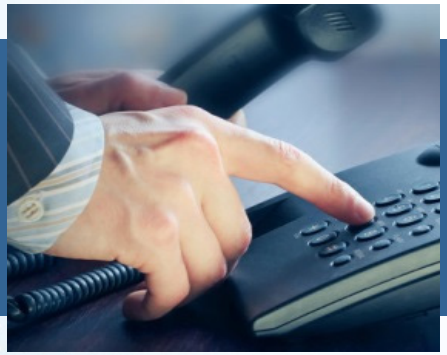


AMR

CALL RECORDING SYSTEM

PRODUCTION CATALOGUE

WE'LL SAVE EVERYTHING THAT'S SAID!

Professional solutions for any type of business

WHY WE NEED RECORDING:

- Storing information about important conversations and transactions
- Protection from fraud and unethical business methods
- Fraud detection and prevention
- Improving customer service
- Incidents reconstruction
- Providing training and self-training of employees
- Keeping business activities register book

We present you the hardware-software complexes 'AMR' designed for the high-quality registration, storage and collecting of information obtained from the analog phone lines, digital lines E1 and BRI, VoIP (IP telephony), radio stations, dispatcher desks and other sources of signal.

Sector solutions

Call centers

- Monitoring the service quality and performance of a contact center
- Obtaining reliable information about what customers think about your company, products and services
- Assistance in solving disputes and disagreements
- Evaluating the effectiveness of each employee`s activity
- Ensuring fulfillment the established procedures, compliance with regulations and company policies by officers

Public safety and state structures

- Automatic recording and storing emergency calls, reaction rate and the process of employees' interaction in solving the problem
- Instant playback of recorded data in order to verify and clarify information
- Call monitoring in real time, providing immediate intervention in the interaction process and influence the situation
- Studying and collecting evidence on the incident for further legal investigation
- Identifying the necessity of training employees of a call center in order to increase citizens' appeals processing accuracy and speed

Financial sector

- Monitoring transactions and other business activity
- Event precise reconstruction for auditing
- Quick dispute settlement
- Assistance in fraud cases investigation
- Monitoring working processes effectiveness
- Upgrading personnel training level

Business task solutions

Incidents reconstruction and analysis

- Reconstruction of events sequence and employees` actions
- Identification of people, responsible for the incident
- Using stored data as legal evidence

Business process optimization

- Improving customer service quality
- Providing training and self- training of employees.
- Collecting reliable statistical information
- Keeping business activities register book.
- Staff performance efficiency and workload analysis
- Oral agreements auto commit
- Communication services cost decrease

Security level improvement

- Information leaks detection and prevention
- Commercial secrecy preservation control
- Fraud detection and prevention.
- Protection from employees` unethical behavior
- Telephone lines technical condition monitoring
- Business processes transparency ensuring
- Employees` actions automatic control

«AMR» benefits

Professional solution

The product based on 15 years' experience and usage of the most advanced technologies in hardware and software development field.

Scalable, modular architecture

A set of components allowing providing solutions adapted for tasks of a particular user with the possibility of further expansion of recording system functionality and capacity.

Intuitive interface

Our software is designed for an average user and allows starting working with the system without studying the manual.

Easy customer's software integration

Software architecture enables client programs to receive information both from a database and in real time mode at the moment of recording.

Computer screen images recording

Users' screen data automatic recording can be used both as a separate analytical system for employees`working speed and quality analysis and together with audio data. When listening to audio recordings, the operator can optionally, in synchronization with sound, display information from the user`s screen, that allows to reconstruct a full picture of the user's actions in a certain situation.

Integrated CRM system

Client database management system, which provides interaction with a client since first contact till transaction completion.

Customized finalization of functionality

High professional competence of our employees allows qualitatively and in a short time to develop additional functionality as per client's needs.

WEB-based and Desktop-based data access

Possibility of professional data processing, both on a local PC and through access to data from virtually any device with WEB browser, without installing any special software.

Best price

The design and production process optimization ensures attractive prices.

Simultaneous data recording from different source types (analog, BRI, E1, VoIP)

Software architecture allows combining data from different sources into a common database, preserving the ability of differentiating access to information from each type of lines.

