



# EVoIP™

## Technical Overview

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### EVoIP™ (Ethrix VAS over IP Platform)

EVoIP™ is a next generation IP based media platform. This already proven platform supports numerous advanced features, including speaker independent ASR, N-way distributed conference over IP, advanced IVR support and more. The EVoIP™ is based on distributed architecture with all the following advantages: High availability, scalability, flexible application creation as well as provisioning, alarming and reporting.

### Release Date

2 August, 2004

### ENS (Ethrix Network Server)

ENS is the core part of the EVoIP™ encapsulating the low level hardware API programming of Media and Telephony boards. ENS is controlled by proprietary easy to use XML messages over MSMQ.

### Features

n Voice Processing Channels

Voice Processing Channel Features:

- \* Compression: G.711, G.723.1, G.729a
- \* Echo Cancellation: 32ms, 64ms
- \* Voice Record
- \* Voice Play Back
- \* Signaling: in-band DTMF or out-band signaling RFC 2833 compliant
- \* Real-time multi party conferencing
- \* VoIP: RTP/RTCP per RFC 3550/3551

N-way Conferencing

- \* Supports 3-64 endpoints per bridge

### Signaling

PSTN EuroISDN  
SS7

### ASR

Capacity: n Concurrent ASR channels (Capacity depends in vocabulary size per resource.)  
Interface: H.100  
Speaker Mode: independent Speaker  
Recognition Modes: Continuous Speech Recognition  
Grammar & Vocabulary: Runtime Dynamic  
Resource allocation: Dynamic  
Grammar Format: ABNF

### Control Protocol

ExCP - Ethrix Propriety API over IP



### EAS (Ethrix Application Server)

EAS consists of two elements

- \* **APPCoord** is managing the runtime resources of EVoIP™. One of its main responsibilities is to handle a load balance process to allow a smooth simultaneous operation of several APPFactories, regardless its physical location.
- \* **APPFactory** is a virtual container of running applications. By handling threading and messaging, APPFactory significantly makes the use of the operator resources more efficient.

### Control Protocol

ExCP - Ethrix Propriety API over IP

### EBB (Ethrix Building Blocks)

EBB is a set of C# assemblies that encapsulate ExCP. EBB makes programming CTI applications easy and straight forward. EBB is a powerful tool to create CTI application and by using the next generation of programming languages, programming is easier than before. Networking actions are handled by the EBB, reducing complicated programming tasks. EBB includes phone emulator to simulate a phone call without PSTN network connectivity

### EMS (Ethrix Management System)

EMS controls EVoIP™ with a user friendly web interface with a comprehensive monitoring, reporting and detection system.

### ECM (Ethrix Content Management)

ECM is a software layer providing management tools for an easy dispatch and distribution of dynamic content for EVoIP™ users.

### ERK (Ethrix Record Keeping)

ERK is a record keeping service that receives and keeps records from the ENS and the APPCoord. Each event is inscribed in a detailed manner and includes time usage per application, conferencing usage, ASR resources usage and more.

### EDE (Ethrix Data Engine)

A Microsoft SQL Server based database, implementing access methodologies and advanced data managing tools.

### ECS (Ethrix Conferencing Server) - Optional

ECS is an optional IP based conferencing server. Bridges between multiple ENS and / or analog gateways are enabling

- \* Distributed ENS installation using same conferencing resource
- \* Internal calls using analog phones
- \* Central conference management