Cut costs. Increase security. Support compliance.

Identity and Access Management

www.siemens.com/iam
IAM solutions enhance the security and rights for IT resources, centralized authentication for portal applications, and the use of external partner applications. And they enable efficient administration. However, IAM solutions can do much more. They enable efficient administration. As an integral component of vertical solutions, they provide increased support for core industry-specific processes.

Recent examples include the implementation of the EU Services Directive for the healthcare sector as well as partner public sector, hospital information systems and the electronic case record for Siemens. IAM solutions based on compliance requirements in particular – to cause enterprises and other organizations to look for new ways of optimizing their business processes. An Identity and Access Management (IAM) system gives them efficient support in doing that.

**Scenarios for greater efficiency and enhanced security**

Cost pressure is combining with increased security needs – compliance requirements in particular – to cause enterprises and other organizations to look for new ways of optimizing their business processes. An Identity and Access Management (IAM) system gives them efficient support in doing that.

Efficient integration of new employees – high productivity

New employees should get started with productive work as quickly as possible. DirX provides them with access rights to the IT resources they need in the shortest possible time. It does so in automated fashion and in a single step – in keeping with the employees’ defined role and for all systems connected to DirX (provisioning).

DirX then provides the users with efficient support in doing their work. Self-service functions, such as quick and easy resetting of forgotten passwords, save time and reduce the workload on the help desk. Workflows such as approvals under the ‘two pairs of eyes’ principle, automatically integrate the right people in coordination processes.

And administrators can work more productively since they no longer have to handle authorizations manually.

The right access rights for the right people at the right time

DirX lets employees access only that information and those services that they need and for which they are authorized. For instance, developers do not usually have access to ordering systems or processes relating to invitations to tender. However, if they switch to a different role in sales, for example, their rights are changed in a single step. The same naturally applies if they leave the company – their user permissions are revoked in full.

This keeps people from accidentally retaining rights that no longer apply. DirX enables unambiguous identities and offers highly secure authentication – with one-time passwords, smart cards or biometrics, for example. Solutions for recognizing fingerprints, hand veins or facial features can be used, depending on the needs of the specific case.

Obervance of compliance regulations

Compliance, i.e. the observance of legal, regulatory and internal policies, requires that financial or personal data and the intellectual property of enterprises and organizations be protected. Publicly listed companies must document all transactions truthfully. Even if employees do not know the specifics of all the many relevant regulations, IAM with DirX gives them effective help in complying – with the rule that the person submitting an application cannot also be the one who approves it, for example. Audit and reporting functions provide complete tracking of who accessed what and who approved it.

Single sign-on for portal applications

Thanks to DirX, employees only have to log on to a portal once in order to use the applications and services integrated in it. With their single electronic identity, they can use not only the SAP solutions in the SAP NetWeaver portal, for instance, but also all third-party applications provided via the portal if they have authorization for them.

In addition, external users – contractors, for example – can also be integrated without letting unauthorized persons access the resources provided by the portal.

The security required here is achieved with Identity Federation technology. The solution is not only secure, but also highly efficient, since it significantly reduces administrative overhead.

Access to IT and buildings

The use of smart cards or biometrics makes sure that only authorized employees have access to buildings and specially protected rooms. DirX offers a particularly efficient solution here: The same technology is used on the PC to enable secure IT access, so that the automatic assignment of rights covers both the IT and access control systems.

When smart cards are used as employee IDs, this automated approach also includes the administration and issuing of the cards. DirX transfers the data for the employees to the card management system and assigns them access profiles.

Efficiency in mergers and acquisitions

Speed and security are crucial factors in the success of mergers and acquisitions. Among other things, employees have to be able to access the new organization’s IT resources as quickly as possible. IAM is an elegant and efficient solution for combining the different user management systems into a single – central – system. With the aid of DirX’s outstanding role management facility, the required user permissions can be granted in the shortest possible time.

International compliance requirements

**Sarbanes-Oxley Act (SOX)**

Confirmation by the CEO and CFO of the accuracy and reliability of financial statements and the adequacy of internal control systems. More stringent criminal-law provisions.

**Basel II**

Banks need sufficient equity and monitored risk management. With the help of greater transparency, the goal is to make the financial market more secure for all players.

**Foreign Corrupt Practices Act**

Law against corruption. Publicly listed companies must document all transactions.

**Sentencing Guidelines**

These guidelines govern the penalty for crimes. They also contain stipulations on the efficiency of compliance programs.

