

Software Defined Networking for Multi-Camera Systems

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Multi-Camera Systems:

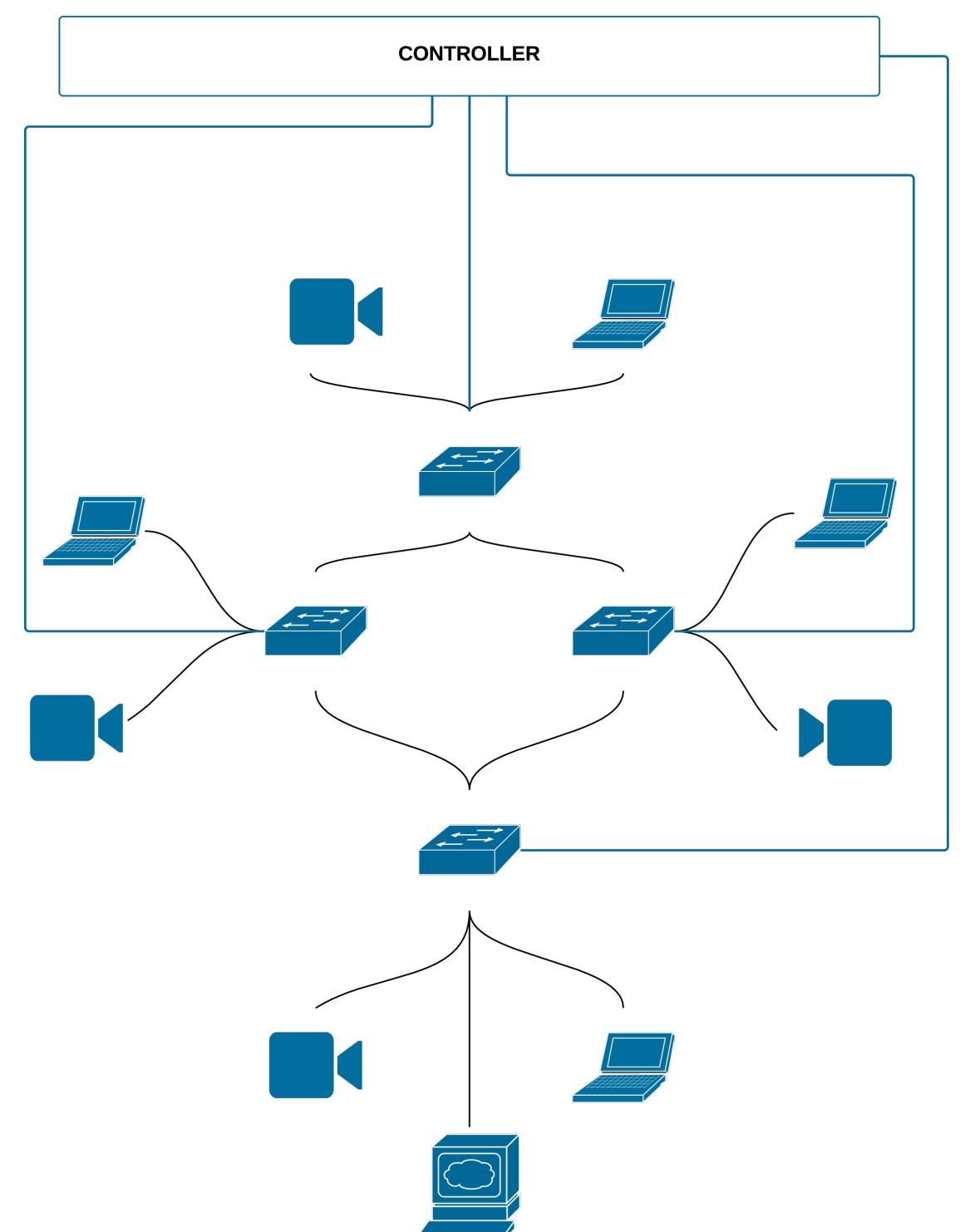
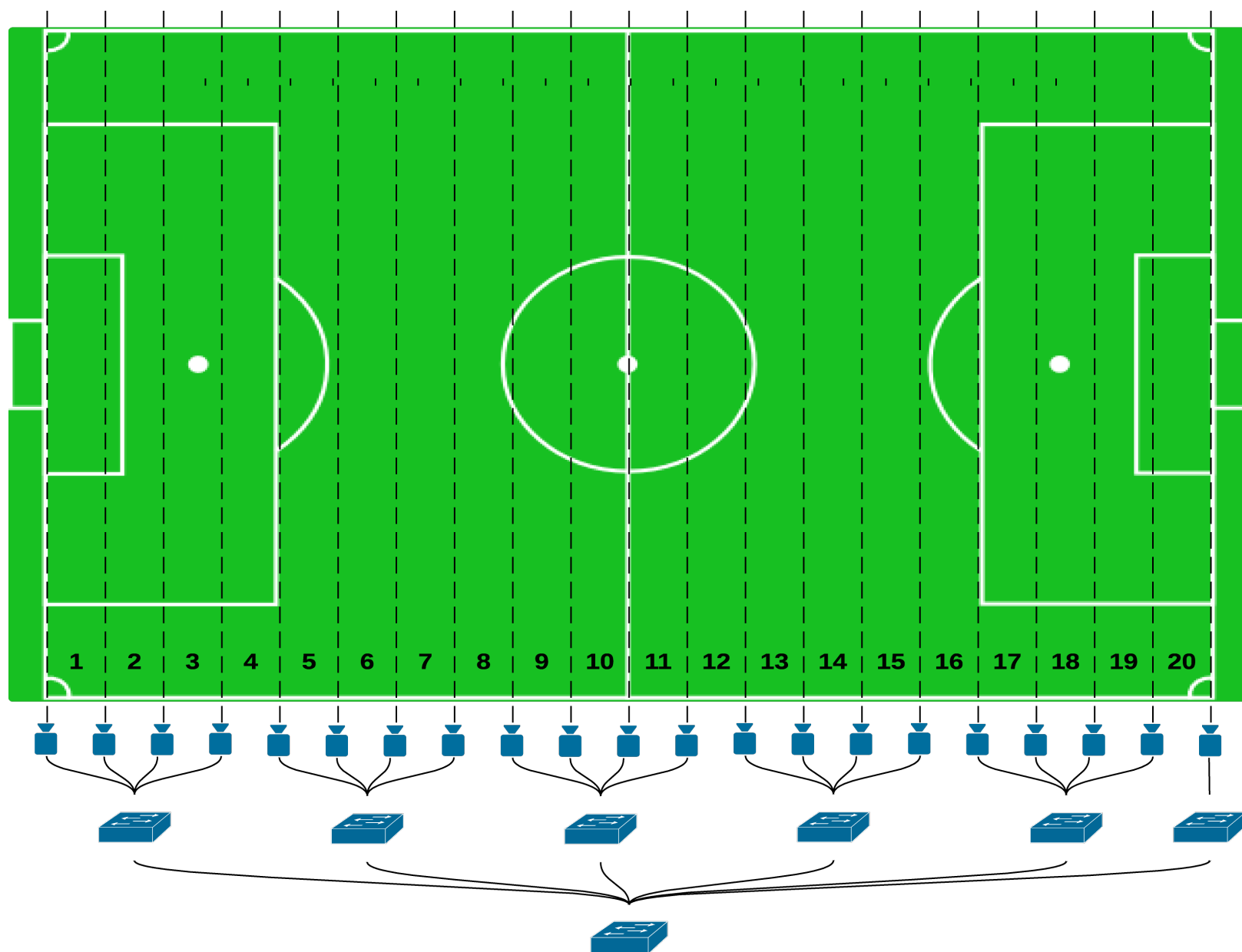
- Dynamic configuration needed
- Easy network control necessary
- Current technology: hard to control

Software Defined networking:

- Separation of control and data plane
- Dynamic and direct control
- Controller decides flow of traffic

Objectives:

- Investigation of possibilities of SDN for Multi-Camera Systems
- Investigation of scalability
- Creation of use case



Use Case – soccer pitch:

- Localization of ball in certain zone of field
- 2 cameras work together for 3D images: path needed
 - Dynamically: location of ball can change
- Location of ball → REST API → network controller module → retrieve camera information from SQL database → create path between 2 nodes → block superfluous traffic

Promotoren / Copromotoren:

Prof. Dr. Ir. Luc Claesen – Hasselt University (BE)

Prof. Dr. Chen Chien – National Chiao Tung University (TW)