Search in audio data by words and phrases

Using the advanced technologies, based on audio analytics, allows searching in the recorded information for certain words or phrases through typing them in text form, ensuring an extremely reduced sound data processing speed. Search accuracy does not depend on the sound quality, accent, dialect or non-standard grammar. Currently it supports Russian and English.

A wide range of connection interfaces (PCI, PCIe, Ethernet, USB)

PC-installable PCI and PCI-Express printed circuit boards; External devices connected to PC via USB or Ethernet-port; Compact stand-alone `all in one' solutions based on specialized devices.

Certifications

Our equipment meets the requirements of European Union as confirmed by the Declaration of compliance to the Directives EU 2004/108/EC and 2006/95/EC as well as quality standards EN 55032 and EN 55024.

Partnership program

Take advantages of partnership:

Training and consulting

- free training of specialists
- assistance in formulation of commercial proposals
- consultations on equipment selection

Marketing support

We provide our partners with the multi-faceted marketing support:

- ready promotional materials in the electronic and printed formats
- assistance in preparation of the own promotional products
- support in organization and conducting of presentations for clients
- providing of analytical and technical information that is not available for clients

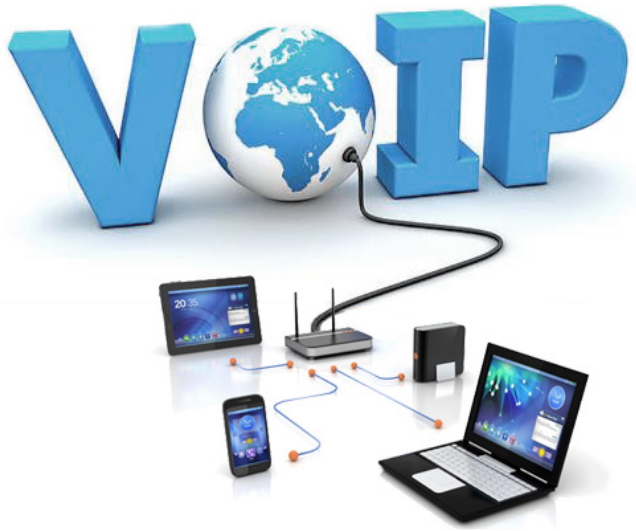
Free technical support

- technical service offers consultations to all partners and end customers of the company free of charge
- technical service is available through the special site with the electronic requests management system, by e-mail or phone
- technical service specialists may offer both written and verbal advice as well as solve the problem remotely while connecting to the customer system upon his request

AMR-IP

Multichannel complex 'AMR-IP' of information registration and storage is designed to register, store, replicate, sort and analyze the connections of IP telephony and other telemetry transferred over TCP/IP and UDP protocol of IP telephony.

The voice information is recorded in the stereo mode, which enables to single out each subscriber for the personal identification and carry out the autoequalization of signal levels of near- and far-end subscribers.



Technical characteristics

Connection to Span port	10/100/1000 Mbit/s и 10 Gbit/s
Nondestructive and nondetectable connection to Ethernet channels	10/100/1000 Mbit/s
Maximum number of simultaneously registered sessions (channels of VoIP telephony)	500
Total capacity of DBMS	up to 100 million entries
Maximum number of simultaneously connected users	100
Maximum capacity of archive	32 Tbyte
Supported protocols	H.323 (H.245, H.225 RAS), SIP, Skinny/SCCP, Unistim, Avaya IPOffice
Supported voice codecs (RTP)	G.711(aLaw/ uLaw), G.723, G.723.1, G.726, G.728, G.729(a/b), GSM-FR, GSM-HR, GSM-EFR, GSM-AMR, GSM-AMRWB
Integration with telecommunications equipment	CDR/SMDR УПАТС: IP MediaServer, Cisco IP Call-center

AMR-X

'AMR-X' is a self-contained hardware-software complex designed for the high-quality recording, long-term storage, reproduction and processing of information obtained from the analog and digital sources of audio signal.

Signal sources: any analog audio output (phone, microphone, radio station, dispatcher desk, audio recorder, telemetry), any digital PABX, primary rate channels PRI-E1, ISDN BRI lines.

Assembly: complex may be equipped with 1 or 2 AMR PCI cards of different number of channels for registration of analog and (or) digital signal sources.

Features: 'AMR-X' is a self-contained device of registration that does not require the computer for information recording and reproduction. In contrast with the registration complexes based on the standard PC, it features the compact size and advanced reliability.

