

SVG Player

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Table of contents

- Introduction
- Architecture
- Implementation
- Conclusion

Motivation

- NSN project
- Customized NS2
- xmlprinter & svgprinter

Tool for analysis

- Combined analysis of xml-based and svg-based results
- SVG Player — the first stage

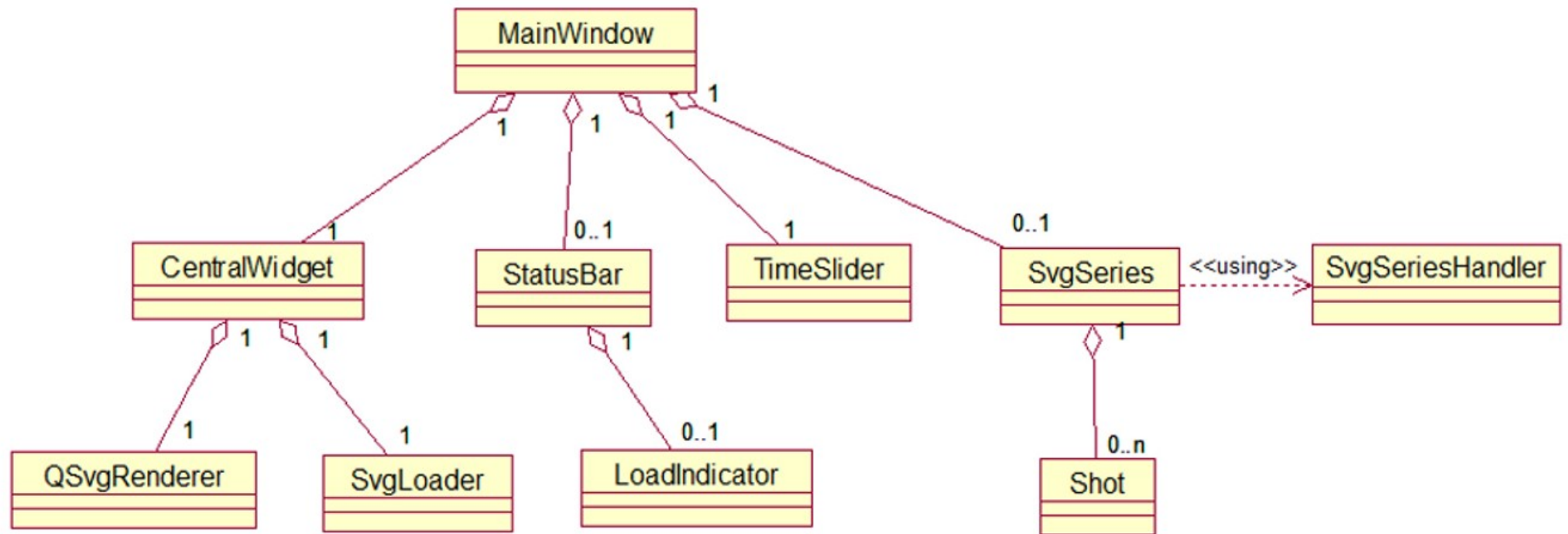
Use Case

- Viewing a set of SVG images
- Forward/backward navigation
- Declaration a set and saving it
- Set playback in direct and reverse orders
- Editing of a set

