OpenPhone

OpenPhone Platform Overview

- Background and goals:
  - Telephone based-systems
  - Why OpenPhone?
- Architecture
  - Platform
  - Authoring tool: DialogPalette

Telephone-based systems

- Free and natural access to information
  - Overcome computer literacy barrier
  - Easily accessible
  - Various disabilities
- Information of local relevance
  - Local news, weather reports, training, etc
- Human Factors
  - Local languages, culturally appropriate interfaces

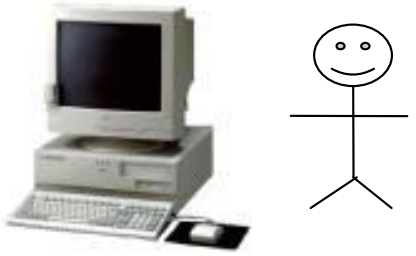
Why OpenPhone?

- Free, open, effective
  - Existing IVR solutions not satisfactory
- Empowering communities
  - Non-expert developers
  - Cost-efficient and scalable
  - Support for HLT required in developing-world context

How does it work?

Authoring tool

- An information provider can design an information dissemination application via the authoring tool.
- The prompts for the various phases can be recorded.
- The designer will be guided by the use of templates.

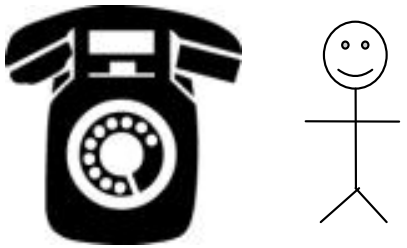


Application Designer

How does it work?

Telephone access

- Information users will access the application by phoning a number.
- Information users can listen to the voice prompts and interact with the system by entering requested key presses (DTMF/*Touchtone*)



Information User

Architectural Overview

- 2 Major components
  - Service designer (Authoring Tool)
  - Service deliverer (Deployment Platform)

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Architecture: Platform

- Deployment platform
  - Link between telephony services and end-user
  - Cost-effective, flexible and reliable
  - Expandable to accommodate required HLT components

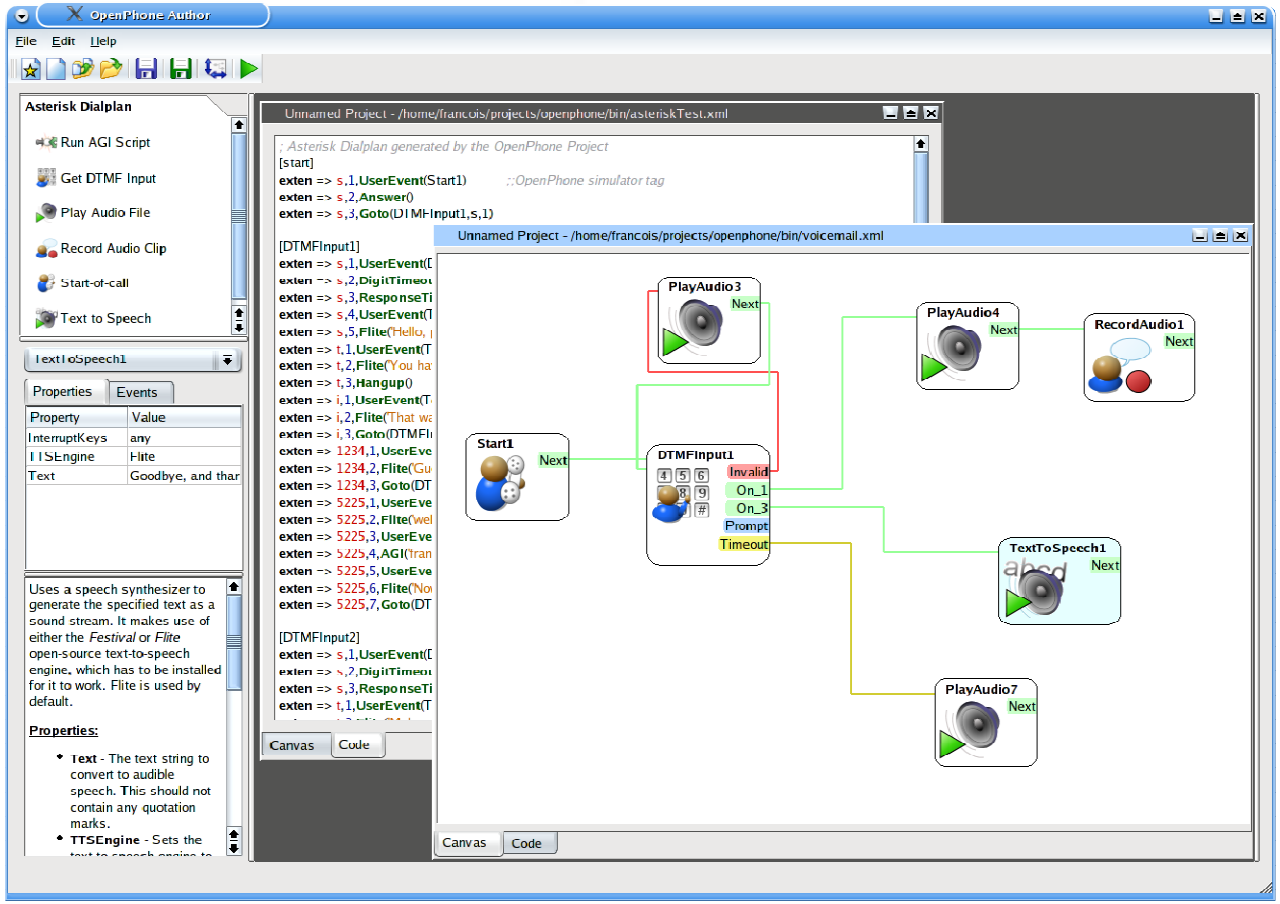
- Asterisk – The Open Source PBX
  - Middleware between Internet and PSTN
  - Support for VOIP and analog hardware interface cards
  - Modular, expandable structure
  - Non-intuitive configuration hampers IVR development

Architecture: DialogPalette (Authoring tool)

- Visual design environment
  - Hides user from Asterisk programming paradigm
  - Intuitive, mouse-driven interface
  - Focuses on logical intent rather than implementation detail
- Powerful code generator
  - Constructs Asterisk code in real-time
  - User expandable
- Tight Asterisk integration
  - Accurate application simulation

DialogPalette Overview

- Intuitive, easy-to-use interface
  - Event Nodes: graphical IVR building blocks
  - Call flow dictated by connecting nodes
  - Behaviour modified via object inspectors
  - Provides on-line help
  - Requires no programming knowledge



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Questions