EVERCOM

Product Overview

June 2015

Windows, as used in this manual, shall refer to the *Microsoft®* implementation of a *Windows™* system.

Rev 1.4

PP – PO2.0E-GEN

Document Modification Track Changes

Author	Version	Date	Comments
AP	1.0	January 30th, 2012	1st version
LP	1.1	February 14th 2012	Includes support for Firefox, Internet Explorer 9, Chrome, Safari and Opera
SV	1.2	January 2013	Hardware updates
LP	1.3	January 2015	Version 3.10 + FingerPrint + HW Spec.
SV	1.4	June 2015	Hardware update

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Solution Highlights

PhonEX TEN is a comprehensive fully web-based solution for call-accounting management and control. It provides an intelligent tracking of all calls in your enterprise network, both traditional and VoIP.

PhonEX TEN is the best choice for monitoring the call traffic in SMB organizations, as it can be adjusted to the local languages and currencies in one click of a mouse. Interoperable with traditional and IP PBXs such as Siemens, Cisco CCME, Aastra, Avaya IP OFFICE, MITEL, Alcatel, Innovaphone and many more, PhonEX TEN provides 100% reliable information, online, anywhere, anytime.

Based upon advanced Microsoft.NET technology, and the standard MS-SQL Express 2008 database, PhonEX TEN is designed for specific organization needs, thus creating information in shortest periods of time.

PhonEX TEN supports any VM environment like VMWARE & HYPER-V.

PhonEX TEN Key Features

- **Web-based** system, providing full functionality using any web browser, from anywhere inside or outside the organization;
- **Scalable system** architecture, supporting up to 2 sites and up to 400 extensions;
- **Supports the Microsoft SQL Express 2008** database and uses an advanced ASP.NET technology;
- **Carrier billing** collection capability and device assignation to a user/employee;
- **Event log** for tracking the system logs for a better system administration;
- **System monitor**, displaying online information about the CDRs collection from the 2 data sources, the CDRs processing status and other changes in the system;
- **Reports drill-down** ability, for viewing the different hierarchies of the enterprise in just one report;
- **Enhanced export API** that enables users to define the required export format;
- **Enhanced security**: access limitation to capabilities and functions on a user and group basis;

Web-based Solution

The PhonEX TEN fully web-based solution enables managers and users to conveniently access their accounting system anytime and anywhere, using a Web browser. PhonEX TEN enables managers to run department and personal reports and to configure and use administration tools via a Web browser. It permits straightforward configuration and system monitoring. PhonEX TEN is designed using the Microsoft .Net technology and has extensive configuration capabilities using XML files with Server – Client interaction.

The entire administration process is handled through Web-based tools that allow managers to create user accounts, review reports and logs, edit configuration files etc.

PhonEX ONE includes support for Firefox, Internet Explorer 9, Chrome, Safari and Opera.

MS SQL EXPRESS Database

The PhonEX TEN database benefits from the power of the standard and open database architecture. Users will be able to query the database using their own tools. The integration with other systems will be simpler. The MS SQL Express database allows several users to have simultaneous access to the PhonEX database. The dual databases architecture – detailed and summary - is also part of the SQL product. This architecture increases the report production speed.

