

OKEFORD Media Platform

The OKEFORD Media Platform enables operators and developers to quickly create and deploy the advanced interactive services that subscribers increasingly demand. And to do this quickly and cost-effectively, on both next-generation IP and legacy networks.

KEY FEATURES

- VoiceXML 2.0
- INAP, CAMEL, IS-771 WIN, AIN, SIP/Netann, MGCP and PacketCable NCS Interfaces
- SIP, ISUP and ISDN network signaling
- GbE, OC-3, STM-1, T1 and E1 connectivity
- Up to 2,106 channels of G.711 RTP in 2U
- 3G-324M video playback and record

KEY BENEFITS

- Powerful, high-capacity, carrier-grade media platform for cost-effective solutions
- Multiple simultaneous APIs (e.g. MGCP and SIP) allows mixed cable, IP, 2G, 3G and PSTN networks
- Multiple application interfaces allow rapid deployment of new VoiceXML services while retaining legacy AIN/IN services
- Protects current investment and offers controlled migration to next-generation IMS-based architecture

APPLICATIONS

- Operator information services
- Call screening and privacy applications
- Customer self-service service applications
- Cellular pre-paid customer care
- Conferencing
- Cellular advertising
- VoiceXML applications deployed in both TDM and IP networks
- Color ring-back tones

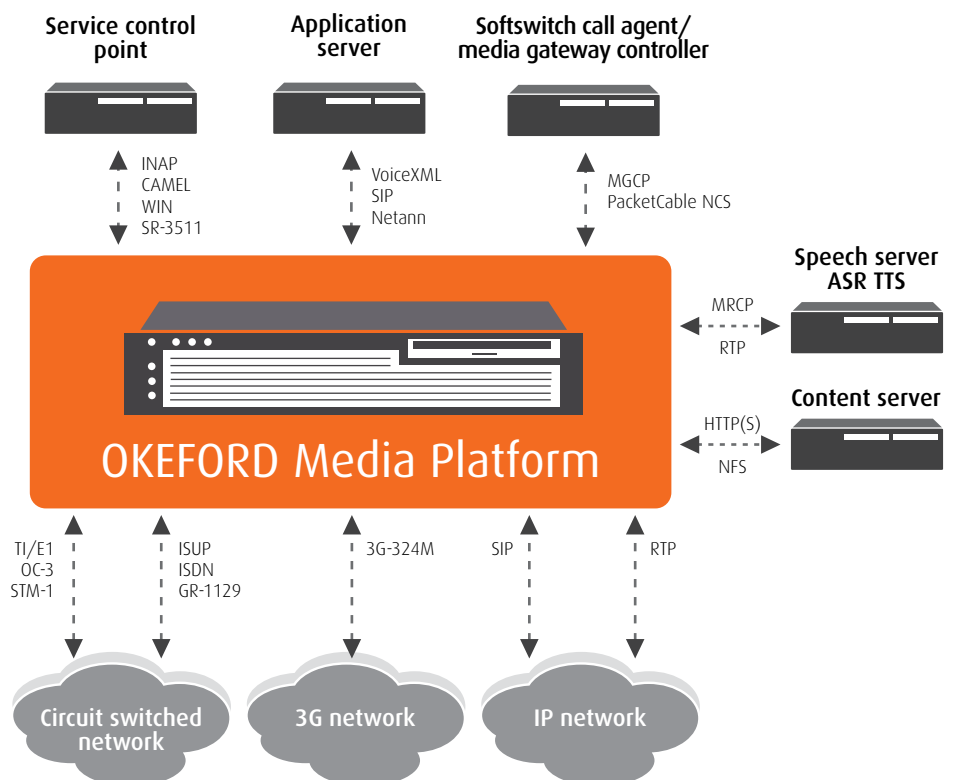
OVERVIEW

The OKEFORD Media Platform combines both media resource function (MRF) and intelligent peripheral capabilities, enabling operators, carriers and application developers to rapidly develop and launch advanced interactive voice applications in IP-Multimedia Subsystem (IMS), SIP, 2G/3G wireless, cable and wireline networks.

Combining the VoiceXML Forum certified VoiceXML 2.0 interpreter with Telesoft Technologies' renowned and field-proven CAMEL, WIN, INAP, AIN, MGCP and SIP interfaces, the OKEFORD Media Platform is ideal for deploying exciting and innovative IVR and IVVR services while enabling migration to an IMS architecture.

