



Video Conferencing with 3G Handsets

Mirial 3G (H.324M) / Codian H.323-SIP Enterprise Solution

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1. Introduction

This Whitepaper describes how the best-in-class H.324M (3G) and H.323/SIP integration can be achieved for the enterprise by using Mirial and Codian infrastructure.

About Mirial

Mirial is focused on enterprise and carrier-grade level streaming and videoconferencing product development for H.323, SIP and H.324M environments. Mirial solutions have been widely adopted around the world in the most important and advanced visual communication projects in real business and consumer environments with hundreds of thousands of users. Main product lines include Mirial video softphone, PSE 3G Gateway and PSE Media Server for the development of interactive real-time audio/video services for IP (SIP, H.323) and 3G UMTS (H.324M) networks, like Video Mail, Video Portal, Video Chat and Video Blog. For additional information please visit www.mirial.com

About Codian

Codian designs and manufactures the most advanced video conferencing infrastructure products available. Codian's product line includes Multipoint Control Units, Video Conference Recorders, Streaming Servers and ISDN Video Gateways. Using a unique architecture and the latest hardware technology, Codian's products are both easy to use and powerful, supporting enterprise and service provider customers worldwide. Codian has main offices in San Jose, California; New York; Washington, D.C.; London, UK; Frankfurt, Germany; Hong Kong; and Sydney, Australia. For a product demonstration or to learn more about Codian products, please visit www.codian.com

2. The Opportunity

Many people now have 3G video phones: the 3G video market is growing rapidly and offers users a wide range of applications not possible before with 2G technology. One such application which opens up a whole host of exciting possibilities is the ability to integrate 3G handsets with H.323 and H.320 video conferencing networks.

Examples of what is possible include:

1. Salesmen can still join a conference call while “on the road” - receiving and contributing video from their 3G handsets.
2. People who are working from home but do not have the bandwidth for traditional video conferencing can use their 3G phone to call:
 - a. Point-to-point to H.323 or H.320 endpoints
 - b. Conferences that include H323, H320 and 3G callers
3. Users can do live “web casts” direct from their mobile phones.
4. 3G handsets can connect to a conference and receive presentation slides etc. sent via a data video channel routed to their handset.
5. Mobile users can use an IVR (Interactive Voice Response menu) to join conferences.



3. The Solution

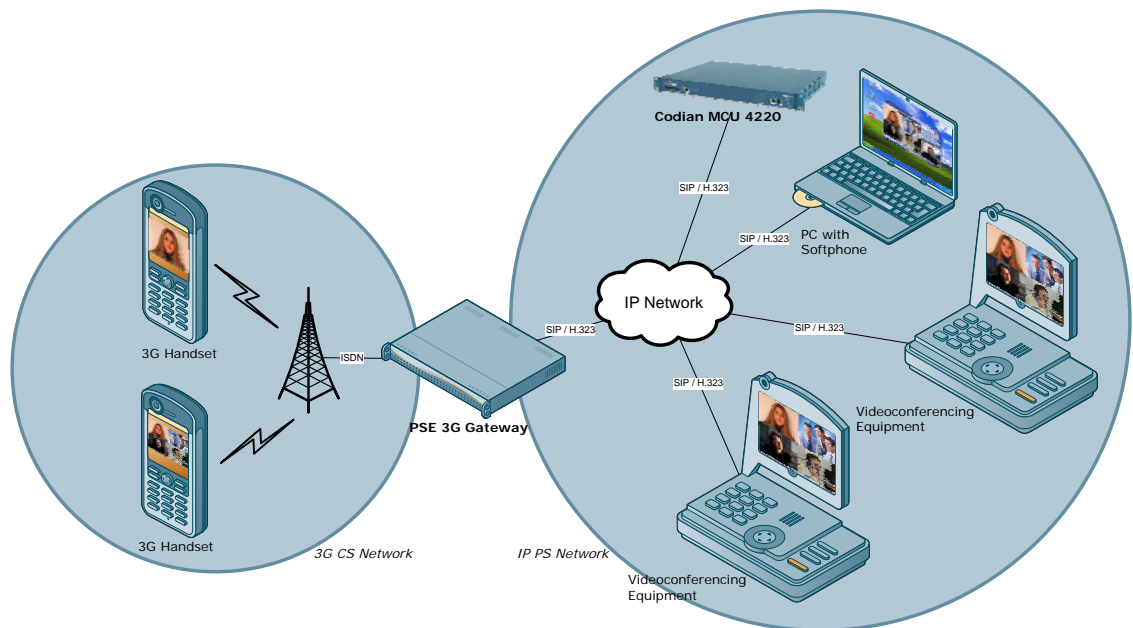
A 3G gateway is needed in order to be able to integrate 3G devices into standards-based H.320/H.323/SIP video conferences.

