



The Telesens Notary Server and Messenger

Raising up Security to the Next Level

Deutsche Post

At a Glance

Company Profil

We are an international Company headquartered in London with a 16 year international track-record within the IT-Infrastructure and Software Development Business. Germany is appointed as the European Business Hub

Facts and Figures

- Founded in: **1998**
- Employees: ca. 190 employees
- CEO: Eduard Rubin
CEO Germany: Nino Messaoud

Our Product

With our new **NOTARY-SERVER** Technology we ensure a new level of data-/ transmission security

Customers



Threats for Transaction Security

Sony Network was hacked and data from 100 million accounts was stolen



Hackers have stolen 45 Million Healthcare patient records

TAN, M-TAN, Photo- TAN have all been hacked



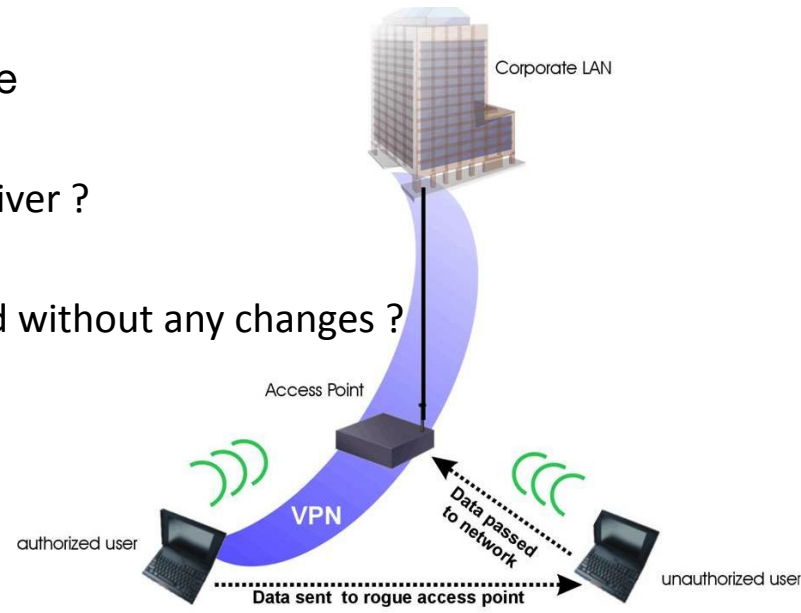
30 Million bank accounts have been hacked

Common Threats



Common Threats

- In most cases the user is not even aware that a „third-party“ has access to his confidential information
- The critical points in any Internet-Transmission are
 - Can you really 100% identify the sender and receiver ?
 - Are you sure that the transmitted data is received without any changes ?



- Think about what would happen if someone changes data while transmission or not the original receiver gets the data

Common Threats



- European Banks and Insurance Companies are losing hundreds of million Euros / Year because of fraudulence
- Within some E-Government Systems, fraud has opened the doors to faked documents, driving licenses etc.
- Within the Healthcare and Telemedicine Industry, genuine data can save lives
- Due to industrial espionage, companies are losing funds, competitive edges etc.



- Provide yourself and/or your clients an environment with maximum Security
- Protect yourself and/or your clients against fraud and against recourse rights

What can Telesens do for you?

- We have developed a technology, which provides you with the highest possible security standards to avoid the aforementioned threats
- With the usage of our NOTARY-SERVER Technology you can ensure the following:
 - ✔ Identify **100%** the sender and receiver
 - ✔ Ensure that nobody can change Data during transmission and provide your employees and/or customers a safe way of transmitting data
 - ✔ Use our applications or use the **NOTARY SERVER** as a core-technology for your own applications and services. Telesens provides you the technology. **We do not host your data.** The Data is always under your control.
 - ✔ Hide your secrets to competitors and lower the risk of fraudulence
 - ✔ Independent of mobile or desktop applications. The NOTARY-SERVER secures your values

How it works

- Telesens has developed a new, innovative security and identification solution that enables all online transactions and interactions to be conducted securely.
- The unique characteristic of this solution is the sole use of INDIVIDUAL KEYS.
 - There is not one general key but a distinctive key for every transaction.
 - Transactions can only be conducted by users that have been registered as well as clearly identified with their hardware and as a person.

How it works

- Each Client and Client-Scenario has his **own** NOTARY-SERVER. There **is not** one Server for all clients. This ensures that each client is protected separately.
- The NOTARY-SERVER can be placed at your office or within a high security Computing Center.
- You can use the NOTARY-SERVER Technology with any device of your choice. Independent of whether it's a Mobile- or Desktop Device. Additionally, we support the major operating systems (Windows©, Android© or Apple OS©.)



