



What's New in this Release

VoiceObjects 7 provides powerful functionalities to enable the development, deployment, management and analysis of self-service phone portals over multiple channels including voice, video, text and Web.

These *Release Notes* contain a summary of the changes between VoiceObjects 6 and VoiceObjects 7, including bug fixes and new functionality. They also summarize the known limitations for VoiceObjects 7.

New Functionality

This section summarizes the major new functionalities that are introduced with VoiceObjects 7.

For an introduction to the enhanced multiple phone channel support that comes with VoiceObjects 7 refer to Chapter 10 – *How to Support Multiple Phone Channels* in the *Design Guide*.

For detailed information on the new utterance recording functionality refer to Chapter 6 – *Recording of Utterances* in the *Deployment Guide*.

Object library

- **Support for multiple phone channels**
All applicable objects now provide a new channel filter to easily build applications that can serve multiple phone channels. This makes it possible to build the dialog flow once and deploy it simultaneously e.g. as a voice and a mobile Web application. Refer to Object enhancements in Chapter 10 - *How to Support Multiple Phone Channels* in the *Design Guide* for details.
- **Format object**
The Format object now consists of a set of Format items that can be defined separately by channel, language, and custom layer condition. This makes it possible to format dynamic data in different ways e.g. for the voice and the mobile Web channel.
- **Presentation output**
Hyperlinks and other objects now provide an additional presentation output that can be used to identify them. All the usual mechanisms such as random prompting and layer filtering are of course available here, too.
- **Title output**
Module objects now provide an additional title output that is particularly useful in the new text-based phone channels to show the caller which branch of the application is currently active.

VoiceObjects Desktop

- **Usability enhancements in object editors**
A number of object editors have been enhanced to allow easier re-ordering of items.
- **Control Center enhancements**
The Control Center now connects to server clusters using Web services. This enables new options to monitor servers both locally and remotely, as well as using the same or different Metadata Repositories. In particular, several



installations such as e.g. test and production can now be monitored and controlled simultaneously.

VoiceObjects Server

- **Support for multiple phone channels**
VoiceObjects Server now delivers applications to four different phone channels (Voice/DTMF, Video, Text, Web) from a single application definition, significantly reducing maintenance effort and enabling integrated caller behavior analysis across all these channels.
- **Utterance recording**
When working with VoiceXML 2.1 compliant media platforms, VoiceObjects Server can now store and manage the actual recorded caller input. Tightly integrated with Infostore, this enables in-depth analysis of application problems such as incomplete grammars. Refer to Chapter 6 – *Recording of Utterances* in the *Deployment Guide* for details.
- **XDK enhancements**
VoiceObjectsXML has been adjusted to reflect the changes made to individual objects (see above).
- **Session variables**
Session variables can now be defined on the Service object; these are populated when a service is invoked through a `<subdialog>` call from VoiceXML. In addition, session variables can be used to extract custom information provided by the media platform.

Storyboard

- **Video objects**
Alternative texts for Video objects can now be handled using the Storyboard Manager.

Infostore

- **Utterance Recording**
Information about the recordings of caller input is tightly integrated with the information about each individual input state of a call. This makes it possible e.g. to quickly identify input states with a high number of No Match events, and to immediately listen to caller inputs to determine what they actually said. See Collected Data in Infostore in Chapter 6 – *Recording of Utterances* in the *Deployment Guide*.
- **Recordings**
Information about recordings made using the Recording object is now also stored in Infostore.
- **Support for multiple phone channels**
Infostore information is available for all supported channels and tagged accordingly, so that caller behavior analysis can make full use of it.
- **Enhanced support for Module sequences**
Information about the Module objects visited by callers are now written to Infostore in even greater detail, enabling out-of-the-box reports that provide valuable insight into caller behavior.



Analyzer

- **Pre-defined reports added**
New pre-defined reports bring the total to 48 out-of-the box reports for business analysts and marketing, designers and developers, and system administrators and operators.
- **New pre-defined reports on utterance recording**
Developers can analyze application usage and customer behavior on different levels. With VoiceObjects 7 developers can now also access the lowest level of detail, the single utterance recordings, gaining insight into what callers said.
- **New module subsequence analysis**
A set of powerful new reports is added enabling out-of-the-box subsequence analysis of modules. These reports provide insight into how users navigate through the application. The reports can be used to easily analyze what customers did before or after a specific module or how they navigated between two selected modules. Users gain customer behavior analysis without any additional development efforts.
- **New reports for multiple channel applications**
Additional new reports provide information about the usage of the different phone channels and media platform drivers.
- **Added support for the following Business Intelligence Tools**
Business Objects XI
MicroStrategy 8

VoiceObjects Studio

- **Control Center enhancements**
Connections to multiple server clusters can now be defined and maintained, so that several different installations (e.g. test and production) can be monitored and controlled simultaneously.

Media platform drivers

Support has been added for the following media platforms:

- Aspect CSS 7.2
- Genesys Voice Platform 7.5
- HP OpenCall Media Platform Video 1.0
- I6NET VXIasterisk 1.5
- Microsoft Speech Server 2007
- Unisys Open Services Platform 4.8
- VoiceGenie 7.1

Support has been enhanced for the following media platforms:

- Avaya IR 2.0/3.0
- Avaya Voice Portal 3.0/4.0
- Intervoice MTC VXML Browser 3.0.1
- Nortel MPS 3.0
- Nuance Voice Platform 3.1



- Voxpilot Open Media Platform 2.5-3.1

Support has been added for the following USSD browsers:

- Cellicium Cellcube 3.6
- Sicap USSD Menu Browser 3.2

Support has been added for the following Web browsers:

- Mobile Web XHTML 1.0

Support has been added for the following Business Intelligence platforms:

- Business Objects XI
- MicroStrategy 8

Bug Fixes

VoiceObjects 7 fixes the following issues:

- A problem in the dialog flow of the Confirmation object when directly correcting an item from the initial confirmation request
- Several small issues in the VoiceObjectsXML import and export

Known Limitations

The following limitations are known to exist with VoiceObjects 7:

- An error occurs if the REFRESH() or INIT() functions are used on a Variable or Collection object before it has been evaluated at least once.
- Due to a problem on the Cellicium Cellcube USSD browser, free-form inputs do not support hyperlinks.
- VoiceObjects Desktop masks XML-relevant characters (<,>,',") in object properties (Short Description, Comment, Keywords, Error Description, Version Description).
- The Debug Viewer has problems displaying characters entities (such as e.g. ä).

Upgrades

The following upgrades were performed for VoiceObjects 7. They may require adjustments in existing applications:

- The *findrow* function has been enhanced to be more versatile in finding data within collection structures. In isolated use cases, this may lead to changed behavior in existing applications.
- Tuning properties are now rendered into VoiceXML markup even if their value is the empty string (previously they were ignored in this case). If your application relies on the old behavior, it may need to be adjusted.
- The default import/export format is now VoiceObjectsXML providing smaller, readable files and faster processing.



- Imports from VoiceObjectsXML now perform implicit upgrades to the current VoiceObjects version. It is therefore crucial that the correct version information is provided in the `version` attribute of the `<VoiceObjectsXML>` element. This can be one of 5.1, 5.2, 6.1, 7.1.



Tip: During Metadata Upgrade from a previous version of VoiceObjects to VoiceObjects 7.1, the existing application will be treated as belonging to the voice channel. This makes it easy to extend existing applications to new channels such as text or Web.