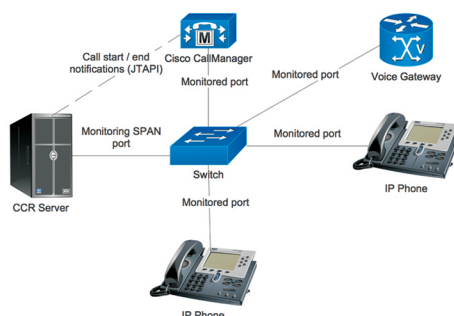
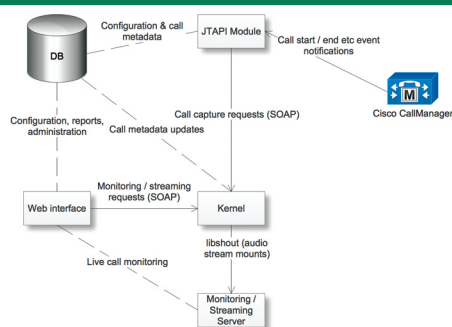


Corporate Call Recorder



Corporate Call Recorder



GB Corporate Call Recorder is a VoIP call recording solution designed for voice networks based on the equipment manufactured by Cisco Systems. It is capable of live call monitoring as well as automated conversation recording. The system is exceptionally useful to IT security departments and call centers. It is composed of several modules which communicate with each other and can easily be spread across several machines to achieve scalability. The system is designed around the widely embraced by the IT industry SOA (Service Oriented Architecture) principles - all components of the system are uncoupled from the others and communicate with each other using SOAP based services. CCR receives notifications on the occurrence of the events of call initiation, hang up and others via a TCP/IP connection to the Cisco implementation of the JTAPI (Java Telephony Application Programming Interface) specification on the Cisco Call Manager (see components diagram). When a call is started, the CCM notifies the JTAPI module which consults a set of rules, configured in the database, to decide whether the call should be processed for recording and monitoring or ignored. After that (if the call is to be processed) the JTAPI module sends a SOAP message to the system's kernel which contains information needed to extract the conversation from the network traffic (IPs and ports of the terminal devices, used codec, bit-rate etc) and stores metadata for the record in the DB (calling / called number, duration etc). Upon receiving a call start SOAP notification from the JTAPI module, the system's kernel starts intercepting the conversation from the network traffic. Along with the actual audio extraction from the network traffic, the kernel takes care of several helper functions - encoding / decoding the audio from / to a given format, codec, bit-rate etc, sound mixing and synchronization etc. When the call is over, the JTAPI module sends a call stop notification to the kernel and the latter finalizes processing and recording the call. Apart from the above-mentioned functionalities, the kernel also provides a SOAP service for live call monitoring requests.

Whenever an user of the system wants to monitor an ongoing call, she initiates a monitoring request for the given call via the web interface which sends a monitoring SOAP request to the kernel. Upon receiving a monitoring request the kernel - while continuing the call's normal processing - opens a stream to a dedicated streaming / broadcasting server. After that the user can listen to the call in the same way as it were an Internet radio station. The system's web interface provides an easy and convenient means for administration and configuration, reports, call monitoring, listening and downloading of existing records. To integrate CCR in your organization you need a minimum of one server machine (the system's components - DB, web interface, kernel, JTAPI module and streaming server can be spread across several servers to achieve scalability and load-balancing), Cisco Call Manager versions 4.x, 5.x, 6.x, 7.x and a SPAN capable switch e.g. Cisco Catalyst 2950 (the IP phones which are to be monitored and recorded, the CCM, voice routers and possibly other VoIP network devices have to be connected to ports on the switch which are mirrored in such a way that the CCR server machine can get the network traffic to extract the audio).

D Corporate Call Recorder (CCR) ist eine Software für Cisco Call Managers und PBXs in Ihrem Unternehmen, die Festlegung der Kombination von Regeln ermöglicht und abhängig davon Sprachaufnahmen von Anrufen automatisch bildet. Das benutzerfreundliche Interface erlaubt Suche, Zuhören und Herunterladen von Sprachaufnahmen als auch Zuhören der Anrufe in Realzeit (Live Monitoring). Die Software ist den Call-Centers besonders behilflich, weil sie die Kommunikation mit den Kunden verbessert. CCR vermeidet Fehler bei Kundenanfragen und verringert die durchschnittliche Zeit zur Kundenbedienung. Diese Software ist besonders wichtig für die Sicherheit eines Unternehmens, da der Unternehmensinformationsabfluss abgebrochen werden kann.

