# *Ak*

## *An Audio Toolkit for Tcl & Tk*

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June, 1993

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# Outline

❏ *AudioFile*

❏ *Ak details and code examples*

❏ *Implementation*

❏ *Future work*

# *AudioFile*

❏ **Network-transparent, device-independent audio system**

❏ **Emphasis on client-side handling of audio**

❏ **Unique model of time**

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# Abstractions

❏ *Connections to AudioFile servers:*
```
audioserver main "north-fork:0"
```

❏ *Device contexts:*
```
main context room-device -device 1
```

❏ *Requests ("audio widgets")*

❏ Types:  play, action, record, passthrough

❏ Operations: create, config, delete

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# Request Examples

❑ ***Create play request:***
```
set req [room-dev create play "hello.au"\
  -start {now +5s} -stop {now +6s}\
  -offset {+10s}]
```

❑ ***Configure the request:***
```
room-dev reqconfig $req -stop {now}
```

❑ ***Create an action:***
```
room-dev create action \
  "puts stdout STOP!" -at {now +5s}
```

# Events

❏ *AudioFile events:*
*ring, hookswitch, loop current, DTMF detect*

```
phone-dev bind <RingStart> \
 "phone-dev hook off"
```

❏ **Command substitution**

# *Implementation*

- ❏ *2,500 lines of C*

- ❏ *Request type table*

- ❏ *Audio time scheduler*

- ❏ *Mostly independent of Tk*

# The Future

❏ *Lots of work left!*

❏ *Applications:*

❏ Full-featured tape deck

❏ Multimedia presentations and tutorials

❏ Telephone inquiry system

❏ *Design a signal processing architecture*

❏ *First release at end of summer*