Development tools

- C++
- Qt Framework
 - QtGui Module
 - QtSvg Module
- Qt Creator IDE

Class diagram

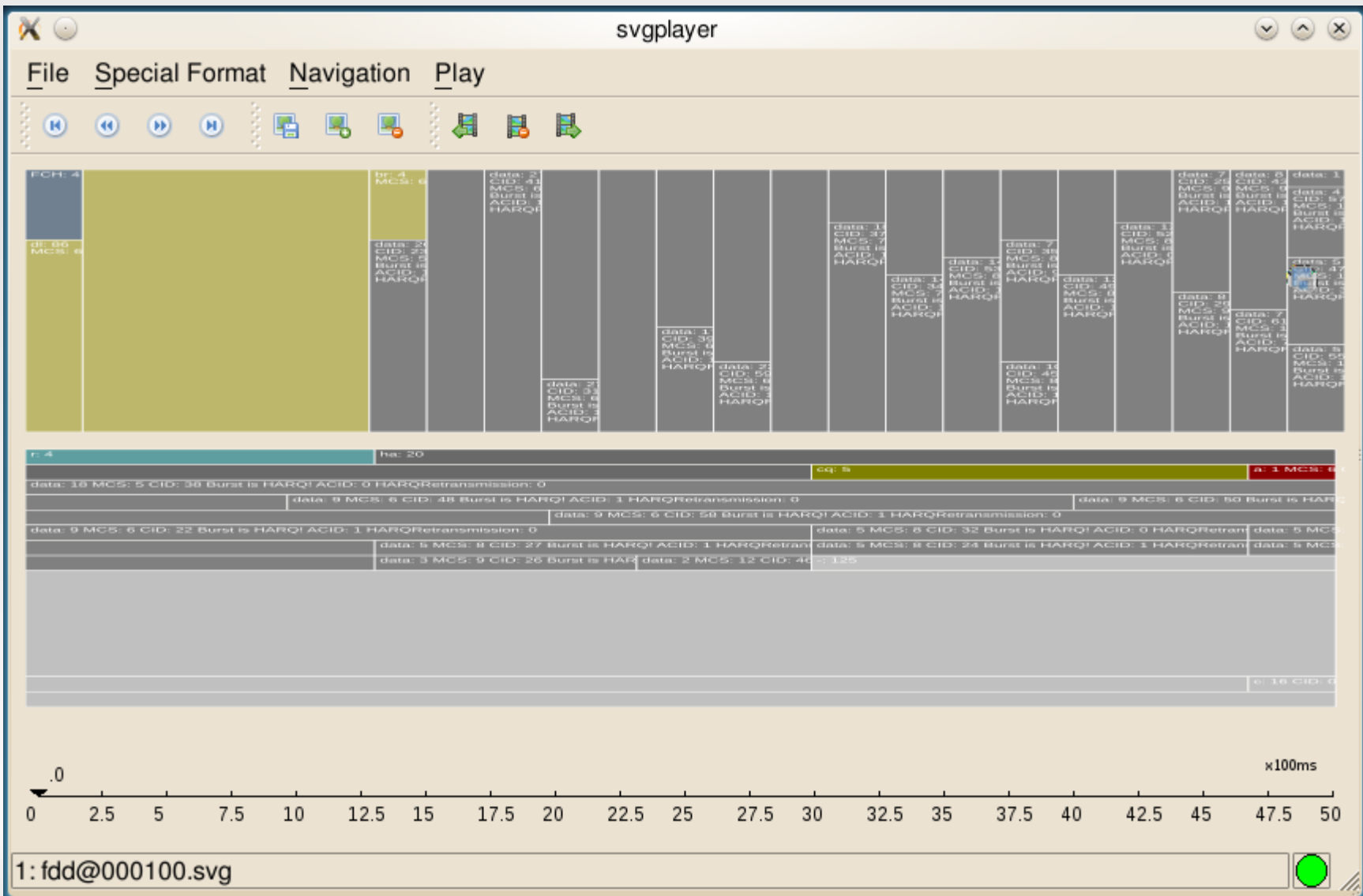


Data model

- .set files
- Image ← certain time moment
- Images naming format `name@nnnnnnn.svg`
- Calculating time intervals

