

**Communication Solutions** 

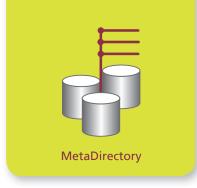


MetaDirectory





**Easy search, fast results. Companywide.**LDAP Server for fast access of contact data.



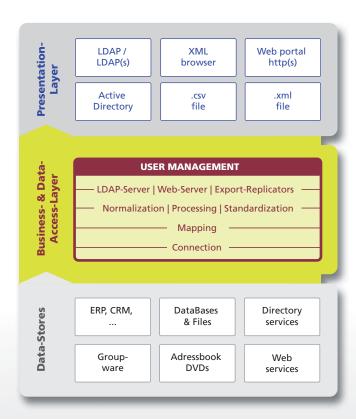
# Easy search. Fast results.

Perfectly formatted, up-to-date contact information for every employees in the company

MetaDirectory brings different databases together into a single LDAP directory that can be used consistently throughout the company. Therefore all relevant data such as phone numbers or contact information is available to all employees. The intelligent processing of data allows easy searching and fast presentation of results – even for very large and distributed databases.

# What is MetaDirectory?

The use of different database systems in a company makes the search for employees and contact data often very time-consuming. MetaDirectory solves this problem by bringing all the relevant information together into a central LDAP data pool. MetaDirectory is a LDAP (Lightweight Directory Access Protocol) Server. In addition to the preparation of phone numbers (normalization) and contact details it allows an efficient and customizable search process for contacts in different databases. Thus, it allows the integration of, for example, Microsoft Dynamics Products, CRM and ERP Systems, Lotus Notes and Exchange public folders with a minimum of effort in different scenarios.



Topology MetaDirectory 3.5 Enterprise

# **More features - MetaDirectory Professional**

MetaDirectory Professional also has a mechanism to export the replication of data as Microsoft Active Directory contacts, XML files or CSV files. Besides it includes deploying web services via ready secure protocols (https and ldaps).

# **Premium variant - MetaDirectory Enterprise**

The MetaDirectory Enterprise adds user management to the Professional Version. This way there are several authentication methods (SIMPLE, Digest MD5 and NTLM) available. The user rights can be allocated, either via the integrated user administration or via Active Directory or ProCall Enterprise.

# **Automated synchronization**

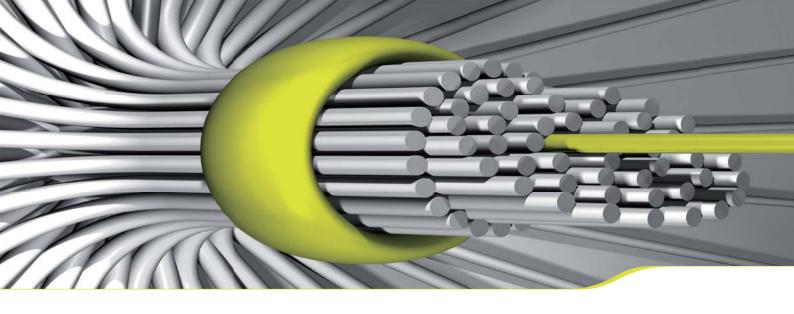
Database-specific connectors, so-called replicators, connect to the individual data source and synchronize it with MetaDirectory. This technology only generates a load on the system and network at specific times and is therefore extremely reliable and resource-friendly. The allocation of the data source fields to those used by MetaDirectory is made with a field allocation assistant. This also allows special, company-specific fields to be included in the search.

# Always up-to-date

MetaDirectory collects and distributes the contents of all databases, ensuring that all data changes after replication are made available to all users without any delay. The data provided is independent of location or database and therefore the whole company benefits from an up-to-date database. Interdepartmental processes are carried out without a long wait and processing times are shortened.

# **Standardized format**

All search results are provided in a common format (LDAP), regardless of which datasource the contact details were entered into. This format enables simple and efficient processing for communications applications like ESTOS ProCall or Microsoft Outlook. Besides this, special features allow a search with LDAP-enabled telephones.



# **Company-wide access**

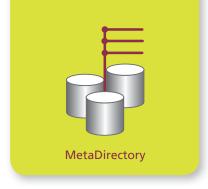
MetaDirectory has an intranet directory of contact data that goes far beyond the functions of a classic intranet telephone book. It offers scores of opportunities to optimize individualization with a minimum of configuration effort. Employees can use the web-based search portal of MetaDirectory immediately with all standard browsers. Relevant contact details are available to authorized individuals on an ad hoc basis.

# **Easy search. Fast results**

A key advantage of MetaDirectory Intranet phone directory is its simple and intuitive search function, automatically searching through all integrated databases. The administrator also has the ability to adapt the result pages to the company's own specific requirements. It can be searched for e.g. cost centers, building numbers, travelling data or customer information, depending on the requirements.