Dashboard

The PhonEX TEN Dashboard is a useful tool meant to help administrators to get a quick and relevant image of the general system activity related to calls. The Dashboard can quickly provide – though it's graphical and non-graphical monitors – a snapshot over the outgoing and incoming calls, as well as several reports like Trunk & Carrier usages, TOP destinations, ….
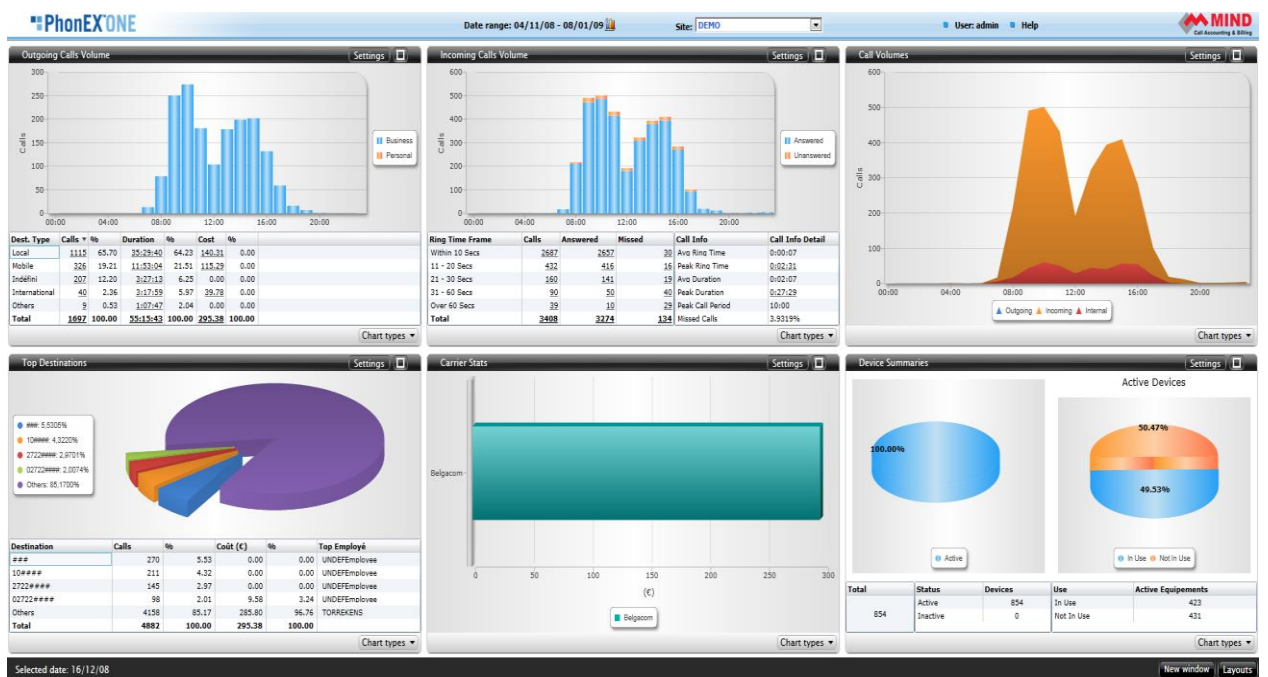
PhonEX TEN Dashboard

Dynamic Hierarchy

PhonEX TEN features a dynamic hierarchy structure with an unlimited number of hierarchy levels. These features allow the implementation of any complex hierarchy in the PhonEX hierarchy tables. Extensions can be associated to any hierarchy level, including the Organization level, as described below:
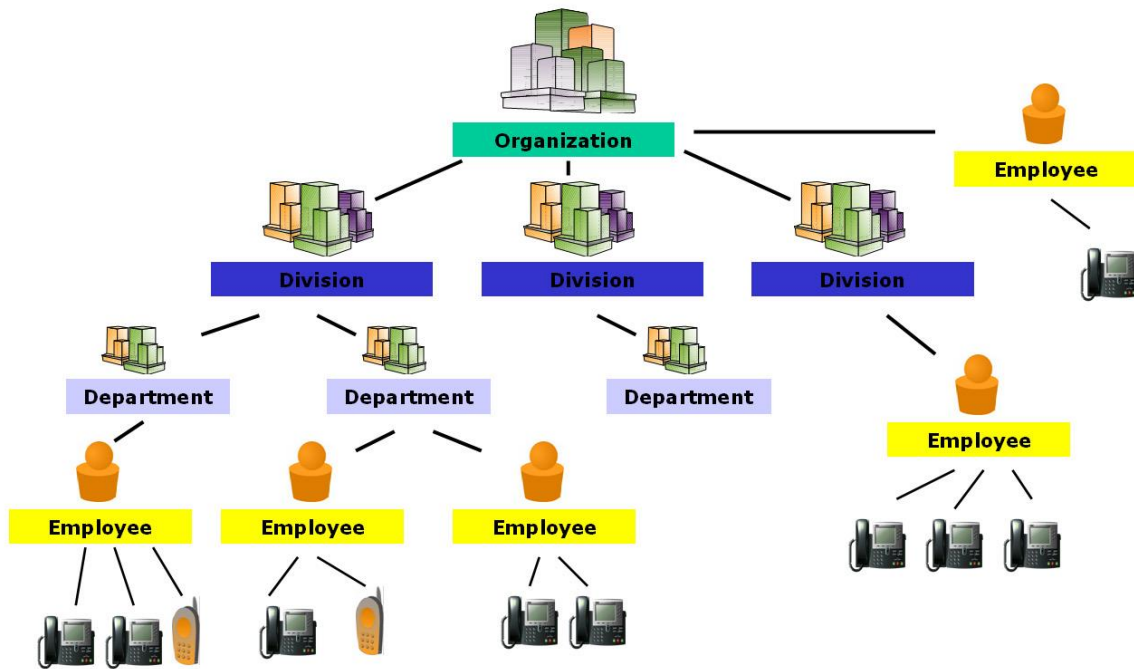
Figure 1 - Organization Hierarchy

