

PARAGON SEMVOX ODP S3

THE LEADING TECHNOLOGY FOR PROACTIVE INTERACTION AND ASSISTANCE SYSTEMS

Incorporating the latest AI technologies for a truly natural interactive dialog experience

Flexible dialog management is one of the key features of ODP S3-based assistance systems: users can phrase their input spontaneously and intuitively. The system understands complex requests and is able to ask in case of incomplete or vague input.

ODP S3- based systems **support the user proactively**: ODP S3 is able to process context factors and the user's personal preferences. These systems take initiative and make recommendations and suggestions.

” Compared to conventional speech recognition, ODP S3 offers a set of unique features: natural language understanding and intelligent system behavior ”



FEATURES

- ▶ **GOAL-ORIENTED INTERACTION**
- ▶ **PROACTIVE BEHAVIOR**
- ▶ **SUPPORTS NATURAL DIALOG PHENOMENA**
- ▶ **TRUE MULTIMODALITY**
- ▶ **ODP S3 MAKES USE OF CONTEXT KNOWLEDGE**
- ▶ **USER MODEL & PERSONALIZATION (PROFILING)**
- ▶ **MACHINE LEARNING**
- ▶ **REASONING**
- ▶ **SEMANTIC TECHNOLOGIES**
- ▶ **TASK-BASED DIALOG MODEL**
- ▶ **MIXED INITIATIVE**
- ▶ **HYBRID SPEECH RECOGNITION AND PROCESSING**
- ▶ **NATURAL LANGUAGE UNDERSTANDING (NLU)**
- ▶ **NATURAL LANGUAGE GENERATION (NLG)**
- ▶ **MULTI-SLOT FILLING**

SDK & TOOL CHAIN

ODP S3 enables integrators to develop next-generation dialog systems and to integrate them into their own existing systems:

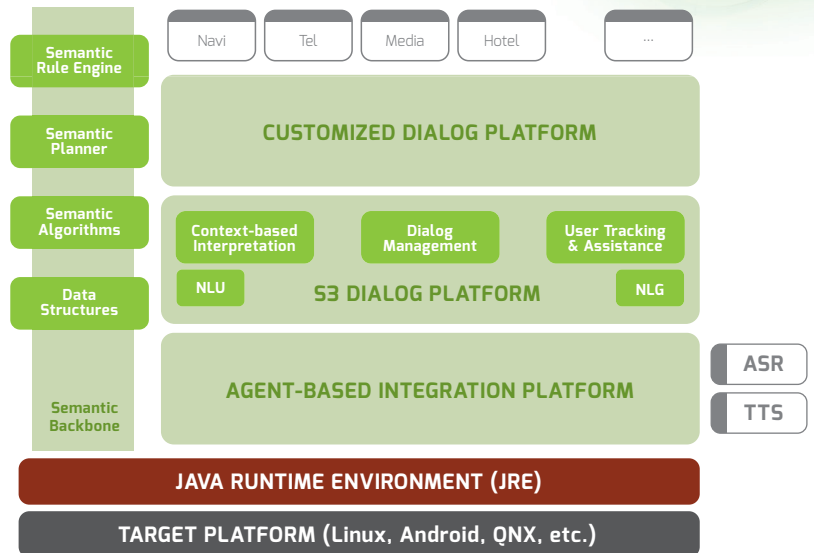
- ▶ The **ODP Workbench** provides an integrated tool chain based on Eclipse that supports all steps of the development process and contains a Software Development Kit (SDK)
- ▶ The **SemVox Developer Portal** provides a single point of access to tutorials, examples and the API documentation
- ▶ The **ODP Workbench** supports the entire development process, from the system specification to the generation of knowledge sources, the system test and the deployment on the target platform
- ▶ Intelligent tools such as Content Assist, Syntax Check and Wizards support the developers and enhance both **productivity** and **quality**
- ▶ **Test cases** and **system documentation**, which are considered vital for the QM process, can be generated automatically directly from the system specification
- ▶ The system environment can be **integrated already during dialog modeling**. Complexities thus can be identified early to implement the optimal solution for the interface between voice control and the corresponding applications

PLATFORM

- ▶ Java-based modular platform for natural-language dialog
- ▶ Write Once, Run Anywhere: Dialog components can be deployed on different target platforms
- ▶ Small footprint: Low resource demands, full range of features on embedded systems (also for J2ME)
- ▶ Target platforms: Linux x86/ARM, QNX Neutrino, Android, Windows Embedded, etc.
- ▶ Highly integratable: Android Apps, OSGi-Container, Servlet-Container

” With ODP S3, developing dialog components is as easy as developing apps for smart phones. Development times become significantly shorter ”

” The basis of ODP S3: AI-technologies that enable the implementation of intelligent solutions on embedded systems ”



ODP S3 SYSTEM OVERVIEW