The Requirements



NOTARY-SERVER



Mobile Devices



and/or

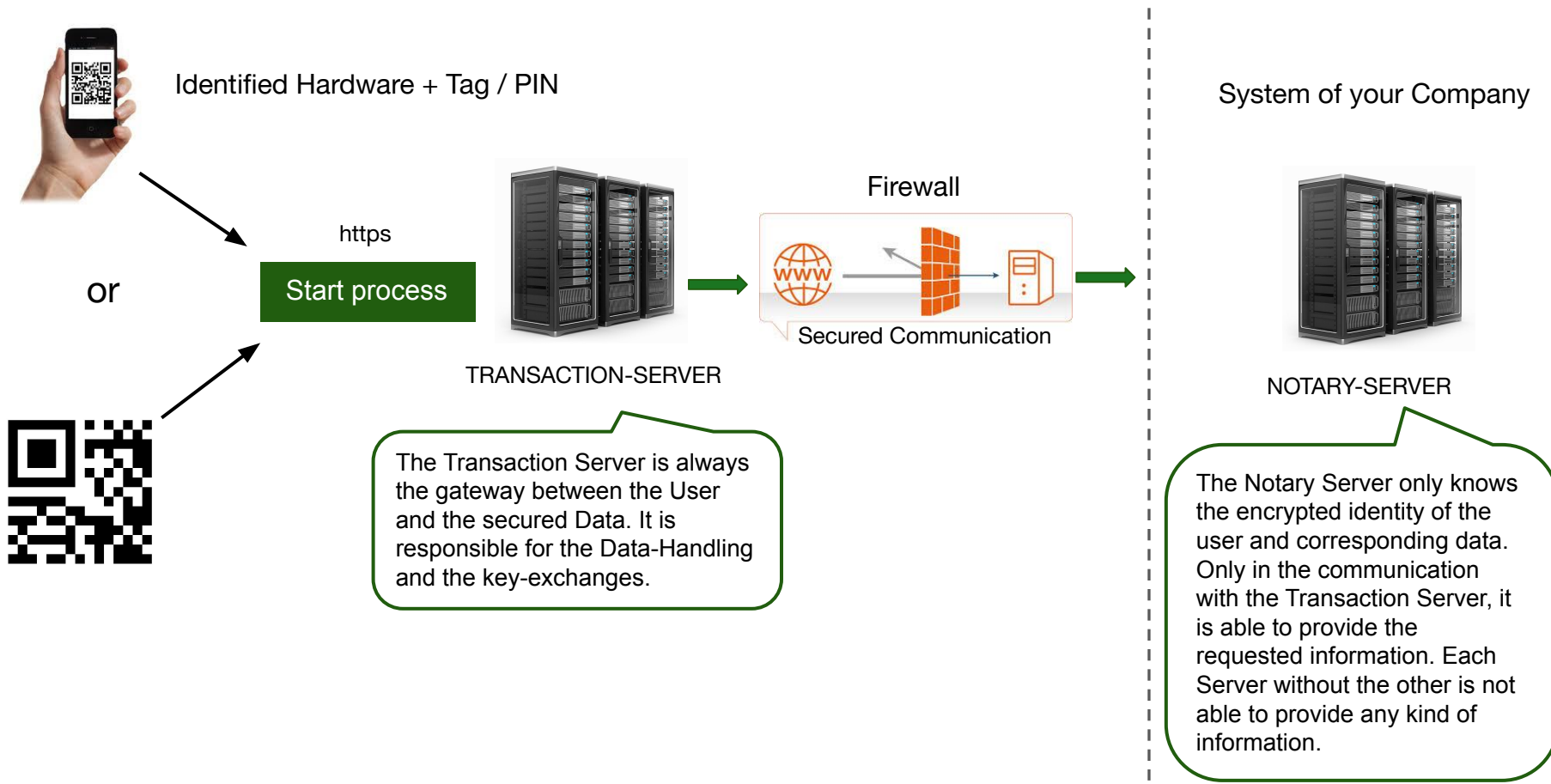


TRANSACTION-SERVER



Desktop Devices

The Process



The Telesens Messenger – “Tutus”

- ✔ Built on Notary-Server Technology
- ✔ Provides your employees, customers, partners etc. a secure and identified way of communication
- ✔ Has all standard functions like other Messengers, plus
 - Encrypted & Identified communication without general key
 - Encrypted & Identified Voice- and Video Communication
 - Encrypted & Identified single- or group communication
 - Encrypted & Identified Cloud Services, Data-Rooms etc.
- ✔ Perfect integration & combination with the Notary Server
- ✔ Independent of your mobile device, Tablet or Desktop

The advantages to existing Products

- The NOTARY-SERVER Technology can be used as a product or as a core technology in addition to your existing products.
- Due to the combination of different keys & items, the Sender / Receiver is identified 100%.
- No information can be changed during transmission. What you send is what the participant receives.
- No common key & technology for all users and scenarios. Each customer gets his own NOTARY-SERVER.
- Place the NOTARY-SERVER within your own Server-Farm or inside a Computing Center.



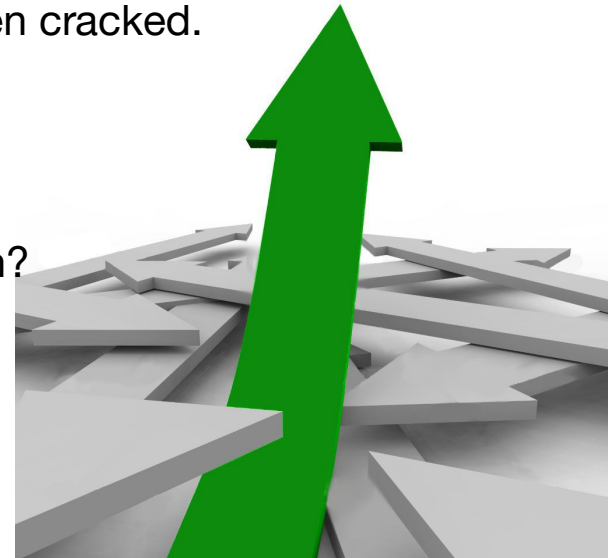
What is different to other solutions?