System Architecture

The flexibility of PhonEX TEN's modular architecture, its configuration and the operating platform options enables to completely customize the best solution to meet the unique needs of each and every SMB enterprise. The modularity enables further configuration even while the system is running, without interrupting traffic.

Figure 2 - PhonEX TEN Architecture

System modularity

The PhonEX TEN system consists of one server including the **SQL Database**, the **Collect&Process** and the **Web server** functions.
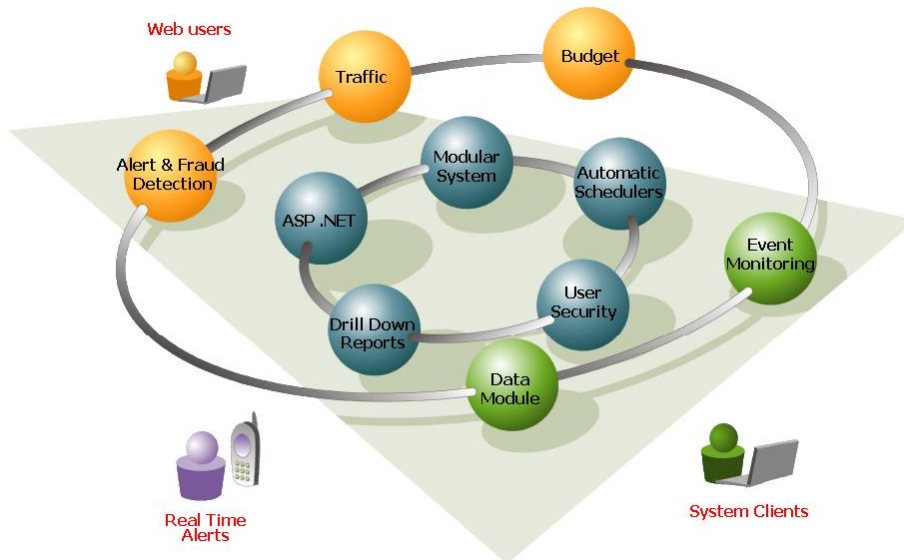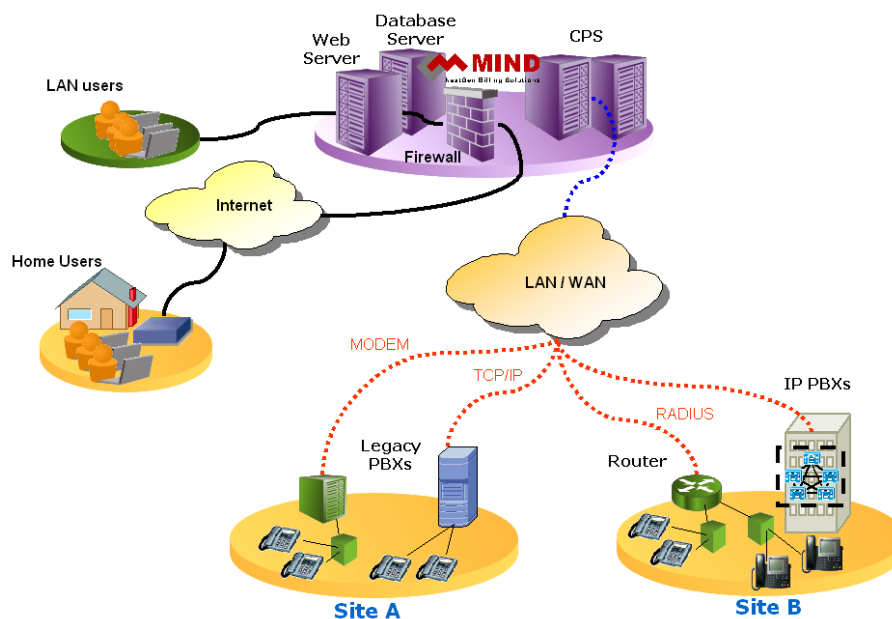

Figure 3 - PhonEX TEN Solution Architecture

User-Centric

The PhonEX TEN user-centric architecture provides a consolidated solution for the collection, analysis, reporting, and managing of all the telecommunication traffic expenses. This provides a single point of reporting for the different telecommunication and data devices and services, such as office extension, home extension, soft phone, and mobile phone. All these are based on a single employee.

