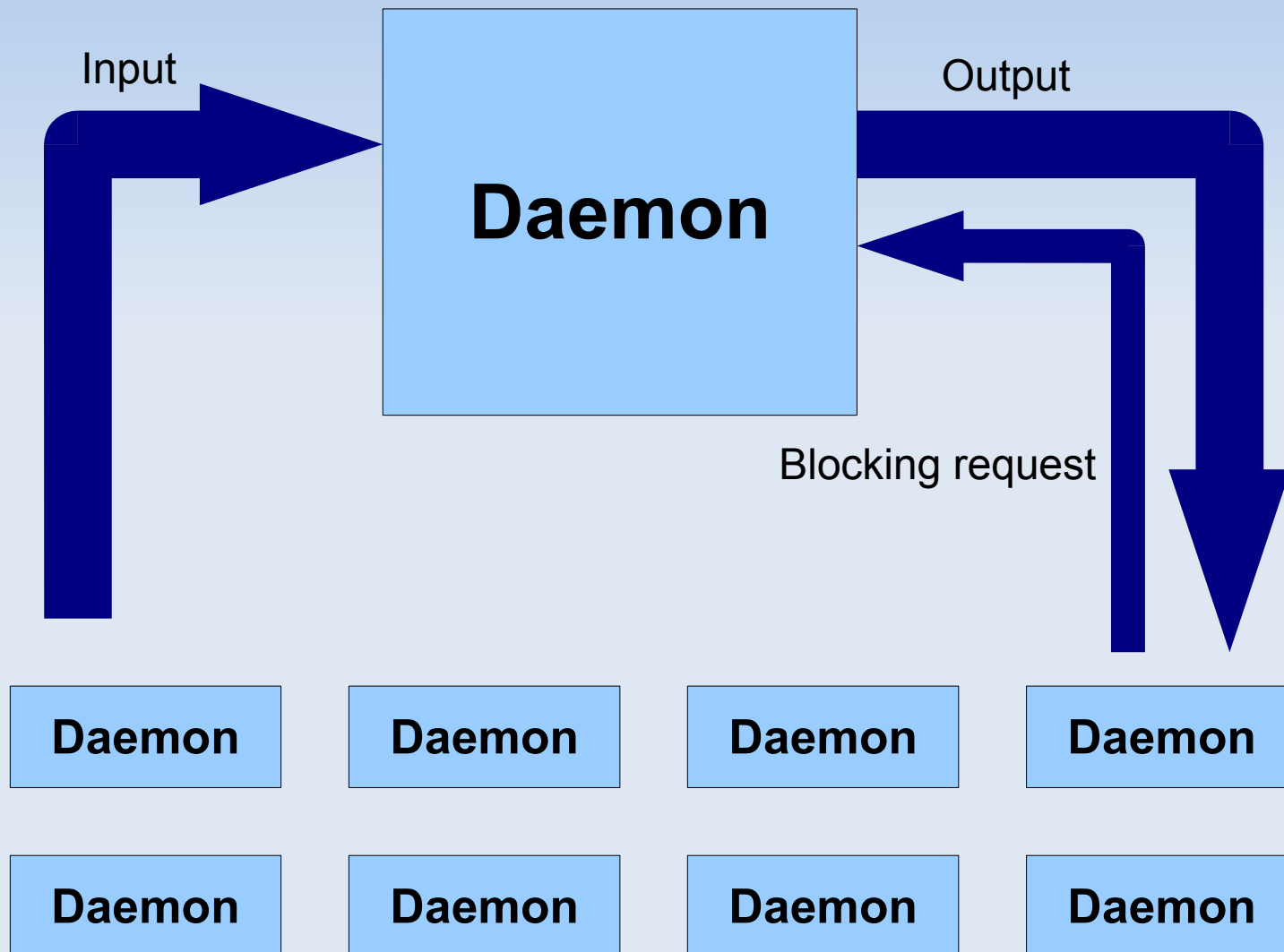


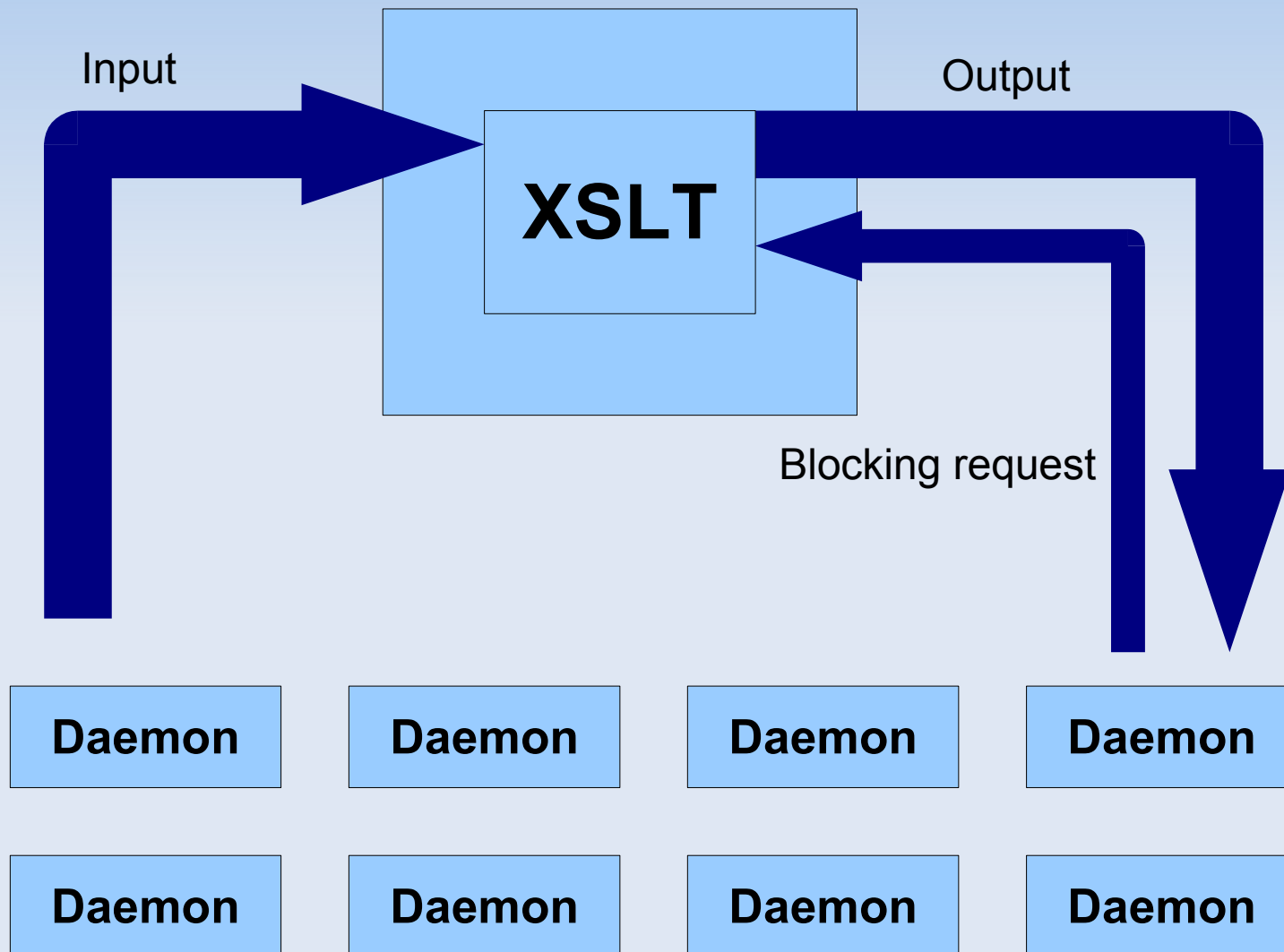
Cataphonix

- A distributed XML-based music application
- Real time XML: hear the latency
 - Or just hear the latency of the midi synthesizer
- Collection of daemons in Java and XSLT