Our clear migration path means the OKEFORD works with any network – cable, IP, 2G/3G wireless or PSTN – and is designed for modern, open-standard application architectures. This makes it ideal for service providers who need to consolidate their investment in legacy intelligent networks (AIN/IN) with new VoiceXML applications on a shared platform.

Extensively deployed across the globe, the OKEFORD's industry-leading call-handling performance and reliability, coupled with its compact size, low operating costs and scalability, have made it the media platform of choice for leading operators and application vendors.





OKEFORD Media Platform



OKEFORD 2500 Media Platform

OVERVIEW – Cont.

Carrier-grade VoiceXML

VoiceXML is a standards-based markup language, designed to allow rapid development and deployment of interactive telephony applications, such as value-added information services, unified messaging, pre-paid cellular and automated customer care. Originating in the enterprise space, VoiceXML is now being adopted by service providers, who can see the time-to-market advantages it brings.

Operators and service providers need a media platform that is capable of scaling beyond that supported by traditional enterprise vendors. The OKEFORD is a carrier-grade media platform and provides the performance and features necessary for deploying large-scale interactive telephony applications. The combination of dedicated high-performance media processing hardware and host-based media processing software gives the OKEFORD unrivalled power across up to 3,360 channels of voice play.

Media resource function

The OKEFORD Media Platform is a next-generation IP-multimedia subsystem (IMS) media resource function (MRF) suitable for deploying in IP, CDMA, 802.11, GSM and PacketCable networks. In mixed circuit switched and IP environments, the OKEFORD also includes an integral media gateway, allowing simultaneous termination of both RTP and TDM channels.

The media platform also supports 3G-324M video over circuit-switched networks without needing an external video gateway, which makes the OKEFORD suitable for deploying video voicemail, video ringback tones and other video applications.

Intelligent network migration

A range of intelligent network (AIN/IN) interfaces is supported including INAP CS-1 and CS-2, CAMEL Phase 2, WIN IS-771, SR-3511 and GR-1129. It acts as an intelligent peripheral (IP) in an AIN or IN network.

Applications using AIN/IN interfaces can be deployed alongside SIP, VoiceXML and CCXML applications making the OKEFORD Media Platform an ideal solution for those operators wishing to invest in new VoiceXML applications without losing their ability to deploy and maintain existing AIN/IN services.

Converged networks

Whilst next-generation networks offer the potential to deploy new innovative services, operators cannot afford to wait until the new network roll-out is complete before launching these applications. Because the OKEFORD Media Platform is suitable for deployment in IP, 2G and 3G wireless, cable and PSTN networks, it's the ideal choice for converged networks.

Global connectivity

The OKEFORD Media Platform supports a wide range of SS7 and ISDN protocols, including switch and country variants. This means that application developers can deploy their media applications globally, without the need for expensive rework. The OKEFORD's range of T1/E1, OC-3/STM-1 and Gbit ethernet means that it is suitable for deployment in any network.

Outstanding pedigree

Today's OKEFORD Media Platform is the latest in an uninterrupted developmental line that stretches back to 1994, building an unrivalled expertise in field-proven deployments with the world's leading carriers. Now serving in excess of 110 million announcements each day the OKEFORD Media Platform combines industry-leading call-handling performance and reliability with compact size, low operating costs and scalability.



OKEFORD 3500 Media Platform



OKEFORD 1500/5500 Media Platform

TECHNICAL SPECIFICATIONS

IMS protocols

- 3GPP 24.229 IP multimedia call control protocol (SIP and SDP stage 3)
- 3GPP 23.228 IP multimedia subsystem; stage 2
- 3GPP 23.218 IM session handling; IM call model; stage 2
- IETF RFC 3261 session initiation protocol
- IETF RFC 3262 reliability of provisional responses in SIP
- IETF RFC 3263 locating SIP servers
- IETF RFC 3264 an offer/answer model with SDP
- IETF RFC 2327 session description protocol
- IETF RFC 2833 RTP payload for DTMF digits
- IETF RFC 3325 private extensions to SIP
- IETF RFC 3323 privacy mechanism for SIP
- IETF RFC 4048 session timers in SIP
- IETF RFC 4240 basic network media services with SIP