Device characteristics:

- made on the basis of specialized platform for integrated systems
- body is made from the metal
- dimentions (WxDxH): 32cm x 24 cm x 7 cm
- mini-ITX motherboard based on the processor with the low-level energy consumption (features the higher fail safety, compact size, satisfactory performance)
- built-in stereo speakers
- external AC-power adapter
- OS: Windows
- control panel with LED indicator, which ensures the setting of registration system as well as work with database

AMR-X-PRO

'AMR-X-PRO' is a self-contained dust- and moisture-proof hardware-software complex that includes components with the level of protection against external actions (due to IP66-IP67 standard).

It is designed for the high-quality recording, long-term storage, reproduction and processing of information obtained from the analog and digital sources of audio signal.

Signal sources: any analog audio output (phone, microphone, radio station, dispatcher desk, audio recorder, telemetry), any digital PABX, primary rate channels PRI-E1, ISDN BRI lines.

Assembly: any AMR device registering the analog and (or) digital signal sources (PCI- or PCIe card, Ethernet or USB with the different number of channels) may be installed inside the equipment.

Design features:

- hermetic aluminium body that is tamper-proof and heat dissipating
- electronic components of device are firmly set inside the body and have no connectors, which directly come out
- external connectors are firmly set in the body and connected with the internal electronic components through flexible connectors, which ensure the normal operation of main components of device and system in whole in the case of external connector damage and failure as well as easy replacement of damaged elements
- made on the basis of specialized platform for integrated systems
- built-in indication of equipment operation and channels activity
- data archiving management
- built-in Wi-Fi-module that provides the secured access to data practically from any device with Wi-Fi module and WEB browser
- two built-in SD card readers provide an opportunity to automatically archive the registered data in the external media with the help of 'hot' media swapping

Features:

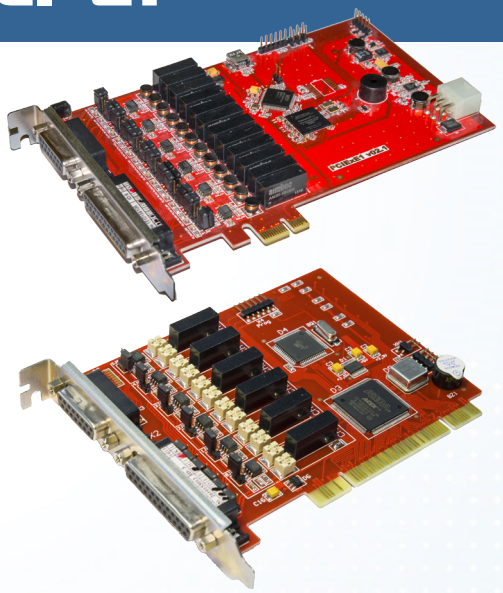
- dimentions: 222 x 146 x 106 (mm)
- power supply – from 12V (AC-power adapter 220/12V is supplied complete)
- operating system: Linux

AMR-PCIe-E1, AMR-PCI-E1

Hardware-software complex is designed for registration of voice and address information circulating within PRI E1communication lines.

The card is made in two variants – PCI and PCI-Express, for installation in PCI or PCI-E computer slot respectively.

The voice information is recorded in the stereo mode, which provides an opportunity to single out each subscriber for the personal identification as well as carry out the autoequalization of signal levels of near- and far-end subscribers