- Instead of using third party tools like “Key Generating” devices, you can use YOUR standard device for all purposes.
- The handling is very easy. Use your personal QR-Code to start any kind of action depending on your provider.
- You do not need to link your hardware device to e.g. your credit card, etc.
- It works with any known hardware on the major operating systems like Windows©, Android© and IOS©.



What is different to other solutions?

- No one – not even the provider or telecommunication provider – can read your messages and/ or content of transactions.
- “Man in the Middle” or “Brute-Force Attacks” can not harm you. These are the common attacks to steal sensitive data.
- TAN-Services – even to registered mobile device have been cracked. The Notary Server protects you against those attacks.
- Compared to other encryption solutions:
How do you know if your recipient is the dedicated person?
With the Notary Server, the recipient is 100% identified.



ProFix – Our latest customer

- ProFix provides its services to a wide client base
 - 250+ Banks in 14 countries which now use the **NOTARY SERVER technology** to secure their transactions
 - Profix provides services like
 - International Money Transfer
 - SWIFT
 - EastNets Products
- A customized version of the **Telesens Messenger „Tutus“** will be used as „Payment Instrument“ to transfer money



The Registration Process I

Registration

*That fields are required**

PERSONAL INFORMATION

--Salutation*-- --Title*-- Name* Last Name*

Date of Birth* Place of Birth*

ADDRESS

Germany Zip Code* City

Address*

CONTACT INFORMATION

Phone --Select secret question*-- Answer to the secret question*

Email* Mobile Phone* -- Preferred Channel* --

Cancel Register

The Registration process can be customized to your own homepage and / or already existing registration processes.

During registration we collect unique identifier of the used hardware. If the User wants to use several devices (e.g. desktop and mobile), then he needs to register both devices.

The Registration Process II

Registration

To confirm your email, please enter the activation code in the form below that was sent to your email.

[Didn't receive confirmation instructions?](#)

After the registration, the User receives his activation code to the previously entered email address. This is to confirm the given email address.

Please keep in mind, that usually the cooperate knows his customers. In case he is unknown, we support services like e.g. Post-Ident or similar services to confirm given address in the registration process.

The Registration Process III

Registration Results

Welcome Mr. John White!

Your account has been registered successfully.

Your pers.ident Number is **2345-1452-1345-1234**

You will receive an email with installation instruction.
Please read that instruction carefully before starting the installation.

Install Application

Choose the type of app.

- Messenger
- Coming soon...
- Coming soon...
- Coming soon...

After successful registration, the User receives a confirmation. The important information is the pers.ident Number. THIS is the unique identifier of the User for all future processes.

Now the User can select which applications he would like to install on his device, e.g. Home Banking Software, POS-Software, E-Commerce Software etc.

This screen & processes can be customized to customer needs. So YOUR applications can be provided after successful registration.

The Registration Process IV

Providing QR-Code is the most comfortable way for the end consumer to download applications of any kind.

Registration Results

Welcome Mr. John White!

Your account has been registered successfully.

Your pers.ident Number is **2345-1452-1345-1234**

You will receive an email with installation instruction.
Please read that instruction carefully before starting the installation.

Install Application

Messenger


Coming soon...

Coming soon...

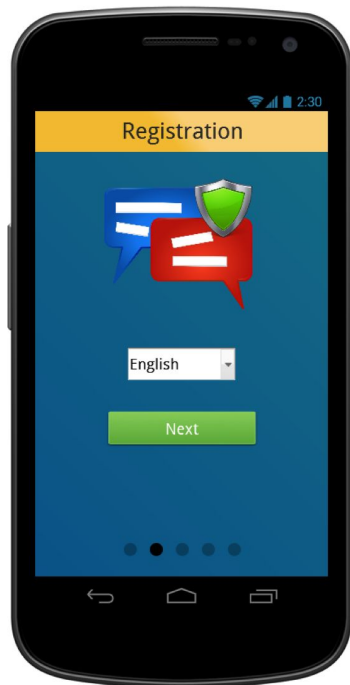
Coming soon...

Download app

Or



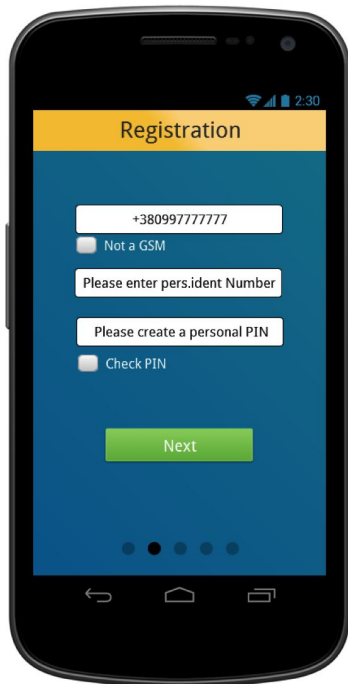
The Mobile Device Registration (I)



Now the User is able to launch the – on the Notary Server High-Security Technology based – Messenger. This Messenger can be customized to your individual needs and CI.