Data model

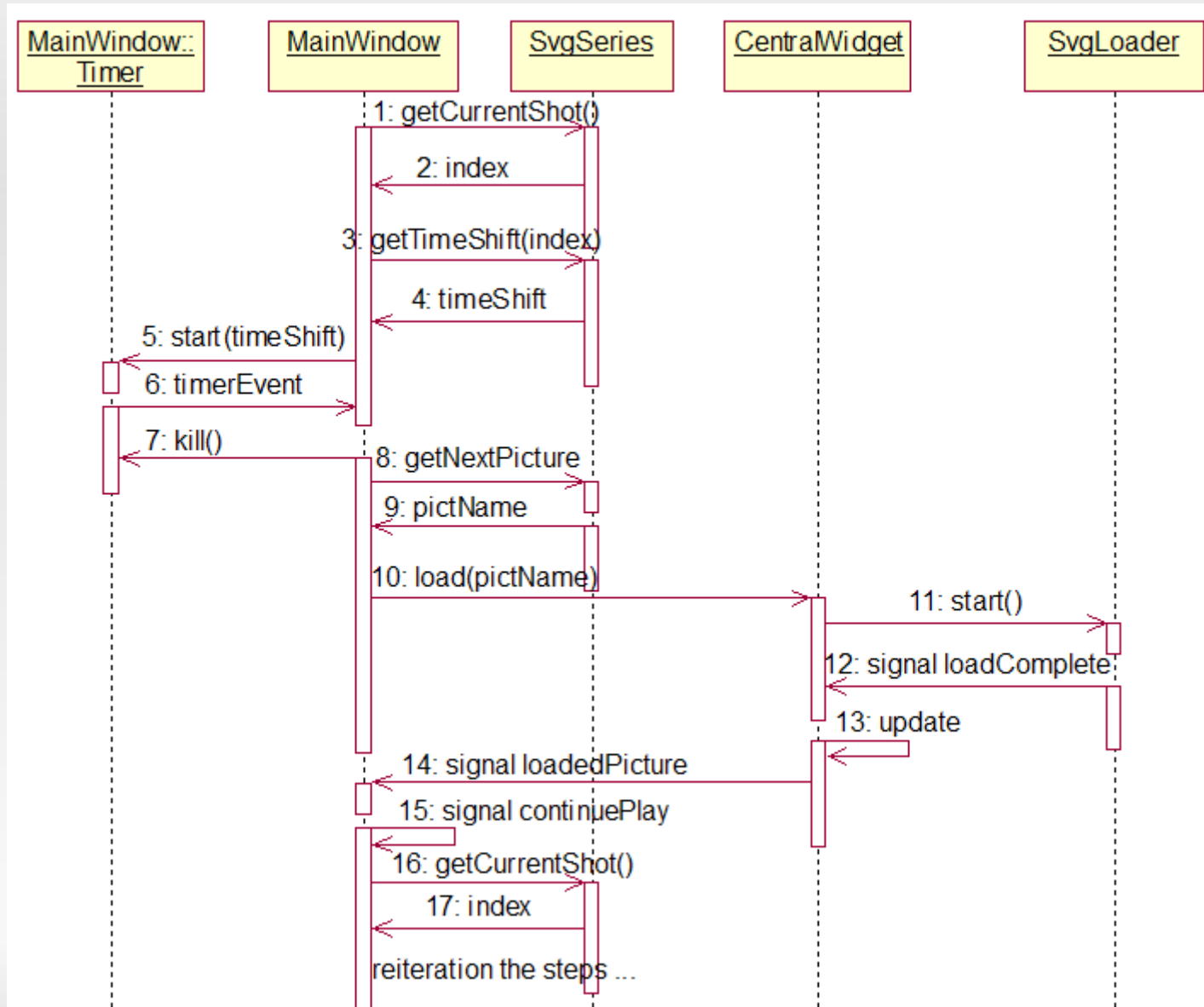
```
<?xml version ="1.0"?>  
<svgseries>  
  <svgshot>  
    <name>fdd@000100.svg</name>  
    <timeshift>0</timeshift>  
  </svgshot>  
  <svgshot>  
    <name>hfdd@000783.svg</name>  
    <timeshift>683</timeshift>  
  </svgshot>  
</svgseries>
```



Playing as a video stream

- The loading time exceeds the interval
- Synchronize the playback timer and the period of loading picture