MetaDirectory search portal



# The right contacts. Anytime and anywhere.

It doesn't matter where you are and what communication device you use

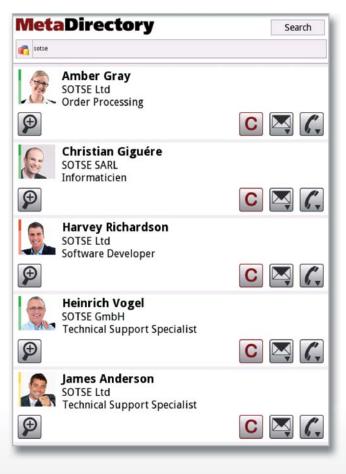
Today mobility and accessibility are a priority, therefore it is important that relevant contact information is provided where it is needed. MetaDirectory provides web services and interfaces for safe access of relevant contact information for all standard LDAP-enabled phones and PBX systems, as well as mobile (cell) phones and tablet PC's.

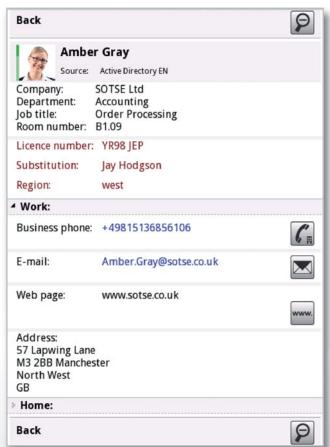
# **Support for mobile telephones**

Current mobile phones and smartphones often have fast data connection and an internet enabled browser available. MetaDirectory offers a dedicated web portal that is optimized for the requirements of mobile devices. Therefore valuable contact information is always available anywhere for the mobile or smartphone.

# **Optimized for Touch Sensitive Displays**

A special emphasis is placed in the simple and practical use of mobile devices with touch-sensitive screens. So calls can be made, E-mail forms opened or other customized actions can be carried out with a single touch of the finger. The display of personalized contact information is also possible.





MetaDirectory mobile search portal



# **Another mobile form factor: Tablet PC's**

A web portal is available for devices with large touch sensitive displays in order to meet the correct requirements of tablet PC's like the Apple iPad or Samsung Galaxy Tab.

# LDAP and XML-enabled telephone and telecommunications systems

Many telephone and telecommunications systems from well-known manufacturers (including Apple, Aastra, Cisco, innovaphone, Polycom, Siemens and snom) support the connection of LDAP phone directories. Therefore it is possible to search for contacts and telephone numbers directly on the device and to resolve incoming calls. MetaDirectory provides predefined templates for a variety of devices for easy and convenient integration.

# **Systems for Unified Communications and CTI**

The MetaDirectory is the perfect addition to LDAP 2 or LDAP 3 compatible Unified Communications Systems and Clients, CTI solutions and switchboards.

### In combination with ProCall Enterprise

MetaDirectory can be conveniently combined with Pro-Call Enterprise to reduce administration time and effort. Users of ProCall Client can dial phone numbers displayed in the intranet phone book directly with a mouse click (Click-to-call).

# In combination with Microsoft Lync Server

Using the MetaDirectory provides a fast and easy solution to extend the search base of the Microsoft Lync Server. Therefore other business-related contact data sources can be used in addition to Active Directory, Windows Address book or Outlook contacts even for reverse lookups on incoming calls.

# **Display of personal contact information**

To be able to serve individual company specific requirements, MetaDirectory offers a wide range of easy options which can be adapted via the configuration: LDAP knots and portal characteristics, search parameters and result fields.

# Integration of contact photos

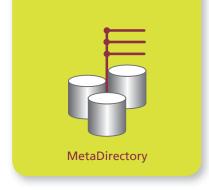
MetaDirectory is able to process and display contact photos. Photos are automatically imported together with contact information from data sources and the display size and quality are optimally modified.

# **Display of presence information**

In cooperation with Unified Communications solutions like ProCall Enterprise, it is possible to implement presence information to the MetaDirectory portal pages. This also applies to special portal pages for mobile phones and Tablet PC's. Presence services (user-independent) can be made available to an extended user circle via server-sided implementation. Because of this, employees can be supplied with presence information without UC-Client applications.

### **Safe access**

The professional version of MetaDirectory has secure web services. Contact data directories and portal pages can be securely accessed via https and Idaps from nearly everywhere. The access to sensitive contact information can be optionally protected via a password or can be limited to a defined IP address range if Virtual Private Networks are used.



# Information is valuable. If it's used.

The processing and the context-oriented provision of contact information is a company asset

Due to the constantly growing mass of contact data in business, it is becoming increasingly difficult to maintain a clear view of the flood of information. The facts that there are no standardized models and data is still saved in heterogeneous systems related to their field of application make it very difficult to use valuable information effectively and release its full potential.