Event Log Viewer

The PhonEX TEN system stores the most recent actions regarding the system use. It shows when the system was used and who used it. The Event Log viewer is an effective management tool based on the Microsoft Event Viewer, for system administrators to easily observe and track any suspicious behavior.

Drill Down Reports

PhonEX TEN web-based drill down reporting features give users simple, flexible and faster access to database information. The extensive reporting drill-down capabilities help users to better monitor their summary report information. Once a report is produced, administrator may drill into different hierarchies without needing to reproduce the same report over and over again.

Monitor Status

Users and system administrators are able to view the system's status online. The monitor displays the real time status of the different system elements, providing information on disconnects, errors, processes, and all other changes in the system. Whenever a problem occurs, it is immediately shown on the monitor.

The Monitor is an essential tool to audit and control the system's behavior and to observe the system's faults the minute they happen. Some of the statuses shown are: Data sources, Data process, Scheduler, New Trunk Groups etc.

System Security

Management, Control and Security

PhonEX TEN is designed to enable a smooth and easy management and control over the system. PhonEX TEN controlling entity is the Administrator. The Administrator manages and controls all the system's users throughout the entire organization. PhonEX TEN enables the following abilities:

- System's rules may be configured only by the administrator, having view/edit/delete permissions.
- Administrator may manage and restrict users from having certain privileges..
- Users have their own privileges and security groups. Sensitive features can be disabled for selected users.
- Administrator is provided with full control for managing users easily. Using an online view of each of the users' status, each change in any of the tables' status (add, remove, import) is immediately written into the system log event and generates a detailed audit trail. Support for unlimited levels of web users accounts to accommodate complex organizational and business models. This ability makes it easier to define and manage accounts or P&L (Profit and Loss) units by allowing an unlimited hierarchy within the organization's structure and an unlimited number of system rules allocated to users or user groups.

Database Security

All sensitive information and restricted data (such as customer passwords) are stored encrypted in the database, since the Database security is one of the most vital components of the overall security requirements. PhonEX TEN uses the Microsoft Frameworks security functionality. Static password authentication information is protected by cryptographic hash algorithms, safe from hacking or removal.

System Logs

The PhonEX TEN system stores the most recent actions regarding the system use. It shows when the system was used and who used it. The Event Log viewer is an effective management tool based on the Microsoft Event Viewer, a system administrator that can easily observe and track the system's suspicious behavior.

All-important operations performed by the user are logged. The term "important operations" includes all logins, logoffs, failed attempts to provide the correct password - that lead to account suspending, and operations dealing with the database (insert/update/delete).

Mediation

Data Collection

The PhonEX TEN system is capable of collecting call records from up to two data sources. The modular architecture gives the system the required flexibility, adjusted to SMB enterprises with low to medium Voice and VoIP Call Records volume traffic.

- The system saves data on calls that do not pass user-defined threshold requirements. It is simple to change the threshold parameter and repeat the sorting.
- Undefined lines (the result of different communication problems) are stored in a separate file on a daily basis. This file is used to identify problems and is erased automatically after several days (the amount of days is defined by the user).
- Statistics are stored on data collection and percentage of calls that are below defined thresholds as well as bad calls.
- All these tools allow for absolute reliability and avoid data loss.

PhonEX TEN Collector

The PhonEX TEN Collector is part of the CPS function (Collect and Process) and responsible for configuring the system's sites and data sources (DS). The PhonEX TEN collector, working in the background and as a service, is capable of transferring the usage records files by using a FTP or TCP/IP protocol, Modem, Shared file, ODBC, HTTP, Telnet, Syslog and Radius. The key features of the PhonEX TEN collector are:

- Password protected connection
- File transfer recovery mechanism
- Fully safe data transfer
- Backup of transferred data
- Comprehensive logging of the transfer sessions

Buffers

The common way of collecting the call detail record from a remote PABX site is by using a local buffer; this buffer collects and stores all information until the collector initiates a collection session and pulls down the records. We recommends of using a 3rd party vendor buffer - the Scannex Net Buffer. These buffers were found very reliable and with good resilience capabilities.