Mirial PSE 3G Gateway (part number PSE.3GGW) is a class-leading appliance that can connect a 3G mobile videophone to any fixed-line (IP) videoconferencing solution.

By providing the translation between the circuit-switched 3G mobile network and IP packet-based network, PSE.3GGW enables the 3G devices and IP endpoints to communicate; used with with Codian's H.323/SIP and H.320 video conferencing infrastructure, it allows 3G users to join an IP multiconference by simply using a third generation mobile phone.

Mirial and Codian have conducted extensive testing to ensure interoperability between their equipment, other vendors' H.323, SIP, H.320 standards-based equipment and a wide range of 3G handsets.

The diagram below shows an enterprise-level solution using the Mirial PSE 3G Gateway together with Codian MCU.



Advantages of the Mirial/Codian solution

The Mirial PSE 3G Gateway has unparalleled ease of use and maintenance. It can be used with BRIs or PRIs, with or without gatekeepers, is compact in size (1U) and has customizable IVRs.

Equally, unlike any other MCU, the Codian MCU always sends each participant in a call its own unique transcoded video. This means that 3G callers get the best possible video quality that their endpoint can support without affecting the other participants of the conference. 3G calling is very easy to set up and start using because no special configuration is required on the Codian equipment.

Using the Mirial/Codian combined solution, the following is possible:

1. 3G handsets can join multipoint calls using a Video IVR menu.
2. After a call is established, each 3G user can choose their own layout using their keypad. They can choose both the layout they want to see and who they want to see within the layout.
3. 3G users can call H.323/SIP or H.320 endpoints directly – or by using an IVR.
4. H.323/SIP or H.320 callers can call 3G endpoints directly – or by using an IVR.
5. Conferences can be created from 3G phones. H.323/SIP, H.320 and 3G callers can join a conference with no additional setup.
6. Mirial's and Codian's equipment is endpoint agnostic - it has been tested to work with equipment from all manufactures - often better than with other manufacturers' own equipment.

Using Mirial and Codian together ensures that equipment from all video conferencing vendors and 3G handset vendors can all communicate within the same conference without any loss of functionality.

Mirial 3G Gateway products

| Part Number | Ports | Size | |
|------------------------|-------|------|----------------------------|
| PSE.3GGW_04 | 4 | 1RU | 4BRI |
| PSE.3GGW_08 | 8 | 1RU | 4BRI |
| PSE.3GGW_15 | 15 | 1RU | 1PRI |
| PSE.3GGW_30 | 30 | 1RU | 1PRI |
| Upgrade 4 to 8 ports | | sw | PSE.3GGW_04 to PSE.3GGW_08 |
| Upgrade 15 to 30 ports | | sw | PSE.3GGW_15 to PSE.3GGW_30 |

Codian video conferencing products

| Product | Ports | Size | |
|---------------------|-------|------|---------------------------------|
| Codian MCU 4205 | 12 | 1RU | All ports transcoded |
| Codian MCU 4010 | 20 | 1RU | All ports transcoded |
| Codian MCU 4215 | 30 | 1RU | All ports transcoded |
| Codian MCU 4220 | 40 | 1RU | All ports transcoded |
| Codian IP VCR 2210 | 6 | 1RU | 1 recording, 5 playback ports |
| Codian IP VCR 2220 | 15 | 1RU | 5 recording, 10 playback ports |
| Codian IP VCR 2240 | 30 | 1RU | 10 recording, 20 playback ports |
| Codian ISDN GW 3210 | | | 1 E1/T1 Interface |

Availability

All products are available now in EMEA. Please contact your local Mirial and Codian sales representative or reseller.

For service providers

Mirial and Codian also have solutions specifically designed for service providers and carriers. Please contact Mirial or Codian for more information.



www.mirial.com

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