



# SVG FOR IPTV

OLA ANDERSSON  
ERICSSON

# WHO AM I?

---

- › Ericsson Multimedia Unit
- › Client strategies for IPTV and Connected Home Solutions
- › Working with SVG since 2001

# WHAT IS IPTV?

---

- › IPTV – Internet Protocol Television
- › IPTV is TV, and other multimedia services, delivered over IP networks
- › Young technology compared to the traditional ways to deliver TV: cable, satellite and radio frequency broadcast
- › Gaining momentum from TV providers around the world

# WHY IPTV?

---

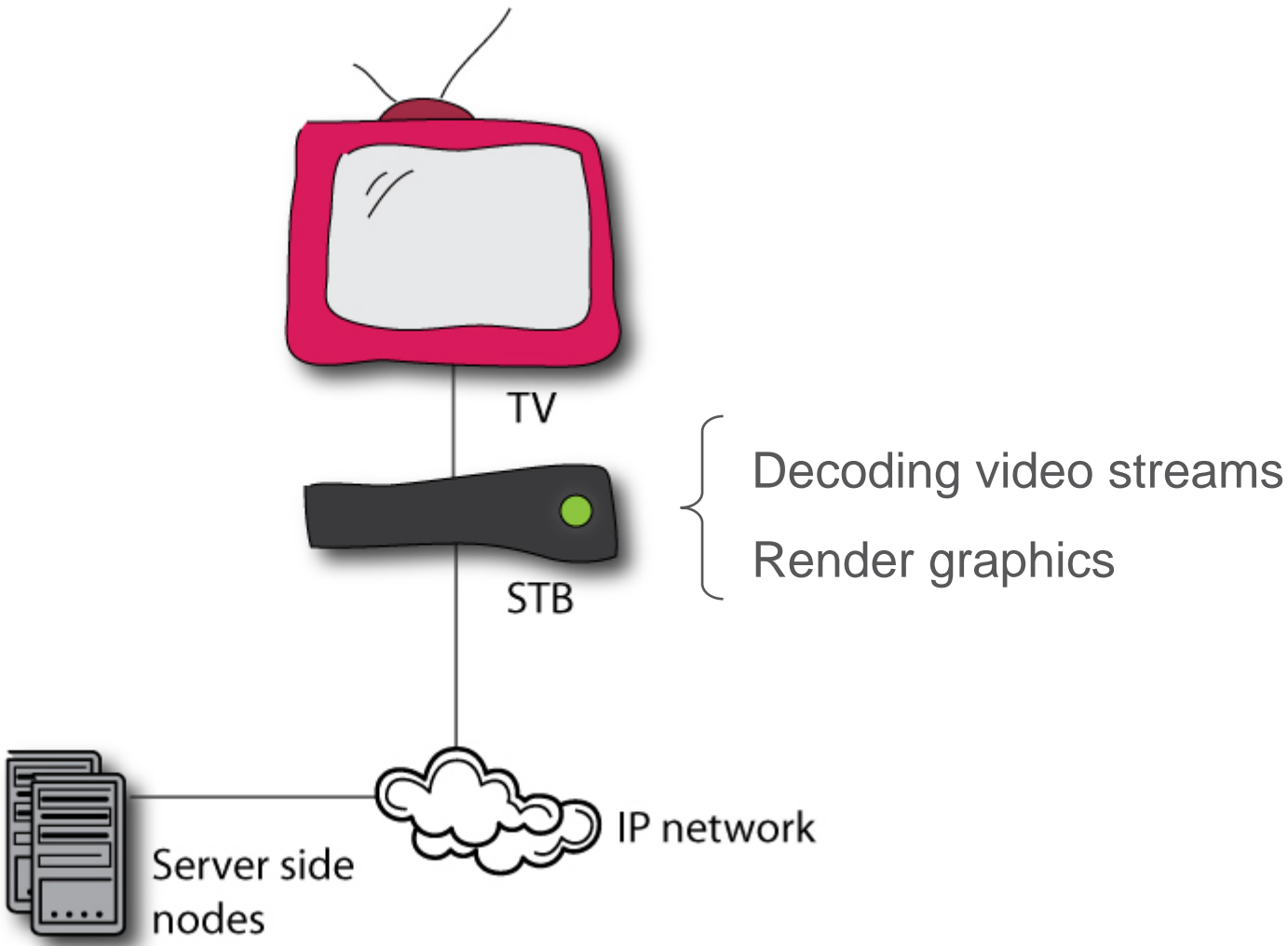
## For providers

- › Lower infrastructure cost
- › More attractive services

## For consumers

- › Increased competition => higher quality
- › More attractive services

# HOW IT WORKS...



# IPTV GUI TECHNOLOGIES

---

- › A number of different technologies are used for graphics rendering on IPTV STBs, c/c++, java, HTML, SVG, Flash...
- › STBs are very low in performance – traditionally hard wired solutions to get acceptable performance
- › Modern STBs with higher performance allows for thin client solutions
- › Thin client solutions allows the service provider to brand and customize the GUI, which is a very important requirement

# WHY WEB TECHNOLOGIES (HTML/SVG)?

---

- › Flexibility
- › Server-side aggregation
- › Standardized => multiple providers => better pricing and scalability situation

# HTML OR SVG?

---

- › Ericsson offers both SVG and HTML based solutions
- › Lately, all our customers require SVG
- › Very rich graphics and transition effects is a must today
- › Scalability is a key



# HOW DOES ERICSSON WORK WITH SVG?

---

- › Connecting SVG engine providers with platform providers in need of SVG support
- › Working with multiple SVG engine providers
- › SVG Tiny 1.2 ++
- › Speed is a key
- › SVG GUIs – building inhouse and using design firms

# IS SVG ENOUGH?

---

- › Ericsson has defined a number of TV extensions to SVG
- › Planning to standardize these features, in OIPF and/or possibly in W3C, and the new W3C Web on TV work
- › Also using "HTML5" APIs in conjunction with SVG:
  - WebStorage
  - WebWorkers
  - Widgets
  - ...

# OIPF MEMBERS



# IS SVG ENOUGH?

---

- › Ericsson has defined a number of TV extensions to SVG
- › Planning to standardize these features, in OIPF and/or possibly in W3C, and the new W3C Web on TV work
- › Also using "HTML5" APIs in conjunction with SVG:
  - WebStorage
  - WebWorkers
  - Widgets
  - ...

# SVG EXTENSIONS NEEDED

---

- › The ability to seek in time and speed (fast forward/rewind) in a video element's time container
- › More granularity in media related events (buffering info etc.)
- › Priority rules for video elements
- › Control of subtitles, audio and teletext within a media stream
- › Clipping
- › TV key identifiers

# QUESTIONS...

---



**ERICSSON**