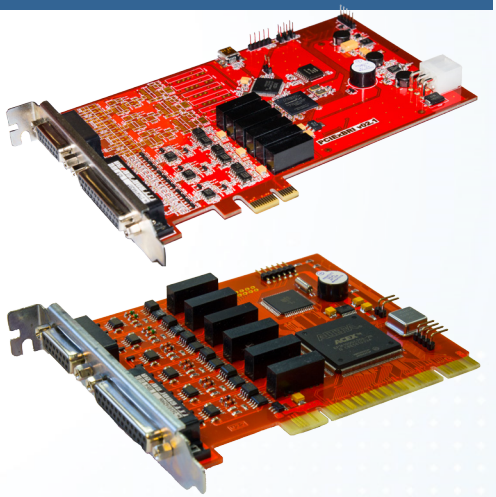
AMR-PCIe (PCI express). Technical characteristics	
AMR-PCIe-E1 / Computer connection interface	PCIe (PCI-express)
AMR-PCI-E1 / Computer connection interface	PCI
Connection to communication lines	parallel, with full galvanic decoupling
AMR-PCIe-E1 / Number of channels connected to one card	From 30 to 180 (1- 6 streams E1)
AMR-PCI-E1 / Number of channels connected to one card	From 30 to 90 (1- 3 streams E1)
AMR-PCIe-E1 / Maximum number of cards in one computer	11 (1980 channels, 66 streams E1)
AMR-PCI-E1 / Maximum number of cards in one computer	11 (990 channels, 33 streams E1)
Registered signaling types	SS-7 (OKS7), DSS-1, R2D, R1.5, R1 [0x0B], V5.2, VSK2 Dec, R1 [0x09], VSK1
Maximum length of the cable connected to the stream	3 meters
Length of the cable for connection of one extension cord	300 meters
Input resistance on the direct current (AC)	at least 100 MOhm
on the alternate current (DC)	at least 2.5 kOhm

AMR-PCIe-BRI, AMR-PCI-BRI

Hardware-software complex is designed for the registration of voice and address information circulating within ISDN BRI communication lines.

The card is made in two variants – PCI and PCI-Express, for installation in PCI or PCI-E computer slot respectively.

The voice information is recorded in the stereo mode, which provides an opportunity to single out each subscriber for the personal identification as well as carry out the autoequalization of signal levels of near- and far-end subscribers.



Technical characteristics	
AMR-PCIe-BRI / Computer connection interface	PCIe (PCI-express)
AMR-PCI-BRI / Computer connection interface	PCI
Connection to communication lines	parallel, with full galvanic decoupling
AMR-PCIe-BRI / Number of channels connected to one card	2-24 (2B+1D), 2-12 (1B+1D)
AMR-PCI-BRI / Number of channels connected to one card	2-12 (2B+1D), 2-6 (1B+1D)
AMR-PCIe-BRI / Maximum number of cards in one computer	11 (264 линий 2B+1D, 132 линий 2B+1D)
AMR-PCI-BRI / Maximum number of cards in one computer	11 (132 линий 2B+1D, 66 линий 2B+1D)
Input resistance on the direct current (AC)	at least 10 kOhm
on the alternate current (DC)	at least 1 MOhm
Built-in indication	synchronization with the lines, line activity

AMR-NET-BRI

Hardware-software complex is designed for the registration of voice and address information circulating within ISDN BRI communication lines. The device is made as the external block connected to the computer via Ethernet..

It enables the transmission of data from sources, which are located at the considerable distance from the registration place. At the same time, the data are not stored in the place of device installation that's why the unauthorized access to them is completely excluded.

The voice information is recorded in the stereo mode, which provides an opportunity to single out each subscriber for the personal identification as well as carry out the autoequalization of signal levels of near-

Technical characteristics	
Computer connection interface	Ethernet
Connection to communication lines	parallel, with full galvanic decoupling
Number of channels connected to one device	2-12 (2B+1D), 2-6 (1B+1D)
Maximum number of devices connected to PC	11 (132 lines 2V+1D or 66 lines 1V+1D)
Built-in indication	power supply, synchronization with the lines, lines activity
Device power supply	DC, 5 V 1,5 A

AMR-NET-A

Hardware-software complex is designed for the high-quality recording, storage and reproduction of information circulating within the analog communication channels.

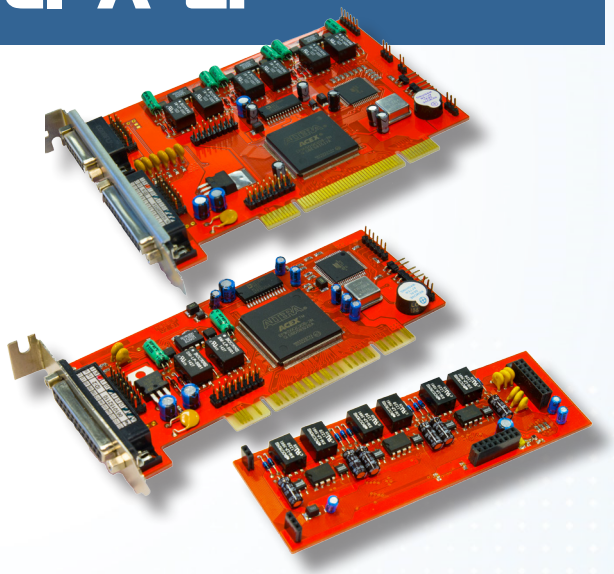
The device is made as the external block connected to the computer via Ethernet.