VoiceXML support

- VoiceXML: W3C voice extensible markup language V2.0
- SSML: W3C speech synthesis markup language V1.0
- SRGS: W3C speech recognition grammar specification V1.0
- SISR: W3C semantic interpretation for speech recognition V1.0
- MRCP V2: IETF draft-ietf-speechsc-mrcpv2-12
- SIP: IETF RFC3261
- RTP: IETF RFC3550
- VoiceXML/CCXML sessions on all calls simultaneously

Media processing

- Voice play on every channel simultaneously
- DTMF on every channel simultaneously
- VAD on every channel simultaneously
- Automated speech recognition via MRCP V2
- Text to speech via MRCP V2
- Voice record via MRCP V2
- SSML for speech synthesis control
- SRGS and SISR for speech recognition control
- file://access to local media files
- http(s)://access to remote media files
- Content caching for improved latency
- Voice play storage: 937MB on OKEFORD 2500/3500, 3+ GB on OKEFORD 1500/5500
- Built-in grammars for dates/times/currencies etc
- Up to 32 languages
- Conferencing

In protocol support

- INAP CS-1: ETSI ETS 300-374
- INAP CS-2: ETSI EN 301-140
- CAMEL: ETSI TS 101 441, 3GPP TS 29.78
- WIN Phase 1: 3GPP2 NS.0013-0. IS-771
- Telcordia: GR-1129-CORE, SR-3511
- ITU-T TCAP: Q.771-Q.774
- ITU-T SCCP: Q.711, Q.713, Q.714
- ANSI TCAP: T1.114
- ANSI SCCP: T1.112
- IN XML: based on ETS 300-374 and EN-301-140

3G-324M video

- 3GPP TS 26.110
- 3GPP TS 26.111
- 3GPP TS 26.071 AMR multi-frequency speech codec
- H.263 profile 0 level 10 video
- .3GP file format – basic profile

TDM network protocols

- SS7 and ISDN including switch and country variants
- ITU-T ISUP: Q.761-Q.764
- ITU-T international ISUP: Q.767
- ETSI ISUP V2: ETS 300-356-(basic services)
- ANSI ISUP: T1.113, Telcordia GR-246-CORE
- UK ISUP: PNO ISC 007
- Indian ISUP: S/CCS-02/03
- Brazilian ISUP: TELEBRAS 22-250-735
- ISDN: Q.931
- EuroISDN: ETS 300-102
- TR-41449, TR-41459, TR-NWT-001268, TR-NWT-001187

PacketCable protocols

- IETF RFC3435 media gateway control protocol v1.0
- PacketCable audio server protocol specification PKT-SP-ASP-I02-010620

OKEFORD Media Platform

TECHNICAL SPECIFICATIONS – Cont.

High-speed signaling

- RFC3332: M3UA SIGTRAN
- ATM high-speed signaling links

Network interfaces

- T1/E1 electrical TDM interfaces
- OC-3/STM-1 optical TDM interfaces
- 100/1,000 BaseT VoIP (RTP) interfaces
- 256 trunk groups
- Up to 16 SS7 link sets
- Up to 112 SS7 signaling links
- Up to 112 ISDN D-channels
- SS7 A-link and F-link support
- Ability to mix SS7 and ISDN on a single TDM card

Management

- Remote GUI configuration and resource management
- CDR generation to disk and TCP/IP
- Alarms and statistics via SNMP
- Oracle Enterprise Linux operating system
- Oracle Database

Performance and capacity

- Up to 500,000 BHCA/BHCC subject to application
- OKEFORD 1500: 8 E1/T1 interfaces per 2U chassis
- OKEFORD 2500: 16-48 E1/T1 interfaces per 2U chassis
- OKEFORD 3500: 16-112 E1/T1 interfaces per 5U chassis
- OKEFORD 5500: 1 STM-1/OC-3 interface per 2U chassis
- 2016 channels of G.711 RTP per OKEFORD 5500
- 240 channels of G.711 RTP per OKEFORD 1500
- 19" rack mountable
- AC 110-250V, DC-48V

Approvals

- CB Scheme UL1950/CSA 22.2 950
- EU:BD EN 60950: 1992
- NEBS Level 3
- EN55022: 1998
- EN50082: 1992
- EN61000-4-2: 1995
- EN61000-4-3: 1996
- FCC Part 15

RoHS

- Compliant



WHAT OUR CUSTOMERS SAY

“Thanks to the OKEFORD’s powerful media capability, our real-time charging solution is able to play 40 million pre-pay announcements, in 10 languages, every day”

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