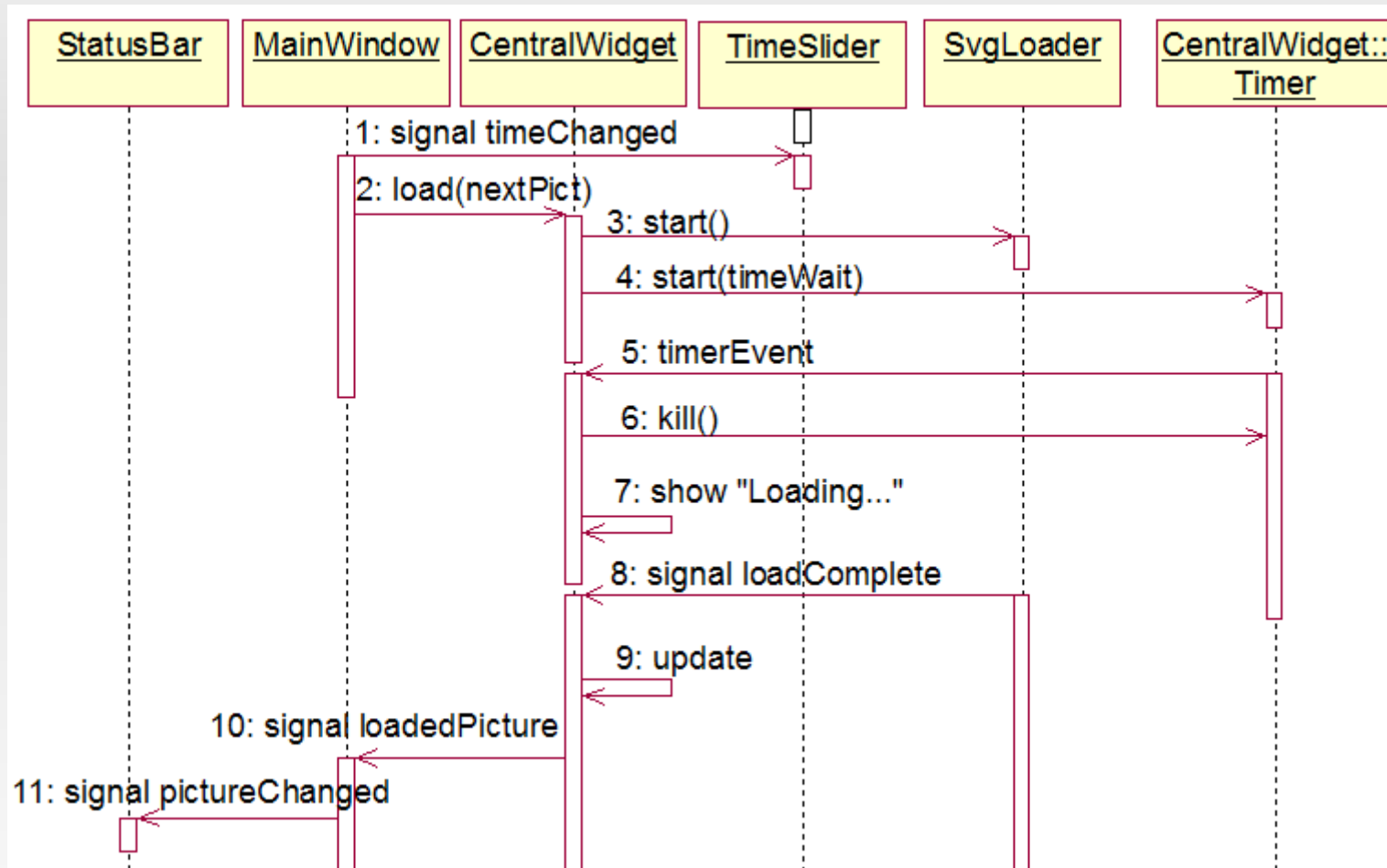
Playing as a video stream



Rendering

- Long process of picture loading → the main window buzzes
- Load pictures in another thread
- Separate processes of loading and rendering

Rendering



Conclusion

- The SVG Player is mostly completed
- Besides showing NS2-related images it can be used for playing any SVG series as a cartoon
- Integration XML-based and SVG-based results

Drawbacks and alternative solutions

- Image files with a big size and very short time intervals
- Load blocks of pictures before they are shown
- Series with a big number of images

Links

- SVG Player project page
 - <http://fruct.org/svgplayer>
- Open source code
 - <https://sourceforge.net/projects/svgplayer/>

Thanks for your attention!