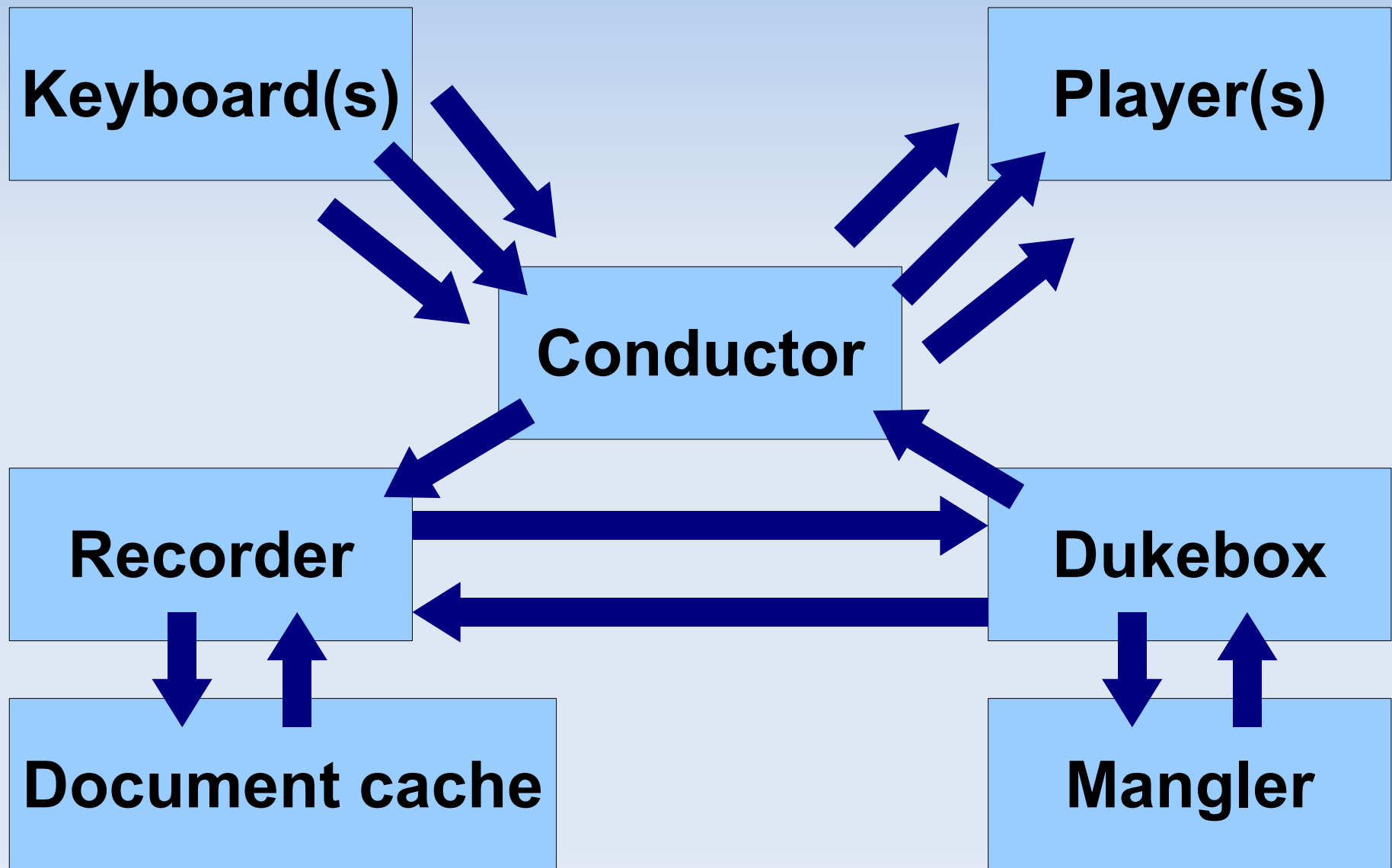
Daemon interface



Daemon interface



Daemons in Cataphonix



Event routing

```
<xcr:event from="keyboard-0" to="conductor" service="conductsound">  
  <note-on keynote="60" velocity="127" voice="piano"/>  
</xcr:event>
```

Conductor daemon

```
<xcr:event  
  service="recordsound">  
  <note-on .../>  
</xcr:event>
```

```
<xcr:event to="player-12"  
  service="playsound">  
  <note-on .../>  
</xcr:event>
```

```
<xcr:event from="conductor"  
  to="recorder"  
  service="recordsound">  
  <note-on .../>  
</xcr:event>
```

```
<xcr:event from="conductor"  
  to="player-12"  
  service="playsound">  
  <note-on .../>  
</xcr:event>
```

(Java queue)

Recorder daemon

(UDP connection)

Player daemon 12

XSLT echo daemon

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>

<xsl:stylesheet version="2.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:xcr="http://xacerbate.co.uk/xcr"
  exclude-result-prefixes = "xsl xcr">

  <xsl:output omit-xml-declaration="yes" method="xml"
    encoding="UTF-8" indent="yes"/>

  <xsl:template match="/">
    <xcr:events>
      <xsl:apply-templates select="*" />
    </xcr:events>
  </xsl:template>

  <!-- Handle service "echo" -->

  <xsl:template match="/xcr:event[@service='echo']">
    <xcr:event service="echo" to="{@from}">
      <xsl:copy-of select="*" />
    </xcr:event>
  </xsl:template>

</xsl:stylesheet>
```