### **Production factor information**

Information is now a recognized and important production factor in companies. In particular, current information of internal and external contacts, employees and colleagues, customers, suppliers, service providers and business partners is valuable. It is the basis for successful communication and with it successful business. Unfortunately, departmental or even personal contact data is often stored in its own autonomous systems and available only to a limited number of users. Furthermore, single contacts with different information components are often stored multiple times. A certain core of information is usually relevant to several user groups and departments. To be able to extract it and to process it specifically for a company, it is necessary to manage information in a useful company manner.

# **Information management**

To utilize "hidden" but relevant information for all concerned parties is a major task for so-called information management. It needs to find the "right" information and provide it in a convenient structure. Unfortunately, user-friendly preparation and presentation is often neglected which leads to a loss of information.

#### **Valuable Information**

Information itself can be seen as a commercial asset, which can be produced in a company through other production factors such as people, computers, software and communications, or can be purchased from outside. Therefore information has a value, which can even be traded – but information only has a value if it can be used!

### In practice

For a company, in practice means that all involved employees, independent from employed systems, devices and applications, can be optimally informed about important contacts in their work environment. This includes the correctly spelled name and title, as well as their availability via different media, e.g. telephone numbers, Instant Messaging and E-mail addresses. It also usually includes specific internal and external organizational information such as accounts, room numbers and building numbers (internal). With respect to customers and business partners it includes, e.g. customer ID, payment arrangements or VIP status, but also in which EDP System further detailed information is stored. The MetaDirectory is a tool, which is especially developed to meet the constantly growing challenges of information management.



Information management



#### **Normalization**

Data has to be converted in order to be automatically processed. This transforms contact data into useful information which can be used companywide. A system which is able to consolidate all internal and external information and provide it in a standardized manner is therefore a "must" for the successful use of contact information. As a technical base, the Standard LDAP (Lightweight Directory Access Protocol) is suitable. This protocol is made for fast, read access of contact information, distributed data sources and a wide application support and therefore ensures a high search performance.

# **Standardizing**

The MetaDirectory is based on a real LDAP server developed by ESTOS, and its structure complies with LDAP specifications and is compatible with LDAP-2 and LDAP-3. It was optimized to be connected to almost every available data source used by companies. It offers several options to import via so called replicators, current groupware, ERP and CRM systems, special applications and industry lines solutions as well as data via general database interfaces and formats.

# **Heterogeneous data sources**

Heterogeneous contact data can be allocated via a standardized contact schema and be saved in a standard format in the server of contemporary storage for further processing. There is only one administrative step because the replication is fully automated. After the processing, the standardized and normalized data are available to all company systems and employees.

# Presentation of the "right" information

Since value and knowledge are only gained if the information is actually used, special attention should be paid on how the standardized data is presented. Meta-Directory offers a wide spectrum of interfaces and user interfaces. It supports a number of usage scenarios. Web portals are available for users which allow independent access irrespective of which device is being used. In addition to direct access of information, integration with other systems is also possible.

## Interoperability

Unified Communications solutions benefit enormously from standardized contact information. They need these, for example, to define the phone numbers of incoming calls and are thereby dependent on a fast and reliable search engine. Information out of groupware, CRM and ERP systems, special applications and industry solutions, can be integrated in communication orientated business processes on the basis of standard protocols.

# Webservices

Integration into existing company portals is simple and aids the centralization of information into a single, usually already known and accepted interface. MetaDirectory offers web services based on LDAP(S), HTTP(S) and XML and other technologies, which minimizes the effort of keeping contact information ready whilst at the same time maximizing its business use.





#### **Communication Solutions**

## **ESTOS GmbH**

Petersbrunner Str. 3a D-82319 Starnberg

Phone: +49 (8151) 36856-177 Fax: +49 (8151) 36856-199

info@estos.de www.estos.com

// Überreicht durch:

# **MetaDirectory 3.5**

### **Compatible Data sources**

- ODBC (Access, SQL-Server, MySQL, etc.)
- .txt and .csv files
- LDAP (OpenLDAP, NDS, public directory services)
- Active Directory/Global Catalogue
- Public Exchange Directories
- Lotus Notes Databanks
- DATEV pro
- Steps Business Solution
- Abacus
- Microsoft Dynamics CRM and Navision

The free version includes convertors for:

- Tobit David InfoCenter
- The German Telephone Directory
- Herold
- KlickTel Server
- TwixTel





# **MetaDirectory 3.5 Professional**

In addition to the named above scope of services:

- Export replicators for AD contacts, .csv and .xml
- supports LDAPS und HTTPS

# **MetaDirectory 3.5 Enterprise**

In addition to the named above scope of services:

• integrated user administration (internally, Active Directory, ProCall Enterprise)

### **System requirements**

Server - Hardware

- PC with 1 GHz processor
- 1GB RAM
- 1GB free hard disk space

Server – Software

- Compatible to 32- & 64-Bit Windows operating system
- Microsoft Windows 2000, XP, Vista, 7, Server 2003 & 2008, 2008 R2
- MetaDirectory 3.0 licenses or
- MetaDirectory 3.0 Professional licenses