NG Systems is leading solution provider for VoIP infrastructure: call recording, billing and customer care solutions.

NG Systems ist ein führender Lieferant für Voip Infrastrukturlösungen: Call Recording, Billing and Customer Care Lösungen.

The company is also Cisco Developer Partner, Oracle Partner and Sun Independent Software Vendor.



For more information:

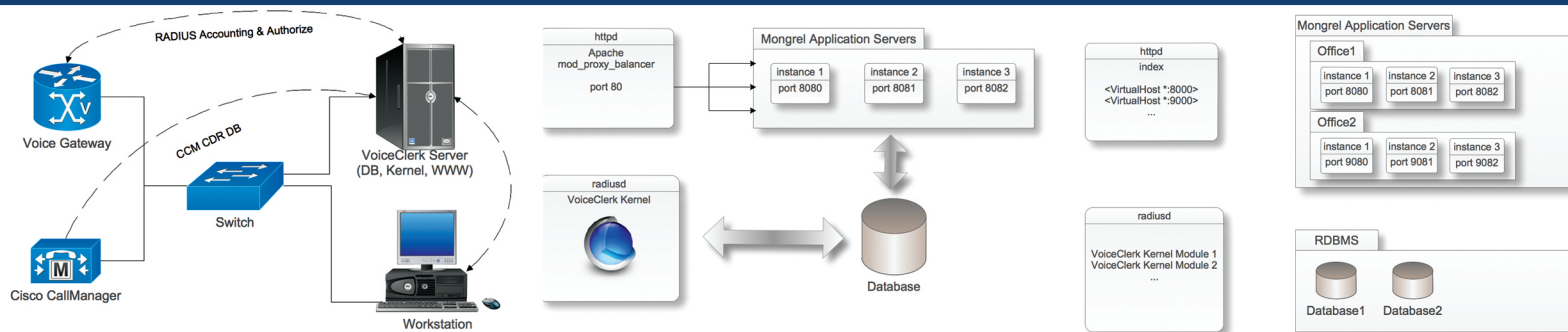
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Voice Clerk



GB Voice Clerk - The main purpose of the professional VoIP billing system - Voice Clerk by NG Systems is to charge and limit the calls of a certain company's employees, aiming at the optimization of the expenses for phone calls in its inner infrastructure. The system allows collecting and storing information about the committed incoming and outgoing calls, through the organization, calculating their cost, blocking or notifying the users, who have reached an administratively assigned limit and generating a variety of different reports about the expenses.

Unlike the other existing systems on the market today, the incoming data about the calculations is received from the VoIP router, that manages the incoming and outgoing calls (via the RADIUS protocol) or it can be gathered directly from the Call Data Record (CDR) database of Cisco Call Manager™ (CCM).

D Voice Clerk von NG Systems ist eine Software zur Kostenberechnung und Einschränkung der Anrufe von bestimmten Mitarbeitern und zielt auf die Optimierung der Kosten für Anrufe in innerer Unternehmensinfrastruktur. Das System gewährleistet die Erfassung und Speicherung von Informationen über die ankommenden und abgehenden Anrufe, die Berechnung ihrer Kosten, Sperrung oder Mitteilung an die Nutzer, wenn die administrativ bestimmte Kostengrenze erreicht wird.

Im Gegensatz zu den anderen auf dem Markt bestehenden Systemen, werden hier die eingehenden Daten über die Berechnungen von dem VoIP-Router erhalten. VoIP Router verwaltet ankommende und abgehende Anrufe (über das RADIUS-Protokoll) oder sie können direkt aus der Call Data Record (CDR) Datenbank von Cisco Call Manager™ (CCM) erfasst werden.

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ORACLE

CERTIFIED PARTNER



Partner Advantage

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