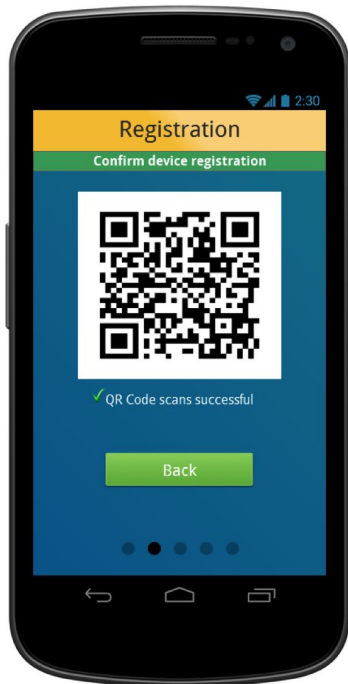
In the first Step – first launch of the Messenger – the User has to select the language. Due to our architecture, we are able to support any desired language.

The Mobile Device Registration (II)



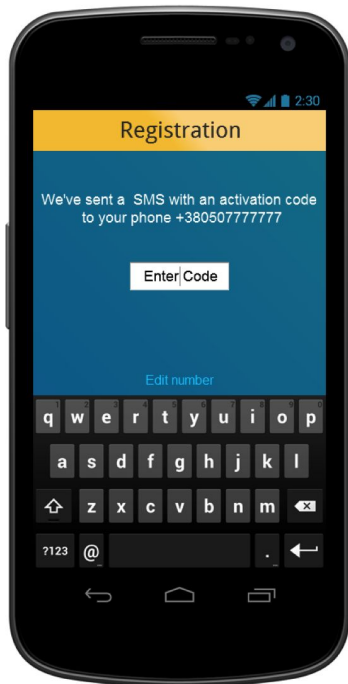
Now the User has to enter the previously provided pers.ident Number and has to select a personal password. The password is needed to launch the application.

The Mobile Device Registration (III)



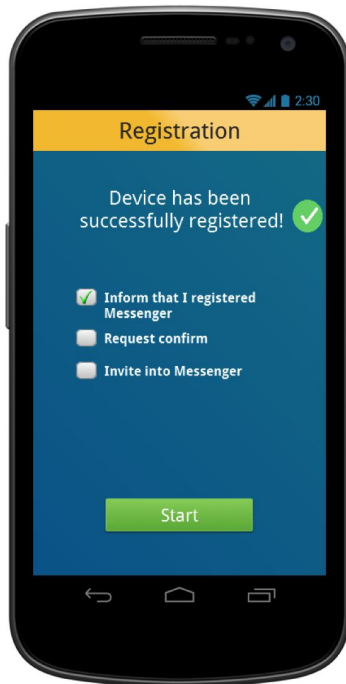
In the next Step, the User has to scan the provided QR-Code. This Step is a further security issue to make sure that the app is installed on the registered hardware and to confirm, that the QR-Code – which is used as a “door opener” to the applications – is correct.

The Mobile Device Registration (IV)



In the final Step, the User has to enter the activation code that was provided to the registered mobile device, which was entered during the registration process.

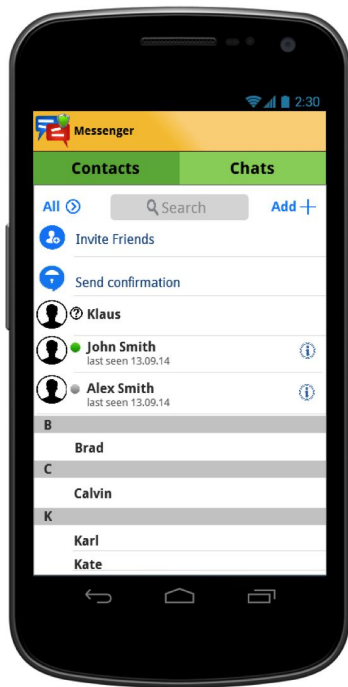
The Mobile Device Registration (V)



Registration is completed. The User finally has three options:

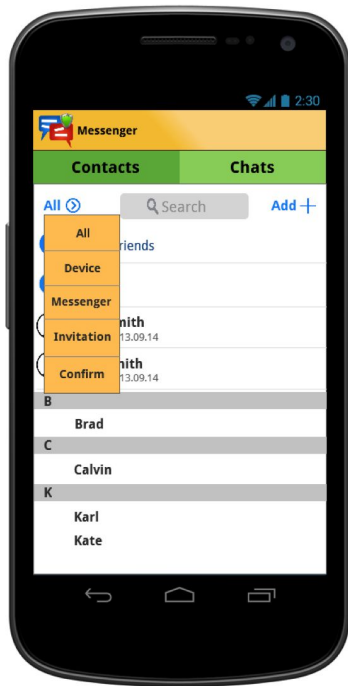
1. Inform my contacts that I have now successfully registered the Messenger. These contacts are out of the address book and the User can decide whom he wants to inform
2. Request confirmation from the informed contacts
3. Invite contacts to install the Messenger

The Application (I)



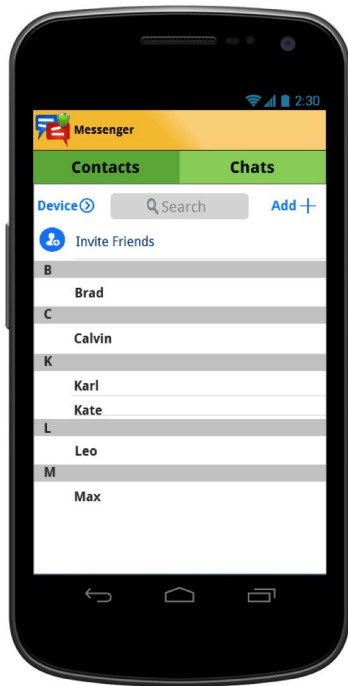
In the address book, the User can decide whom to invite, whom to block, to receive information who is already registered etc.

