Ocean Media Server

Product Overview

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Ocean Media Server Overview

The Ocean Media Server is an optional component of the Ocean Services Platform.

The Ocean Media Server allows Network Operators to develop interactive services that communicate with callers. The Ocean Media Server not only plays announcements and detects key presses, but also supports key media server features, such as caller recording. The Ocean Media Server also supports integration with third-party tools via MRCP to provide features such as Text-to-Speech, Speech-to-Text and Voice-to-Email.

The Ocean Media Server supports a wide range of media codecs, allowing Network Operators to choose the correct codec for their network implementation.

Being integrated as part of the Ocean Services Platform, the Ocean Media Server shares the same operational and management interfaces, reducing both the complexity and costs associated with providing interactive services to callers.

In addition to working in SIP environments, the Ocean Services Platform and Ocean Media Server also be configured to operate with WebRTC based endpoints (option).

Specification

Core Functions

- Media playback
- DTMF Keypress detection (out-of-band)
- DTMF Keypress generation (out-of-band)
- DTMF Keypress detection (in-band)
- Media recording (MP3) with delivery via SCP and Email
- Pause and restart of recording
- Playback of recordings
- Media monitoring
- Media transcoding
- Media forking
- Conferencing
- Silence and Speech detection
- FAX over IP (T.30 and T.38)

Service Integration

Allows integration with third-party, backend solutions via MRCP to provide services such as (but not limited to):

- Text-to-Speech
- Speech-to-Text
- Voice-to-Email

File Storage and Distribution

Automated file distribution across media servers (option)

Control Interfaces

Integrated with Ocean Services Platform (Next Generation Control Protocol)

Codec Support

- PCMU – G.711 µ-Law PCM at 64kbit/s, 20ms packets
- PCMA – G.711 A-Law PCM at 64kbit/s, 20ms packets
- GSM – GSM Full Rate at 13.2kbit/s, 20ms packets
- G729 – G.729/G.729a audio at 8kbit/s, Annex A and B only. 20ms packets
- G722 – G.722 wideband audio at 64kbit/s, 20ms packets
- Support to overrise default packetisation from 10ms to 40ms in steps of 10ms
- Out-of-band keypresses according to RFC4733 (detection and generation)
- In-band keypress detection (impacts performance)
- Other audio codecs available on request.

Simultaneous Sessions

Only limited by software licence and server capabilities

Media Capacity

Only limited by server capabilities

Management

Management is integrated with the Ocean Services Platform

Hardware Requirements

Varies based on usage and codec

WebRTC (Option)

The Ocean Services Platform (OSP) is a next generation telephony service platform for network operators. Built around a next generation service core, the OSP supports both SIP and legacy INAP/CAP protocols for service delivery.

Full WebRTC capability has been added to the OSP to support browser and app-based calls. This document outlines how WebRTC may be added to an OSP system and provides example use cases.

The addition of WebRTC allows users to simplify the interaction between customers and network services. New services can span the PSTN and Internet, offering converged WebRTC and PSTN services that deliver the same caller experience regardless of the access channel.

Telsis' WebRTC solution provides the following capabilities:

- Click to call voice solution
  - WebRTC-to-PSTN Gateway
  - WebRTC-to-WebRTC voice calls
- WebRTC voice conferencing

The solution includes:

- An enhanced HTTP Adapter for support for web sockets
- An RTP Engine module for WebRTC, providing support for DTLS-SRTP
- A module to provide support for NAT traversal technologies – STUN/TURN/ICE
- A set of Map Studio nodes to manage WebRTC interactions (utilising underlying Java API additions)
- Telsis Javascript library, allowing fragments to be added to websites to trigger inbound calls and for agents to login and authenticate with the system

Ocean Media Server Benefits

- **Low impact update and seamless service migration** – Telsis designed the existing inbound call management system and will ensure that the service experience is seamless and work to minimise any impact on integrated back-end systems.
- **Advanced IVR capability in the NG environment** – the Ocean Media Server is designed to provide a media IVR function in a NG environment.
- **No additional hardware or integration** – the existing OSP system and integrated interfaces (SIP, OSS) can all be re-used.
- **Rapid update** – Telsis are able to deploy this update rapidly, we estimate that the total project duration would typically be less than 4 weeks from order.

The media server function can be seamlessly activated on the existing OSP hardware and existing connectivity.