It enables the transmission of data from sources, which are located at the considerable distance from the registration place. At the same time, the data are not stored in the place of device installation that's why the unauthorized access to them is completely excluded.

The sources of information may be telephone or any other analog lines, microphones, radio stations or dispatcher desks. The device is made as the external block connected to the computer via Ethernet.

Technical characteristics	
Computer connection interface	Ethernet
Connection to communication lines	parallel, with full galvanic decoupling
Number of channels connected to one device	6
Maximum number of devices connected to PC	11 (66 channels)
Built-in indication	power supply, synchronization with the lines, lines activity
Device power supply	DC, 5 V 1,5 A

AMR-PCI-A, AMR-PCI-A-LP



Hardware-software complex is designed for the high-quality recording, storage and reproduction of information circulating within the analog communication channels. The sources of information may be telephone or any other analog lines, microphones, radio stations or dispatcher desks.

The card is made in two variants – PCI and PCI Low Profile, for installation in PCI computer slot.

The peculiarity of these cards is an opportunity to increase the number of registered signal sources by means of installation of add-on card on the mother board.

Up to 8 signal sources may be connected to AMR-PCI-A mother board. Additionally, 2 add-on cards with maximal 8 channels on each may be installed on this board. Such technical solution provides an opportunity to obtain the cards with the necessary minimum of channels at the initial stage of registration system implementation, as well as increase the channel capacity without purchasing of new computers while buying some more cards later on.

Technical characteristics	
Computer connection interface	PCI
Connection to communication lines	parallel, with full galvanic decoupling
AMR-PCI-A / Number of signal sources connected to one card	2- 18
AMR-PCI-A-LP / Number of signal sources connected to one card	2-8
AMR-PCI-A / Maximum number of cards in one computer	11 (198 channels)
AMR-PCI-A-LP / Maximum number of cards in one computer	11 (88 channels)
Frequency of analog signal digitization	8 kHz, 16 kHz, 32 kHz
Coefficient of input signal amplification	up to 38 dB
Maximum level of input signal	7000 mV

AMR-USB-A

Hardware-software complex is designed for the high-quality recording, storage and reproduction of information circulating within the analog communication channels.

The sources of information may be telephone or any other analog lines, microphones, radio stations or dispatcher desks.

Connection to controlled lines is parallel.

The device is made as the external block connected to the computer through USB plug.

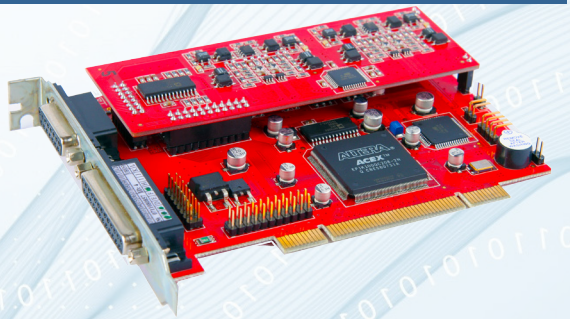
One external block ensures the simultaneous registration and control of up to 6 analog signal sources.

Up to 11 devices may be connected to one computer thus simultaneously recording the data from 66 information channels.

The technical characteristics are similar to 'AMR-NET-A' device.

ATRIS-PCI-A

Hardware-software complex is designed for automatic and swift notification of subscribers with the proof of receipt as well as round-the-clock recording of incoming messages with the function of auto-answer from the municipal telephone lines, private ABX and PBX.