The Application (II)

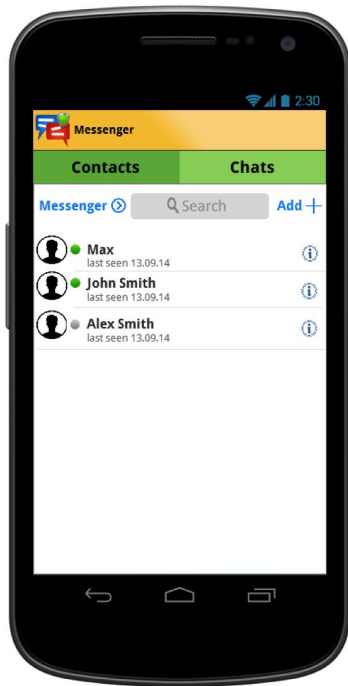


Furthermore, he can query his contacts by Messenger Contacts, contacts where he has sent invitation to, contacts where he is waiting for confirmation etc.

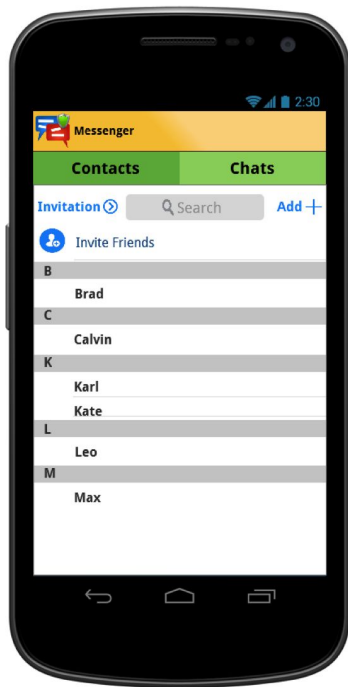
The Application: Device Contacts



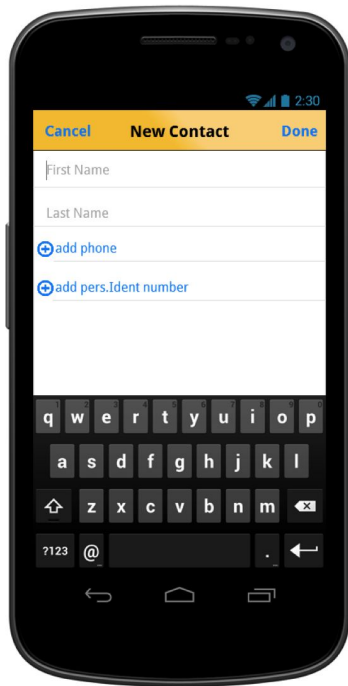
The Application: Messenger Contacts



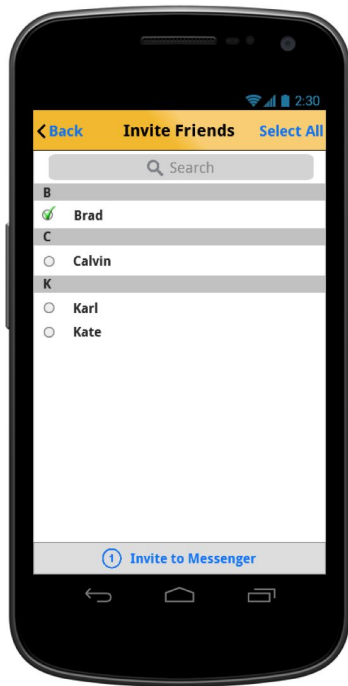
The Application: Contact Invitation



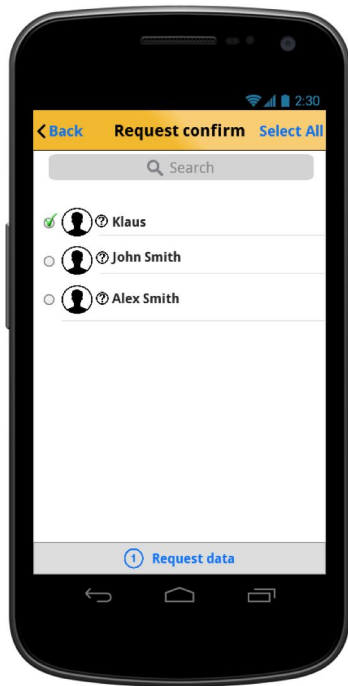
The Application: Add New Contacts



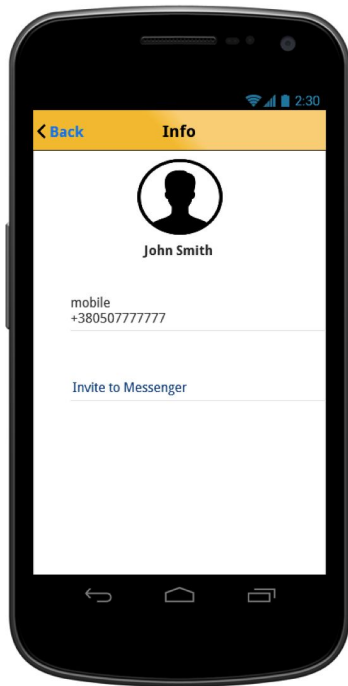
The Application: Multiple Selection for Invitations



