

CZo2: Remote Collaboration Over 8K Visualization Using UltraGrid and SAGE

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SITOLA

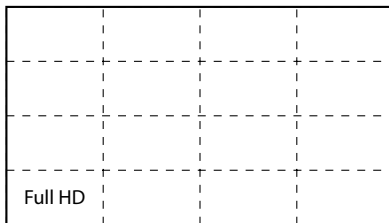


GLIF Technical Meeting, Fall 2012

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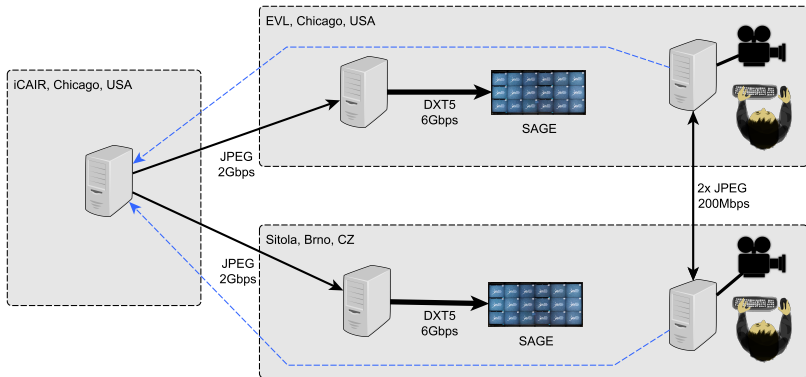


CZo2: 8K on a Single PC



- Just one PC handles 8K stream including (de)compression (GPU)
- Fully interactive (<100 ms in LAN, camera–display)
- Demo uses Searcher Movie kindly provided by iCAIR/HPDMnet

CZo2: Multi-Point 8K



CZ02: UltraGrid and 8K

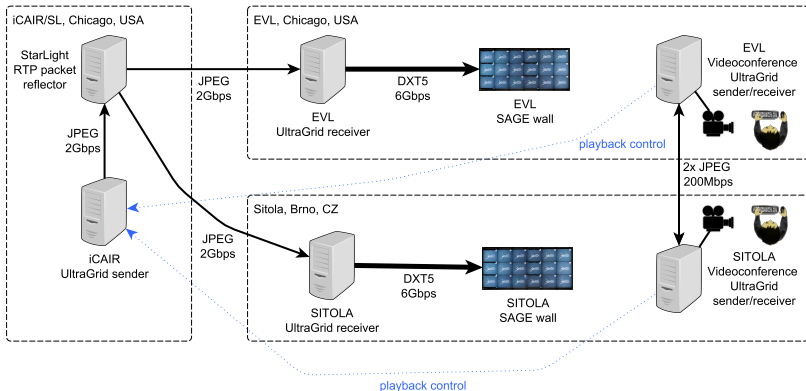
- <http://ultragrid.sitola.cz>,
<http://ultragrid.sf.net>
- 8K input/output
 - HD-SDI: uncompressed 4:2:2 with 4× Decklink Quad
 - file based I/O: uncompressed, compressed
 - SAGE based output: uncompressed, DXT1/5 compressed
- GPU-accelerated compression – 8K performance
 - CUDA JPEG: up to 1.5 Gpix/s = 4.5 GB/s on one NVIDIA 580GTX
<http://gpujpeg.sf.net>
 - CUDA DXT1/5: >1.5 Gpix/s
 - GLSL DXT1/5: underperforms due to OpenGL read-back issues

CZ02: Demo Slot



8pm – 9pm slot

CZo2: Detailed Setup



Thank you for your attention!

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