Process

PBX Integrated

PhonEX TEN is easily integrated with all PBXs through the CDR/SMDR port or via network connection. The exclusive system architecture allows for fast and easy installation and configuration for each Call Detail Record (CDR) format provided by any APBX, including multiple line call data records.

Major PBX vendors are supported, including, Alcatel, AVAYA IP OFFICE, Cisco CCME, Aastra, Siemens, Mitel, NEC, Panasonic, Phillips, SDX, and others.

PBX CDR Data Interface

PhonEX TEN has a flexible interface to interconnect to PBXs. PhonEX TEN supports unlimited number of CDR formats, includes several common default interfaces, uses flexible user interface for easy definition or editing of CDR formats.

Rating

PhonEX TEN offers a flexible and powerful rating engine that allows enterprises unlimited number of rating schemes and billing plans. Administrators can set different tariffs for individual trunks or trunk groups and update system with future tariffs changes and updates. The Charges feature enables the Administrator to define and maintain the dialing prefixes for the system, define all the telephone companies (carriers) that work with the organization, define a daily profile for each telephone company, specifying telephone operation schedule (working days, non-working days and holidays), define various day types that differ in charges, specify various tariffs (i.e. inexpensive, standard, peak, international) for each telephone company, create a call destination list according to various tariffs and call destinations and define prefixes that are charged identically.

The costs feature allows different types of taxes to be defined. Taxes are charges that are added on to the cost of the call, based on the calculated cost of the call.

PhonEX TEN supports different methods of call cost calculation:

Charge Method	Description
Charge by Duration	Charge By Duration is used to describe Charge Rates that have graduated fees based on the duration of the call. Additionally, the duration of the call may be based on pulses or on length (number of seconds).
Fixed Charge	Tariff is based on a flat fee.
PBX Cost (AOC)	The cost will be send by the operator (AOC) and will be available in the CDR records.

Advanced Reports

PhonEX TEN offers a series of advanced features that enhance and ease report production and viewing.

Relative Dates

For user convenience, PhonEX TEN has an option to use date codes in both the Query and Pre-defined Report options. For example, to produce a report on the previous months telephone usage, –m in the From and To date fields should be entered in the report dialog box.

Report Output Options

All reports has the option to be printed, emailed and saved as a Text file (*.TXT), Word document (*.DOC), Excel document (*.XLS), Acrobat Reader file (*.PDF), Web page (*.HTML) and as a Rich Text Format document (*.RTF). In addition, a user-friendly interface allows report formats to be created according to the requirements of various accounting applications.

Multi Currency Capabilities

PhonEX TEN can be used in a global telecommunication environment since it allows report generation in any currency as defined by the user. PhonEX TEN can configure each site and tariff company with local currency parameters. PhonEX TEN can generate reports in two currencies simultaneously (i.e. Euro and USD), fulfilling the Multisite environment in different countries.

Query Generator

The PhonEX TEN query generator is a fast and flexible reporting tool that allows the user to create unlimited custom reports using the query tool. With the query tool the user selects the data required, chooses how the data is to be sorted and summarized, and selects the format of the report. Custom queries can be saved for future use. You can define customized report layouts, selecting the fields and their length and position in the page. This option, combined with the export mode, enables the user to export information to any external system in any possible format.

PhonEX TEN - Standard Query

Reports

The PhonEX TEN produces quick and clear reports on virtually every aspect of the communications system, tailored to suit individual needs. PhonEX TEN provides with full or partial monitoring capability of telephone, fax, and modem usage for the entire enterprise. Whether required minute-by-minute updates, monthly reports, or data on long-term usage patterns, PhonEX TEN supplies with this information. Reports can be produced for any hierarchical level of the enterprise. PhonEX TEN supports unlimited number of hierarchical levels. Reports are presented in tabular form, and summary reports have a graph option.

What If... Report

The What If report allows the user to compare the real cost of selected calls with the cost of the same calls as if they were made using an alternate carrier, or an alternate origin of call. The user can see at a glance if it is cheaper to use a different carrier for certain calls to a specific destination. The report displays the difference between the real cost and the calculated cost for the selected carrier as a percentage. It lists the real cost of the call alongside the cost according to the alternate carrier. PhonEX TEN can prepare a summary report showing the call cost information for up to six different carriers simultaneously.