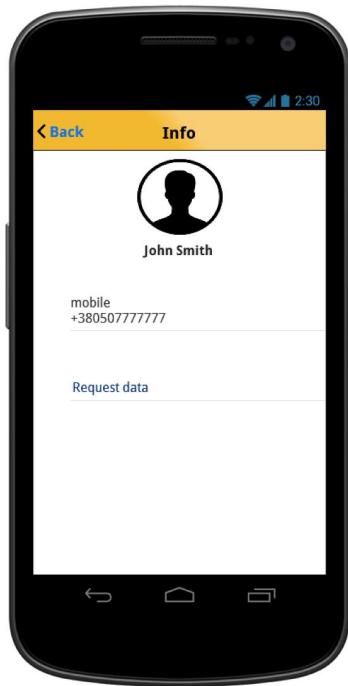
The Application: Multiple Selection for Confirmations



The Application



The Application: Request Information About Contacts



The Application: Start New Chat, File Transfer, etc.



To initiate any action, the User has to identify himself by

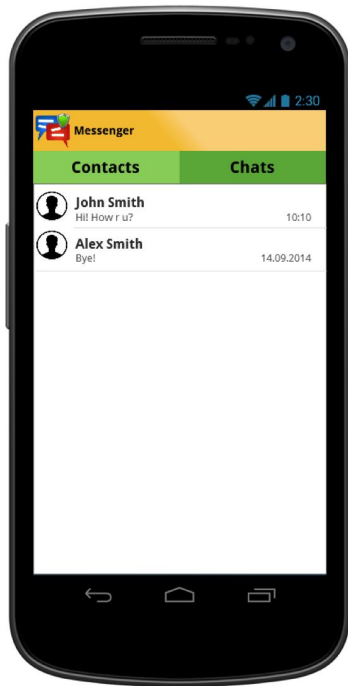
- Scanning the QR-Code from his personal card

OR

- Using a SoftTag to identify himself. A SoftTag can usually be placed on his keychain

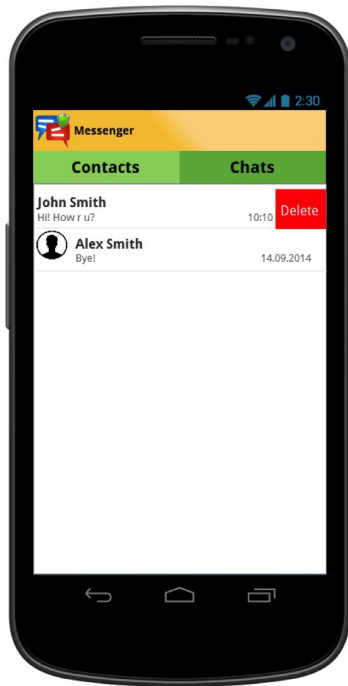
One of these security steps has to be completed. Otherwise no action e.g. chat, file transfer, start of an application or payment process is possible.

The Application: Multiple Chats



The User is able to handle multiple chats (Person to Person or Group chat) at once.

The Application: Control Chats



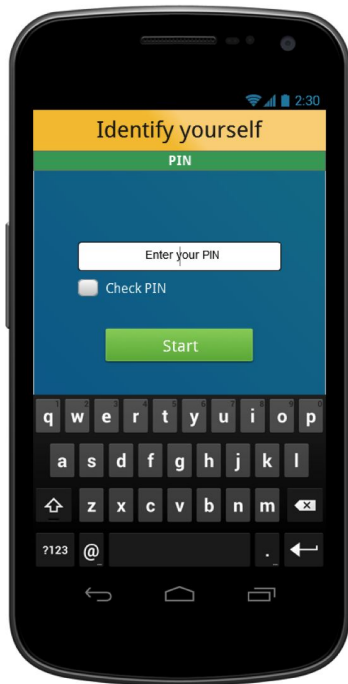
The User is able to add / delete chat participants at any time. Furthermore, he can SEARCH through the chat history for specific keywords.

The Application: Chat History



The Chat Window can be customized to your needs. Colors, CI etc. are changeable.

The Application: Additional Security



For very sensitive operations we can additionally use a PIN-Verification. If that option is chosen, then we have the following security levels:

