

Marketing Info No. 29 – Soft IVR and SoIP

Use of Soft IVR with SoIP

Soft IVR is the name that WTL have given to the ability to run Pre-Paid services for VoIP customers without the use of expensive DSP hardware. Soft IVR is normally delivered on the PVx IP-only platform.

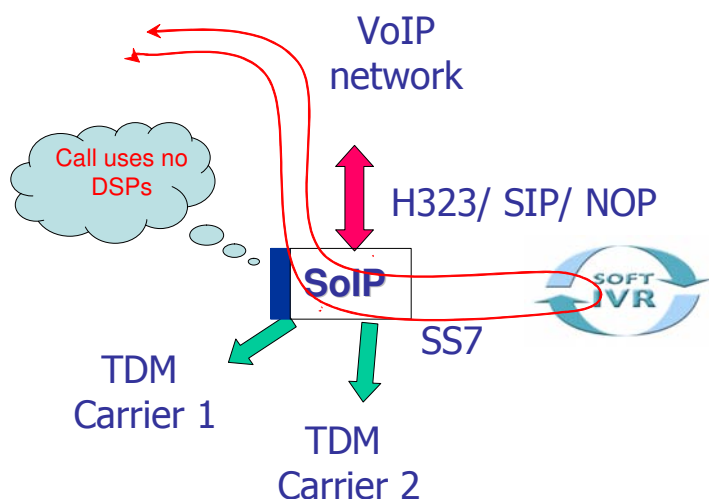
The SoIP Gateway is principally sold as a media and signalling gateway, simply converting SS7 calls to SIP or H.323. However, there is an option to offer Soft IVR on the SoIP gateway provided the following guidelines are followed.

Remember that Soft IVR only provides support for calls that are already VoIP calls. If calls enter the SoIP as TDM, then – as in the IPNx – a dedicated DSP channel is required to provide IVR.

Calls From The VoIP World

Calls that enter the SoIP on the IP side of the gateway can be routed to the Soft IVR function for message playing and DTMF detection. Up to 8 E1s (240 calls) of Soft IVR can be supported on a single SoIP. This is because there is a restriction that RTP on-board processing is not allowed if Soft IVR is enabled. Without RTP on-board, the maximum number of VoIP channels that can be handled is 240, hence the limitation.

IP Calls With Soft IVR



Calls From The TDM (SS7) World

Calls that enter the SoIP on the SS7 side of the gateway CANNOT be routed to the Soft IVR function for message playing and DTMF detection. This is because a DSP resource is needed to translate the Soft IVR (purely VoIP format) messages to TDM format for transport over the SS7 network.

This means that if IVR support is required for SS7 traffic (normally in order to offer a Pre-Paid service) then extra DSP capacity must be available. This capacity can be 'spare' DSP channels in the SoIP (for example, in an 8 E1 240 channel SoIP, 10 or 20 channels could be reserved for IVR use). Alternatively, the SoIP may have to be 'over provisioned' with more capacity than the number of E1s required for interconnect.

Note that the number of extra DSP channels needed is not as high as may be expected. A DSP channel is only needed at the call set up stage when the IVR messages are actually being played. After this initial exchange, the DSP resource is not fixed to the call but is released for reuse by other calls. This is true even if the service is set up to allow 'follow-on' calls (user enters ## to make a second call without having to re-enter their PIN). This is because a special function has been developed to detect the ## without DSPs

SS7 Calls With IVR