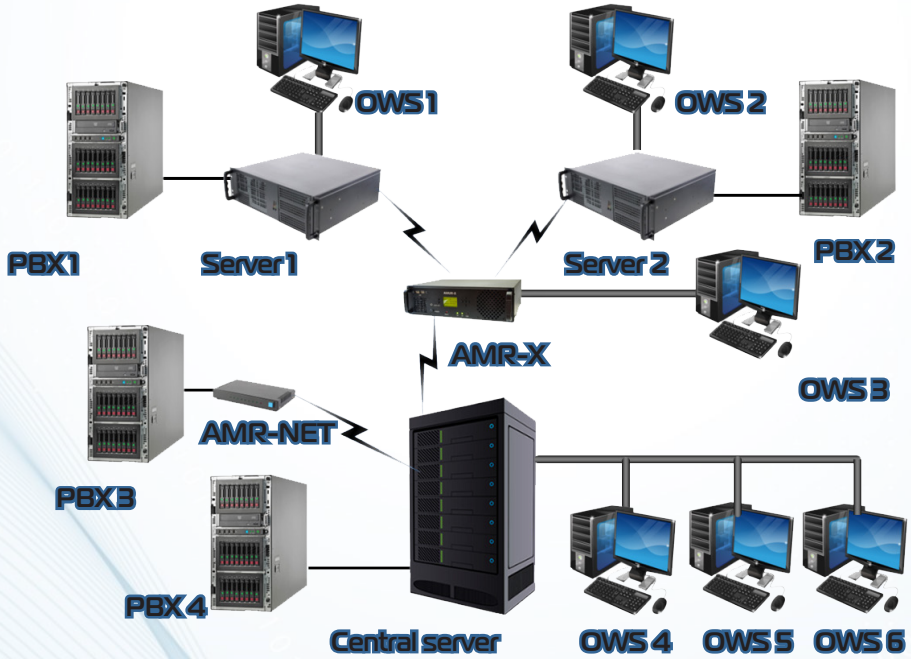
The hardware component is made as the card installed in PCI computer slot.

Every card ensures simultaneous notification or registration through 12 analog channels.

One computer may be equipped with up to 11 cards thus carrying out the simultaneous recording or notifying through 132 channels.

The technical characteristics are similar to 'AMR-PCI-A' device.

Example of organization chart of distributed audio information registration system



It is possible to organize the multilevel solutions for the registration of audio information obtained from the wide area sources with the help of the AMR hardware-software complexes. At the same time, the flexible structure of the complex provides an opportunity to determine the access rights at every level and for every user.

Operator workstation No.1 (OWS1) has an access only to the information registered by the Server 1.

OWS 2 has an access only to the information registered by the Server 2.

AMR-X with AMR-Collector software installed on it performs the function of the intermediate server which task consists in the fusion of information from the Server 1 and 2 as well as its further transmission to the central server.

The OWS 3 operator may get access to the information from Server 1 and 2. The central server stores the information obtained from all servers and sources, which are determined in the chart. Moreover, the OWS 4, 5 and 6 operators have an access to all data. Thereafter, the administrator of central server assigns the access rights for the system users and determines to which source data they may get access according to the solved tasks.

SOFTWARE

The software for the AMR complexes may run either under Windows or Linux operating system. The system components include the modules of self-diagnostics and problem-solving modules, which enable the automatic recording of information 24 hours a day.

Client-server architecture ensures the instant access to information from around the world.

User-friendly custom program interface provides an opportunity to work with the complex even without reading of the user instructions.

Main functions of the software

- recording of voice information in real-time mode
- automatic documenting of all obtained voice and service information (date, time of ringing signal arrival, conversation start, conversation duration, subscriber numbers, channels numbers etc.)
- management of records database with an opportunity to search, sort and filter the records by different criteria (time of conversation start, recording duration, number of channel, telephone etc.)
- the multilingual configurable user interface
- the system of access right differentiation for the complex management
- listening to any channel during recording
- reproduction of the recorded information without interruption of the record mode
- automatic deletion of the oldest records when filling the hard disk above the set limits
- amplitude and frequency correction of a playback signal in the real-time mode
- opportunity to record only in accordance with the previously prepared list of telephone numbers
- determination of inbound and outbound telephone numbers (active and passive ANI)
- detailed logging of system events and operator activities
- automatic archiving of the recorded information on the external data media
- graphic displaying of channel occupancy statistics
- preparation, editing, and printing of reports
- built-in audio and text editors
- full-featured access to the complex resources through a computer network
- opportunity for several users to simultaneously work with the complex via the network as well as the possibility for one user to work with several systems

PRIME-CRM

The Prime-CRM system is designed to automate and standardize the relationship management with the clients from the first contact to the conclusion of the transaction.

