# **TekIVR - SIP Interactive Voice Response System**

TekIVR is a SIP Interactive Voice System (IVR) which provides "Call Attendant" function (Based on RFC 3261) runs under Windows (Vista-11, 2008-2022 Server)

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TekIVR - Settings

## Major features

- Simple, easy to use interface.
- You can create your own IVR scenario using builtin scenario editor. You can select your own audio files to be used in IVR scenario (They must be a wav file in 16 bit per sample, 1 channel and 8000 Hz sampling frequency).
- TekIVR supports Automatic Speech Recognition (ASR) and Text to Speech (TTS) with Microsoft SAPI, Google Cloud SAPI, Azure Cloud SAPI and MRCPv2. You can use Speech Synthesis Markup Language (SSML) while defining prompts.
- TekIVR can act as Proxy between MRCP v2 based application servers and SAPI-Google Speech based speech engines. TekIVR allows MRCP v2 based application servers to use SAPI and Google Speech based TTS and ASR services.
- Supports G.711 A Mu law and G.722 codecs.
- Supports NAT traversal. TekIVR also supports UPnP.
- Call transfer accomplished by using SIP REFER method (*RFC 3515*), Bridge or by sending DTMF (*RFC 2833 / SIP INFO*).
- TekIVR has a built-in SIP presence client and can get an extensions' online status prior to transferring a call to the extension. You can also monitor the presence status of extensions in the extensions tab of TekIVR Manager.
- TekIVR can record and send incoming calls for configured SIP extensions via e-mail (Voice Mail feature).
- Supports UDP, TCP and TLS transports with RTP and SRTP.
- You can dial into TekIVR and listen recorded messages in your mailbox. TekIVR supports Voice Mail Indication (RFC 3842).

- HTTP interface. All functions implemented in Win 32 GUI can be accessible through HTTP interface.
- You can monitor active SIP calls in real-time.
- OpenAl Integration

TekIVR also checks if it is installed behind an UPnP supported NAT gateway. If so, TekIVR automatically detects external IP and displays it on status bar. TekIVR can also add a reverse mapping for incoming connections automatically (*Default UDP port 5070*) through UPnP.

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09:45:03	Preferred IP Address: 192,168,88.3.					
19:45:04	Encoding of announce file(s) is starts	ed				
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Service Monitor Tab

You can monitor active calls through the service monitor tab.

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Extensions Tab

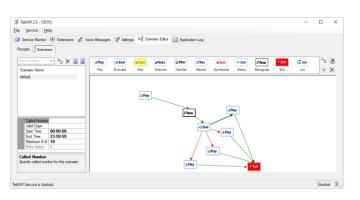
You can define extensions, their mailbox numbers and optionally their e-mail address for sending recorded audio messages through the Extensions tab.

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Scenario Editor / Prompts Tab

#### **Scenario Editor**

You can create your own IVR scenario using built-in Scenario Editor. TekIVR supports the following actions in IVR scenarios; Play, Synthesize, Recognize, Wait, Record, Evaluate, Transfer, Execute and Exit.



Scenario Editor / Scenarios Tab

You can define multiple scenarios based on time of date and called number.

### **System Requirements**

TekIVR requires Microsoft .NET Framework 4.6.1 installed with the latest patches. A Pentium class CPU with 4 GB of RAM is ideal for most configurations.

#### Supported RFCs

- RFC 2617 HTTP Authentication: Basic and Digest
  Access Authentication
- RFC 2782 A DNS RR for specifying the location of services (DNS SRV)
- RFC 2976 SIP INFO Method
- RFC 3261 SIP: Session Initiation Protocol
- **RFC 3262** Reliability of Provisional Responses in the Session Initiation Protocol (SIP)
- RFC 3265 Session Initiation Protocol (SIP)-Specific Event Notification
- RFC 3515 The Session Initiation Protocol (SIP) Refer Method
- RFC 3550 RTP: A Transport Protocol for Real-Time
  Applications
- **RFC 3551** RTP Profile for Audio and Video Conferences with Minimal Control
- RFC 3711 The Secure Real-time Transport Protocol (SRTP)
- **RFC 3842** A Message Summary and Message Waiting Indication Event Package for the Session Initiation Protocol (SIP)
- **RFC 3856** A Presence Event Package for the Session Initiation Protocol (SIP)
- RFC 3891 The Session Initiation Protocol (SIP)
  "Replaces" Header
- RFC 3892 The Session Initiation Protocol (SIP) Referred-By Mechanism
- RFC 6787 Media Resource Control Protocol Version 2 (MRCPv2)

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