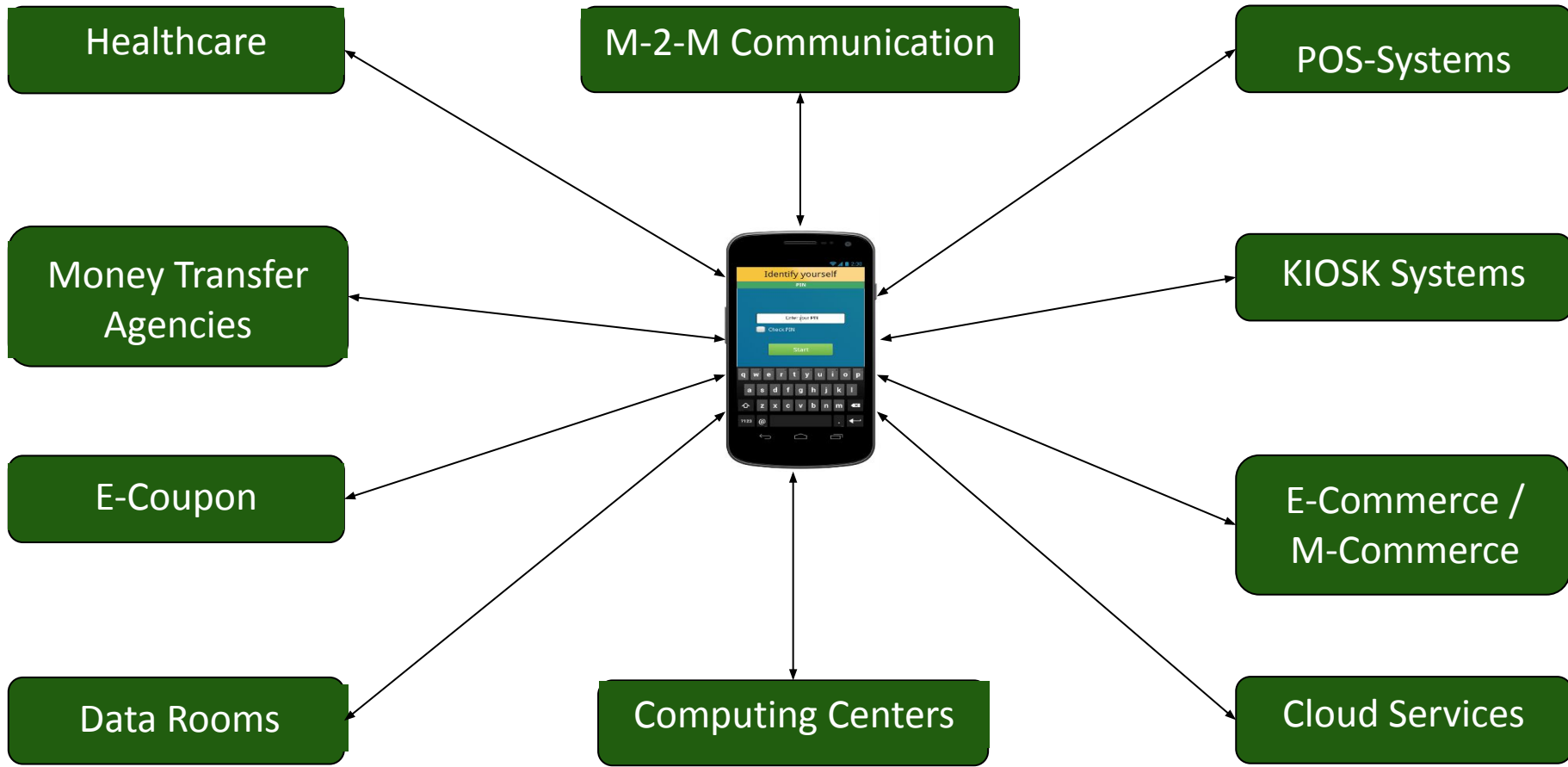
1. Identified Hardware
2. Identified User by QR-Code and/or SoftTag
3. Entered PIN

Plus, there is always the extremely high encryption in all processes and without using a general key or storing data on the local device, we have the most secure solution you can imagine.

The Next Messenger Version

- Voice communication encryption based on the Notary Server technology
- Video communication encryption based on the Notary Server technology
- File Transfers adjusted to your company's needs (Volume)
- Emoticons

The secured mobile device as a general key to various branches and markets



Who Are We?

- **Mr. Eduard Rubin**

- 2012 – present day: Kharkiv Computer and "Kharkiv Polytechnic Institute" Director
- 2010 – present day: "Kharkiv Polytechnic Institute", Computer Aided Management Systems department Associate professor
- 2009 – present day: Telesens International Ltd.
Founder and CEO
- 2002 – 2009 : Telesens LLC
Founder and CEO
- 1998 – 2002 : Telesens AG, Germany
Director of Development Center Ukraine
- 1995 – 2000 : Intermesse ONLINE
Serving the world's first online exhibition
Founder and Director
- 1991 – 1995 : M + R Import / Export GmbH
Export & Import between CIS countries
Founder and Director
- 1987 – 1991 : Scientific Production Cooperative Sintez
The first private industrial production of computers based on the Z-80



Who Are We?

- **Mr. Eduard Rubin – Public activities and awards**

- 2011 – present day: Chairman of Kharkov Branch Board of the European Business Association
- 2008 – 2010 : Vice Chairman of Kharkov Branch Board of the European Business Association
- 2007 : Finalist of the competition “Entrepreneur of the Year” elected by Ernest & Young
- 2006 : Winner of the competition “Entrepreneur of the Year” in the nomination “Information Technologies” elected by Ernest & Young
- 2005 : Phd of technical sciences in automated management systems and progressive information technologies. Defended the thesis in Kharkov National Polytechnic University “The Kharkov Polytechnic Institute”
- 2005 – 2008 : Vice President of the Association “IT”
- 2002 – present day: Head of Employers Organization “Kharkov Regional Branch of Employers in Telecommunications”
- 1998 – present day: Member of the Academy of Computing Sciences in the Ukraine



EY

Building a better
working world



Who Are We?