It provides the users with the convenient tool for automation of business processes, improvement of communication within the company, workflow automation as well as management of information about the clients and product range.

This system may be used as the independent software solution or together with the AMR registration complexes.

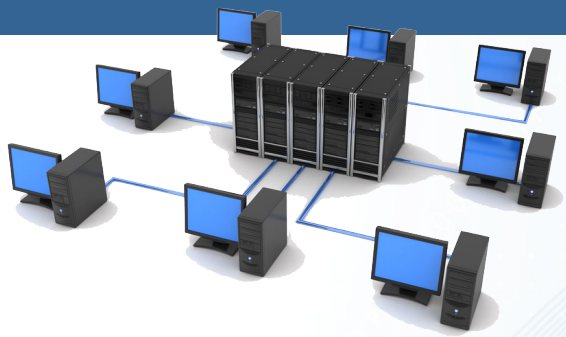
Subsystems composition and design mission:

- Companies: it includes the list of organizations with all necessary information
- Contacts: the detailed information on contacts (people) represented by the independent company clients, as well as contacts relating to the organizations from Companies section
- Transactions: storage and visualization of the detailed information about all company transactions (potential, perspective, current, completed etc), entered by the user
- Products: base of products sold by the company. The information entered to this section is used when producing the specification in Deals section
- Events: information about all the important events (activities performed by the user), which are connected with the deals and any other cooperation with the clients or company partners, are entered by the user to this section
- Tasks: visualization of information entered by the user about the tasks, which are to be performed and relate to any cooperation with the potential or actual company clients
- Calendar: this section presents the tasks, which are saved in the system in the convenient calendar form. If clicking the calendar cell with the definite task the automatic transition to the tab with the detailed task information is carried out
- Audio recording: responsible for the integration to the audio data recorded by the AMR registration system; provides an opportunity to obtain the information about phone calls with reference to the definite client or organization for further possible listening and processing

System advantages:

- integration to the the AMR audio information registration systems
- client-server architecture
- use of Web technologies
- work with the standardized base of contacts (clients, counterparts) that is common for the company
- effective quality control of sales department performance at any moment of time, workers goals setting and registration of their fulfillment
- receiving of statistics for the analysis of workers operation efficiency
- registration and standardization of all the information about company transactions

AMR-Collector



AMR-Collector is a program module designed for the automatic integration of databases of different AMR registration complexes into the single database.

This module enables the creation of the complicated complex systems for information registration if the registration devices with the single audio database are located at the significant distance.

The management team of large organizations with the numerous divisions and branch offices, which are located at some distance from each other, may set a task to get the access to all audio information recorded by the recorders of the remote divisions.

The AMR registration complexes offer 3 variants of this task solution:

- Access to data by means of dial-up networking client.

The simplest method to connect to the remote databases with the help of standard feature implies to using of WEB interface or Desktop program.

The disadvantage of this method is that it is possible to simultaneously work only with one server. Moreover, the data transmission rate and thus work with them strongly depend on the speed of channel used for the remote access.

- Archiving of data on the common media with the help of different servers.

In this case, the remote servers activate the function of data archiving. It is set in the way to copy the data on one common computer.

The advantage of this method is that the speed of work with the data does not depend on the communication channels speed because data are copied in advance.

This method features the same disadvantage as the previous one. It means that the data may be processed simultaneously only from one server because although the data are stored in one place they have different databases that is why such data may be processed only one-by-one.

- Use of the AMR-Collector program module.

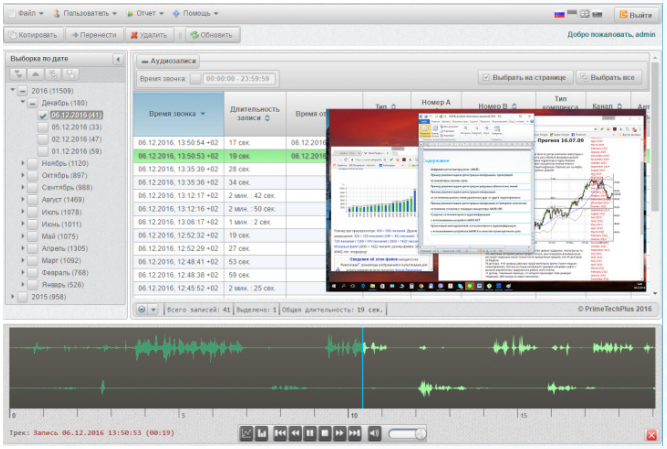
This solution does not feature the disadvantages of two mentioned-above variants and comprises all their benefits. The computer that is planned to be used as the single data warehouse is equipped with AMR-Collector software, which automatically copies data from the remote servers and combines them into the single database upon which all the information may be managed as a single whole.

