



vOKEFORD

Software Based Media Platform

The vOKEFORD is an optimised, high performance software based Media Platform that allows simple migration of services from existing hardware based CAMEL/WIN/IN/AIN based systems to virtualised infrastructure

Based on the widely deployed OKEFORD series of Telco-grade media servers that support over 150M subscribers making 200M calls a day, the vOKEFORD allows existing end of life hardware based media platforms to be replaced with NFV ready software running on standard datacenter infrastructure.

The same service control interfaces, CAMEL, WIN, IN and AIN are provided allowing connection to the same existing SCP, with the minimal change of routing SS7 over SIGTRAN/IP. Bearer channels are terminated on Telesoft's field proven and widely deployed SIP or SIP-I and RTP, with multiple codec support for G.711, G.729 or AMR, allowing rapid migration of existing services to NFV and IP infrastructure with little disruption to subscriber service and hence revenue.

Scalable in intervals of up to 2000 channels per 12 cores/24 threads in a virtualised environment allows the vOKEFORD to meet your migration needs in the most cost efficient way.

Variants

GSM pre-paid - CAMEL-IN for 3G GSM pre-paid (account management, top-up, pre-call and mid-call announcements).

CDMA pre-paid - WIN for CDMA mobile pre-paid (account management, top-up, pre-call and mid-call announcements).

AIN - SR-3511 for providing call screening, privacy and self-service applications.

Key Features

Same application service control as previous OKEFORD versions

Work with existing, extensively deployed SCP infrastructure with no service logic changes required

Software, NFV ready, up to 2000 channels per 12 cores/24 threads

Run on existing datacentre infrastructure using less rack space and less power

Connect to network on SIP and SIP-I

Can be used as part of IMS migration

Multiple language support, same libraries and formats as previous OKEFORD versions

Support multiple language announcements per call based on subscriber profile. No need to re-record announcements

Supports CAMEL and WIN at the same time

Integrate a single application (i.e. billing system) to serve both GSM and CDMA networks

Optional codecs G.711, G.729 and AMR

Deploy as part of migration to IMS and VoLTE services

VXML/CCXML based service creation

Rapidly deploy stand alone custom services

Applications

Software only replacement for large-scale mobile pre-paid (pre-call announcements, mid-call, balance top-up) deployment

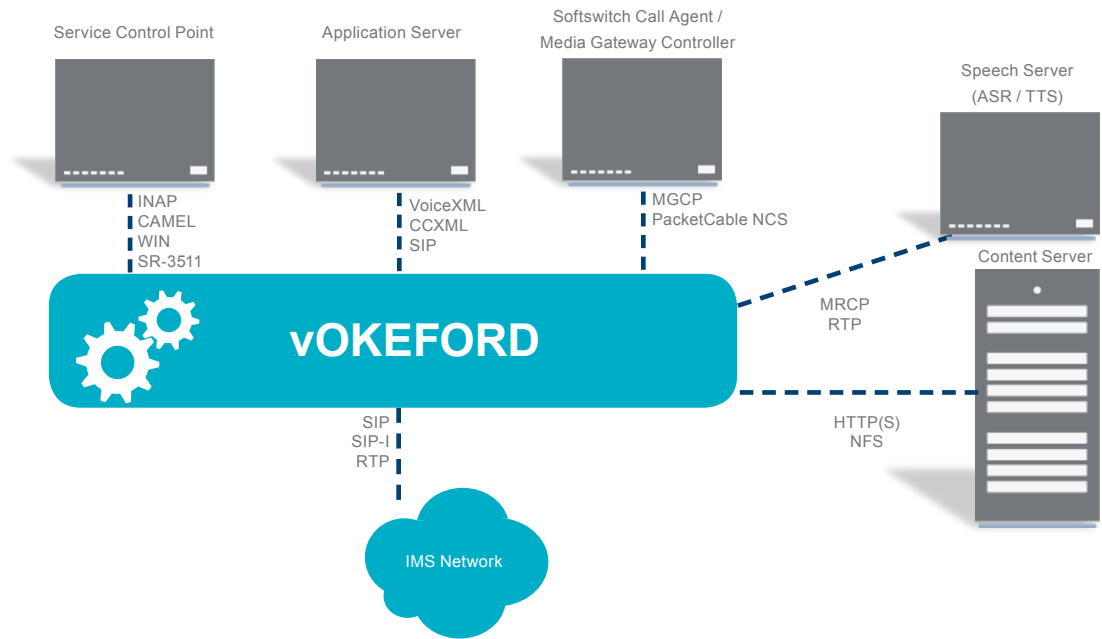
Software only, large scale, multiple language IVR

Replacement and consolidation of legacy IP/IVR equipment

Removal of TDM from service executive environment whilst maintaining services and revenue

Replace end of life equipment and maintain existing AIN, IN or mobile IN (WIN/CAP) services and revenue

System Architecture



Technical Specifications

Capacity	<ul style="list-style-type: none"> Typically scalable in intervals of up to 2000 channels per 12 CPU cores/24 threads (dependent on configuration, deployment and traffic profiles).
Media	<ul style="list-style-type: none"> IPv4, IPv6 RTP payload (IETF RFC3550) Codecs G.711, AMR (3GPP TS 26.071 / RFC4867), ITU-T G.729 06/2012 Voice Play on every channel simultaneously Voice record on several hundred channels simultaneously
Language Support	<ul style="list-style-type: none"> Built-in grammars for phrasing variable content types: "date", "time" and "currency" Supports up to 32 simultaneous languages (recordings not provided by Telesoft) Custom announcement vocabularies and grammars available on request MRCP V2 for connection to Text To Speech (TTS), Automatic Speech Recognition (ASR) and external voice record. TTS/ASR engine not included.
Call Control	<ul style="list-style-type: none"> SIP (IETF RFC 3261) SIP-I (ITU-T Q.1912.5, Profile C) SIP netann (IETF RFC 4240) RTP Payload for DTMF Digits (IETF RFC 2833)
Service Control	<ul style="list-style-type: none"> M3UA SIGTRAN (IETF RFC3332) 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: 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 & EN- 301-140 VXML 2.1 CCXML 1.0
Management	<ul style="list-style-type: none"> HTTP REST API and Web GUI for configuration and resource management CDR generation to disk and TCP/IP Alarms and statistics via SNMP v2/v3

Technical Specifications

Hardware Support and Minimum System Requirements

- Intel 64bit Architecture based server
- Operating System (64-bit): CentOS Release 7.x OR RedHat Enterprise Linux 7.x
- Memory: 32GB RAM minimum
- Storage: 60GB minimum recommended
- Network Interfaces: Minimum 4x1GbE recommended (dependant on network design)
- Dual 2GHz 6 core/12 thread CPUs (24 threads in total) are required for 2000 channels

Typical Network Port Utilization

- SIP 5060
- RTP 19000-24000
- Local SCTP (for M3UA) 2905
- HTTP 80/HTTPS=443
- SSH 22
- SFTP 22
- Syslog 514
- SNMP 161/162

Virtualisation Platform Support

- OpenStack
- Promox Virtual Environment
- XEN Project Virtual Machine
- KVM/QEMU
- VMWare ESXi
- Amazon Web Services (AWS)

Order Options

Part Number	Description
500003041	vOKEFORD 5500 license - 2000 channels G.711
Licenses	
500003042	IN License (inc SR-3511) per 100K BHCC
500003043	CAMEL or IS771 WIN Licence per 100K BHCA
500003045	G.729 Codec Licensing
500003046	AMR Codec Licensing
Extras	
50000343	12-month extended warranty
50000303	Training (charged per day)

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