- **Mr. Nino Messaoud, Degree in Commercial Information Techn.**



- 05/2014 – present day: Setup, Preparation of Director of Telesens Deutschland GmbH i.Gr.
- 2008 – 2014 : Managing Director of SHD Einzelhandelsgesellschaft mbH & Co. KG
Managing more than 100 employees in one of leading software companies for ERP Systems (furniture retail)
- 2007 – 2008 : Al Hamed Enterprises (UAE)
Consulting- and Re-Structuring of the Group of Companies
- 2006 – 2007 : Conception & Development of the world's first B-2-B Diamond Trading System for Antwerp
- 2003 – 2006 : Various Projects as Head of Consultancy & Development in Kuwait, UAE
- 1998 – 2002 : Telesens AG, Germany
Head of Business Unit "Post-Billing"
- 1994 – 1998 : AMS (American Management Systems)
Head of GUI-Development for Mannesmann (today Vodafone) Billing System
- 1997 – 1997 : Software Developer for various companies (project freelancer), e.g. GDG Globus Reisen, Deutsche Presse Grosso, AXA Colonia

Who Are We?

- **Telesens Facts & Figures**

- Internationally operating Company with Headquarter in London (UK). Germany will be setup as the European Hub to provide our Customers contracts based on German law in the heart of Europe with two major business units
 - Products: Telesens Notary Server & Messenger Technologies
 - Outsourcing projects to Ukraine with German project development (one face to the customer)
- 15 Years of experience in international product- and project development for telecommunications and other branches with more than 200 successful projects with more than 50 customers worldwide
- ISO-Certified processes since 2006
- More than 100 highly qualified and top educated analysts, developers, project managers, quality insurance specialists, etc., and a direct link to the University of Kharkov
- Silicon Valley - educational, scientific and industrial center founded by Telesens and National Technical University «Kharkov Polytechnic Institute»



Quality Management System

- Company Quality Management System complies with the ISO 9001:2008 requirements that has been endorsed by the Certificate No. 75 100 60018 issued by the certification authority TÜV Rheinland
- All Telesens Business Processes are in accordance with internationally-accepted standards and models:
 - International and industry standards: ISO 9001, ISO/IEC 12207 (Amd.1,2), ANSI/EIA 649, ANSI/EIA 836
 - Methodological products: Rational Unified Process®, PMI PMBOK® Guide, SEI CMMI® Product Suite to ensure the processes' integrity, consistency and improvability



Our Technology Skills

- Hardware & Software Platforms
 - Sun Sparc (Solaris), HP (Unix), Intel (Windows, Linux)
- Software Development Technologies
 - Java EE, Microsoft .NET (2.0, 3.5, 4.0), CORBA
- DBMS
 - Oracle, MS SQL Server, Sybase, MySQL, IBM DB2
- Programming Languages
 - Java, C#, C/C++, VB, SQL, PL/SQL, TSQL, PHP
- Technologies and Frameworks
 - ASP.NET (2.0, 3.5, 4.0), ASP.NET MVC
 - Spring, OSGi, EJB, Hibernate, iBatis, Swing, GWT/Smart-GWT, JSP, JSF, Struts/Tiles
 - Ajax, HTML, DHTML, XML, XSLT, JavaScript, JQuery, CSS, Iron Speed Designer, MOSS / Sharepoint 2007, 2010
- Application Servers
 - Oracle Weblogic, IBM WebSphere, JBoss, Resin, Apache Tomcat, MS IIS
- Tools
 - Sybase Power Designer, Eclipse, NetBeans, MS Visual Studio, Oracle Data Integrator, Oracle Warehouse Builder, JasperServer, MS SQL Reporting Services, Crystal Reports Subversion, MS VSS, Rational ClearCase, Rational ClearQuest, Atlassian Jira, Apache Maven, Apache Ant, Altova XML Spy, soapUI

Our Technology Partners



Some of our customers



Customer Testimonials



„ For Ucell, as fastest growing operator in Uzbekistan, it's very important to have an efficient tool to manage the interconnect business in order to hold the leading position in tough competition environment. Telesens' executives have demonstrated their ability to respond to requests of COSCOM's staff in a prompt and flexible way. Ucell is very much looking forward to develop and strengthen our partnership with Telesens.“

Helge Taltanen, CTO FE „COSCOM“ LLC



„Due to their professional competence, the Telesens employees participating in this project were able to get into the new available infrastructure very fast. Both technical and interpersonal communication with them was excellent. The fast synchronization of the development processes was easily achieved. The developed software module is remarkable for its high quality. The planned functionality was achieved fully within planned timeline and budget. This project can be designated as a 100% success. Therefore we plan to entrust Telesens Ukraine with further projects.“

Chris Steenbergen, Business Support Solutions T-Systems Nova GmbH

Who Are We?

- **IT-Services provided by us**

- Application Development
 - Project Solutions
 - Product Solutions
 - Software Reengineering
 - Mobile Applications
- Professional Services
 - Integration and Implementation
 - Support Services
- Think-Tank
 - We operate with some customers “Think Tanks” to invent with them the ideas from tomorrow

- IT-Resourcing
 - Dedicated Project Teams
 - Dedicated Quality Insurance
- IT-Consulting
 - Management Consultancy
 - Technical Consultancy



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