The program features a wide range of parameters, which ensures the setting of module operation according to user requirements (data copy and transfer, constant or scheduled work etc).

AMR-Screen

The AMR-Screen screenshots record system is designed to record the displayed shots of PC operator workstation for further analysis of personnel activities.

AMR-Screen may work as the independent solution as well as together with the audio information record system, which provides the ample opportunities for viewing and further complex analysis of all operator activities in the course of cooperation with the client either by talking over the telephone or working with the computer data.



System capabilities:

- automatic recording of shots displayed on the operator PC with the specified periodicity
- viewing of data over the specified period
- synchronous reproduction of recorded shots with the voice data when using AMR audio information recorders
- preparation of the report on inaction periods of PC user
- possibility for the user to deactivate the recording of shot displayed on the monitor while registering this fact in the event log
- export of screenshots to video file
- convenient access to data through the WEB interface
- recording of screenshots from the time of computer switching on to the moment of its switching off or scheduled recording in the specified time intervals
- automatic control of disk space filling and deletion of aged data

AMR-Audio Search

AMUR-Audio Search is an effective method to search the pronounced words and phrases within the recorded voice data.

The use of advanced phonetic algorithms on the basis of the audio analytics provides an opportunity to search for the printed textual words and phrases within the recorded audio information, which provides an opportunity to considerably increase the speed of voice data processing as well as the search of necessary information.

Operational principle:

Two modes of audio data search are supposed – automatic and manual.

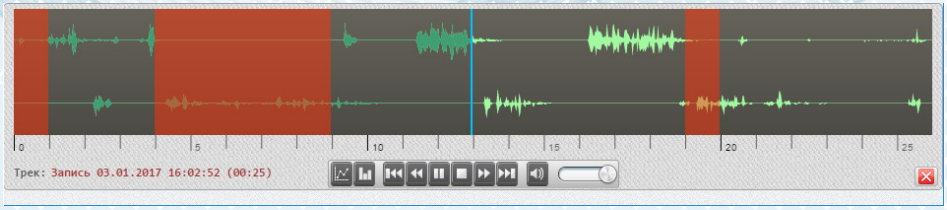
If consider the automatic search mode, the user creates the textual list of words and phrases, which are to be searched within all new audio records. The system automatically analyzes all the obtained audio records for available set words or phrases in real-time mode.

According to the manual search mode, the user prints the textual words and phrases, which he wants to find within the audio records, and the program searches this information only within records, which are currently loaded into the database, while considering the set filters.

The search result is saved in the separate database and the user may return to the work with records found during the previous searches at any time.

In the case of re-search of words and phrases used before, the information about their occurrence in audio records is taken from the existing database, which considerably reduces the time for result receipt.

Besides, the user may use the search results as the filtering parameters when working with the main audio records database.



Additional software modules

AMR-Heartbeat monitor

The AMR-Heartbeat Monitor system is designed for the constant remote control of normal operation of the audio information registration system as well as monitoring of DB place occupied by the audio data with the set periodicity.

This software is FREE OF CHARGE.

AMR-FAX-PRO

The program module is designed for automatic decoding of fax messages into the graphic format.

The AMR recorders are delivered together with the free decoder of FAX messages, which is able to decode the fax messages of simple formats transmitted at slow speeds as well as turn them into the graphic format. However, the functionality of the standard module is insufficient for work with the modern FAX protocols.

The AMR-FAX-PRO module, which may be installed instead of standard FAX decoder, applies the advanced signal processing algorithms, decodes practically all known FAX protocols and provides the system user with full access to the fax data.

AMR-CDR

The program module is designed for integration of the AMR complexes with CDR port (rating) of PBX.

If the AMR recorder is connected to the external (local) PBX lines, the database will not contain the information about the definite extension user who was called because the line includes information only about the external numbers.

It is possible to solve this problem and put the information about the extension user numbers into conversations base with the help of obtained data while connecting to CDR port.