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Magic

Middleware for collaborative Applications
and Global virtual Communities

Deliverable D4.5

On line course and video tutorial on how to
deploy a unified communications network

Progress Report

MAGIC Deliverable: D4.5 Online course and video tutorial on how to deploy a unified communications network

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Abstract: This document is the report of the deliverable of an on line course for the unified communications. The course is focused on the integration of the web-conference MCONF platform and the traditional SIP network.



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For more information on MAGIC, its partners and contributors please see <http://www.magic-project.eu>.

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DELIVERABLE ROUTE

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1. INTRODUCTION

The MAGIC deliverable 4.5 has the objective to provide a guide for institutions that want to implement a unified communications network, using the MCONF web-conference system. The MCONF web-conference system is branch of the Big Blue Button open-source that has been adapted and developed by the Brazilian NREN RNP, RedCLARA and the MAGIC project partners. With the mentioned implementation, the NRENs will be able to dial a conference in a legacy SIP terminal device or multi-conference unit (MCU).

The course is implemented in the OpenEDX platform, and uses video to describe the system architecture.

2. DOCUMENT AMENDMENT PROCEDURE

Requests for amendments to this document must be made to the author, Gustavo García, WP4 - Agreements for Real Time Collaboration, Technical Manager (RedCLARA) gustavo.garcia@redclara.net, and copied to the Management of the MAGIC project.

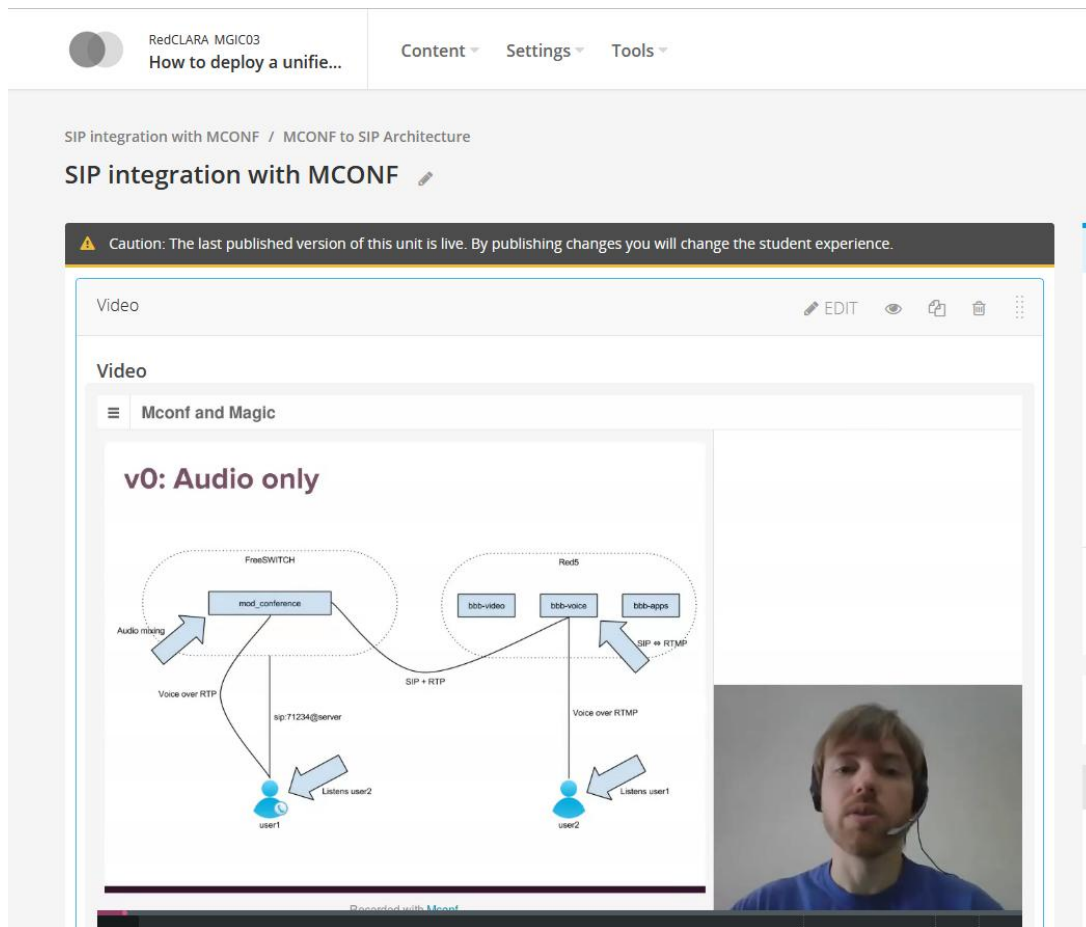
3. GLOSSARY

EC	European Commission
EU	European Union
EU-LAC	Europe, Latin America and the Caribbean
Sci-GaIA	Energising Scientific Endeavour through Science Gateways and e-Infrastructures in Africa
TANDEM	TransAfrican Network Development
WP	Work Package



4. COURSE OVERVIEW

The course is developed in a Massive Open On line Course (MOOC) format. The video elements are as shown in the following figure:



The screenshot shows a MOOC interface for the course "How to deploy a unified communications network". The video player displays a diagram titled "v0: Audio only" illustrating the SIP integration architecture. The diagram shows two components: "FreeSWITCH" and "Red5".

- FreeSWITCH:** Contains a "mod_conference" module. It receives "Voice over RTP" from "user1" and "user2". It also sends "Voice over RTP" to "user1" and "user2".
- Red5:** Contains "bbb-video", "bbb-voice", and "bbb-apps" modules. It receives "SIP + RTP" from "FreeSWITCH" and sends "SIP + RTP" to "FreeSWITCH". It also receives "Voice over RTMP" from "user1" and "user2".

The diagram also shows "Audio mixing" and "SIP + RTP" flows. A live video feed of a presenter is visible in the bottom right corner of the video player.

The course is structured with the following sections:

1. SIP integration with MCONF

This section contains the video and material to train the student in the elements that compound the integration architecture. The course have the communication between elements and how they relate. In addition, the inbound and outbound call flow descriptions are included.



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2. Statistics architecture with elastic search

The section of the statistics architecture is one of the big components in the solution. The student can find in the course how the logging information is stored, and the modules that display the information. Service requirements and Installation instructions are also part of the course.

5. RESOURCE LOCATION

Technical leaders can access the course in the RedCLARA's Open EDX platform through the following link:

<http://edx.redclara.net>



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