the Internet

- Viewpoint control in the hands of viewer
- SDN capabilities make this possible

Applications: Education, Sports, Entertainment, Surveillance, ...

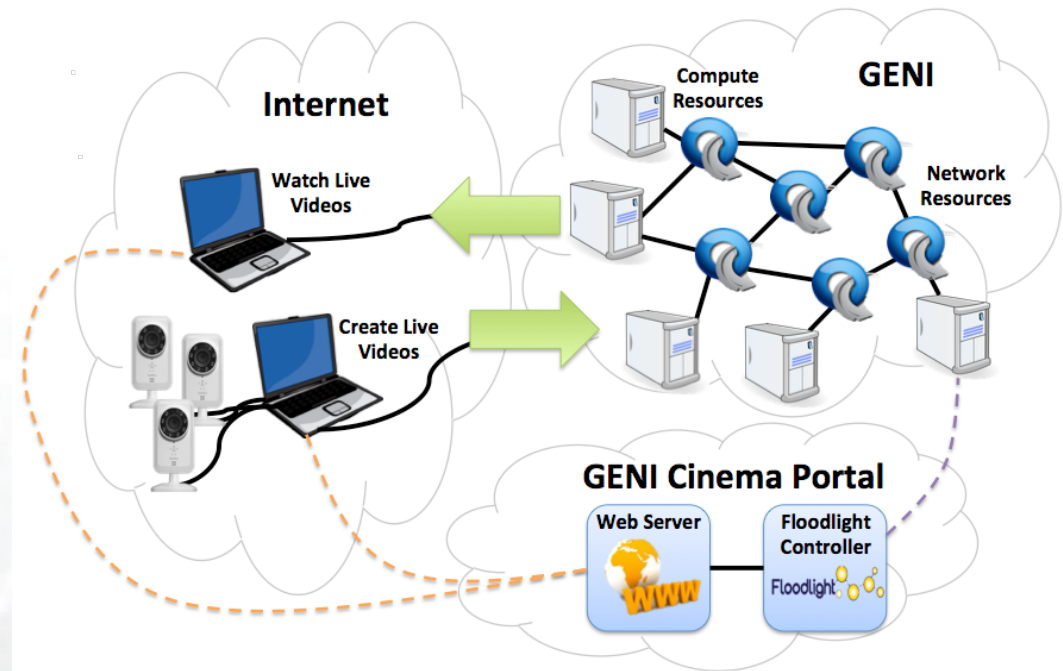
- For example, in educational setting
 - Multiple cameras capture and transmit an University lecture
 - Students view the lectures live
 - Students may independently select and switch between viewpoints

Limitations of Current Networks

- Current networks are not
 - Programmable
 - Highly-customizable
 - Cost-effective
 - Open
- GENI Cinema requires programmable, customizable, and open network to make efficient use of bandwidth resources

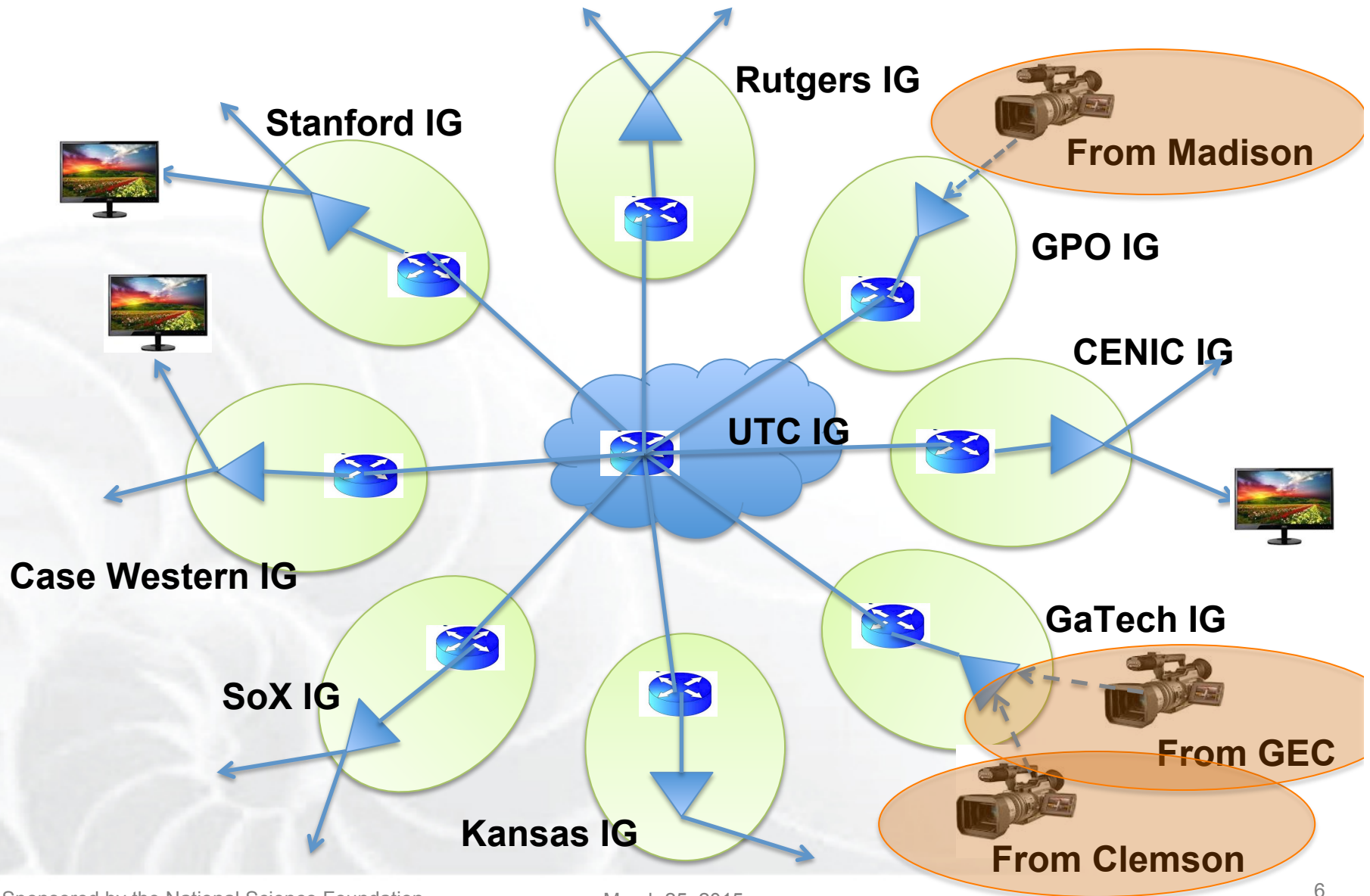
The “GENI” in GENI Cinema

- GENI provides
 - Programmable network infrastructure
 - Geographically distributed computation resources
 - Public accessibility
 - User/experimenter support
 - Enables efficient use of network bandwidth
 - Viewers to be geographically distributed





Today's Demonstration



- GENI Cinema
 - SDN-based live video streaming service
 - Built using GENI compute and networking resources
- Watch the plenary and other live events
<http://cinema.smartfuture2015.net>