Advanced Report Scheduler

The PhonEX TEN Scheduler allows queries and reports to be programmed to run at specific times. The Scheduler keeps track of each task and generates the queries and reports at the designated time. Can perform a task on a one-time basis, or schedule it to run at regular intervals. The output of the task can be sent automatically to a printer, file, or electronic mail.

Pre-defined Standard Report Formats

The PhonEX TEN includes several pre-defined standard report formats often required by a telecommunications manager. These reports were designed following close consultation with customers. In addition, a user-friendly interface allows report formats to be created according to specific user needs.

Predefined Reports

PhonEX TEN provides the following built-in, predefined reports to easily track inappropriate telephone use. These reports are specially designed for accelerated report generation using the system's intelligent database:

- Summary.
- Summary for Projects.
- Overrun Calls.
- Top Extensions.
- Top Destinations.
- Cost Distribution by Department.
- Cost Distribution by Extension.
- Undefined Extensions.
- Extension Details.
- Undefined Accounts.
- Account Details.
- Account Summary.

Summary Reports

PhonEX TEN provides the user with a built-in tool for the easy generation of summary reports. The user can generate a full summary in a matter of seconds for the complete enterprise, or for any one of the enterprise's departments or hierarchy levels. The summary reports include fixed monthly costs for extensions and taxes as defined by the user. Automatic distribution of summary reports via e-mail is available.

Summary Report for Projects

This report includes all telephone calls for a selected project. The report includes all calls that are associated with extensions linked to a project. The user can generate a general report for the entire enterprise, or specify a specific project.

Overrun Calls

This report provides up-to-the-minute information on the specific extensions that are exceeding user-defined set limits.

Top Extensions

This report includes the extensions most extensively used in an enterprise. Calls are sorted by duration and by cost.

Top Destinations

This report includes the destinations most extensively called in an enterprise. Calls are sorted by duration and by cost.

Cost Distribution by Department

This report shows the percentage of total call costs as distributed among the different levels of an enterprise, sorted by division and department.

Cost Distribution by Extension

This report shows the percentage of total call costs as distributed among extensions within a department. It also shows the percentage of total call costs as distributed among destination types for a single extension.

Undefined Extensions

This report provides the user with a summary of the calls on all the extensions within the system that have not been assigned to any department. This report is useful to find new extensions installed in the IP PBX which have not yet been defined in PhonEX TEN.

Extension Details

This report provides a detailed listing of all the outgoing and incoming calls for a specified extension. This report has several formats, including a letter format. The letter format can be addressed to an employee, based on the associated extension's information.

Undefined Accounts

This report allows the user to access a summary of the calls made on accounts that have not been defined in the system.

Account Details

This report provides details of all of the defined accounts; the calls placed on every account and a report about the budget of each account.

Account Summary

This report produces a summary of the activity of all defined accounts.

Monthly Activity

This report details call activity (cost, calls, and hours) per month, beginning with the last month in report and going back a designated number of months. An average of the months is listed.

ORGANIZATIONAL MONTHLY ACTIVITY

This report details call activity per month, beginning with the last month in report and going back a designated number of months for each of the designated levels of the report.

Hardware & Software: minimum requirements

PHONEX TEN server
- Dual Core Processor
- 4GB Ram
- Windows 7 Pro, Windows 8 Pro, Windows 2008 server (Standard or Enterprise Edition) **32/64 Bit +** IIS + ASP.NET 2.0
- Microsoft EXPRESS EDITION 2008 **(limited to 1 CPU and has a maximum database size of 10 GB)** included on the PHONEX TEN CD.
- Windows Installer 4.5 (necessary for Microsoft SQL 2008)
- Windows powershell 1.0 (necessary for Microsoft SQL 2008)
- Framework 3.5 SP1 (necessary for Microsoft SQL 2008)
- Framework 4.0
- Microsoft Silverlight (PC client)
- 80 GB HDD (including OS)
- Network Card 100/1000 (full duplex)
- **VMWARE & Hyper-V Supported.**
- A SW based license will be provided using a fingerprint of the Server.

Minimum PC Client requirements
- Windows 7 & 8
- Silverlight 5
- Microsoft Office 2003
- Adobe Acrobat Reader 8

WEB BROWSER supported

Browser	Version
Firefox	10
Internet Explorer	9 , 10 & 11
Chrome	35.x to 43.x
Safari	5.1
Opera	18