**Regulations of the Food and Drug Administration (FDA)**

Controls on protecting public health in the U.S. Applies to products made in and imported to the U.S.
Identity and Access Management

- **Authentication**
  - Biometrics
  - Smart cards
  - Secure tokens
  - Single Sign-On
  - Identity Federation

- **Administration**
  - User & role Management
  - Self service & delegation
  - Provisioning
  - Workflows
  - Metadirectory

- **Authorization**
  - Policy enforcement
  - Policy & entitlement management
  - Web services security

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Security in SOA environments

Service-Oriented Architectures (SOAs) allow applications to be built from individual, loosely linked and interoperable services. Resources and application interfaces are made accessible as independent services in the network and can be shared by different enterprises and organizations.

This is recommended for implementing the EU Services Directive, for example, since such an architecture can give government agencies outstanding cost-efficiency thanks to sharing of the new resources they have to provide.

Of course, there are special security requirements here. IAM with DirX makes certain that only authenticated and authorized Web services are executed.

An acknowledged solution

Analysts recognize Siemens as a world leader in role management and the integration of IAM in comprehensive security solutions for heterogeneous IT landscapes. This is particularly true for SAP environments. Moreover, Siemens is the only vendor able to combine IAM with professional services and smart card technology and biometrics to create a solution that includes physical and logical access. This integration expertise is also incorporated in Siemens’ own solutions, for example in Product Lifecycle Management.

DirX is the leader in terms of scalability, reliability and high availability and offers outstanding flexibility when it comes to the automated creation of users, assignment of rights and operation.

Proven in many industries

DirX solutions have been in widespread use in a broad range of industries for over 10 years. And Siemens has its own pool of internal industry expertise – in the public sector, healthcare, financial services and power engineering, for example.

That is why Siemens can assess the needs of its customers so well and offer them tailored solutions for Identity and Access Management – ranging from project consulting, analysis and planning, solution implementation and maintenance to training.

Siemens is one of the pioneers in IAM technology and has always played an active part in standardization and new developments. Recent examples include the electronic case record for the healthcare sector and SOA Identity Services for auto makers and their suppliers.

The DirX portfolio

With its DirX family, Siemens offers its own product suite of perfectly tuned and integrated individual components.

**DirX Identity**
Comprehensive Identity Management for automated user and rights management.

**DirX Audit**
Effective support for compliance through continuous identity auditing of user access and user rights.

**DirX Directory**
A high-end directory server for eBusiness and eGovernment environments.

**DirX Access**
Secure and reliable access management and Identity Federation for Web and SOA environments.

**Professional services and consulting**
We offer an extensive range of Identity and Access Management services in connection with our DirX products: project consulting, analysis and planning, solution implementation and maintenance, and training.

Support of regulatory compliance, integration in SAP, security for SOA and Web environments, Hospital Information Systems, business partner networks, integration of logical & physical security, ...
“First we created a total concept – a requirement inventory. Siemens offered us a role-based solution, which seemed to suit us perfectly. We initially tested it in a field trial, and it worked perfectly. All of our requirements could be integrated one hundred percent.”

Jürgen Lorek, Internal Auditor, Generali Insurances

Successful solutions

DirX systems from Siemens are used successfully around the world by well-known customers in a wide range of industries – as a standalone implementation or an integral part of vertical solutions. Here are just a few examples.

Healthcare
To provide their patients with state-of-the-art medical care, hospitals are looking for ways to cut costs while also increasing efficiency and security. For that, they need leaner administrative processes, information that is always up-to-date – pager numbers, for example – and a reliable and auditable means of granting users access rights to highly sensitive data. Several large hospitals and hospital groups rely on IAM with DirX to achieve these goals.

In addition, Siemens, together with a large German hospital group, is involved in developing and testing the electronic case record, work that is being led in Germany by the Fraunhofer Society. The file can be accessed across hospital boundaries if needed when dealing with the patient. The security required here can only be achieved with Identity Federation.

eGovernment
To cut administrative costs and speed up processes such as those for handling resident registration or tax returns, for example, many government agencies have already introduced electronic processes. Under the EU Services Directive, these processes are now mandatory and must be implemented quickly.

The goal is to make it easier for people to begin offering and performing services, ensure their quality and guarantee the highest possible security. DirX solutions are being used successfully by many administrative bodies, from the municipal to the state level. The oldest eGovernment solution commissioned by a government body has been in productive operation for more than 10 years.

In part to implement the EU Services Directive, Siemens is partnering with the Fraunhofer Society to develop innovative eGovernment solutions and is contributing the experience gathered in its many projects.

Banking and insurance
Banks require highly secure authentication solutions. Moreover, acquisitions and mergers are frequent in the banking and insurance arena, and customers who use a bank’s credit cards, for example, expect these organizational changes to be made smoothly. That is only possible if the new organization works productively as soon as possible.

Siemens integrated the user and rights management systems of five insurance companies that had been merged under a single roof. Five different manual administration systems were transformed into a single automated IAM solution based on centrally assigned user roles. Virtually the entire authentication and authorization process is now fully automated – across all applications and systems, smoothly and securely.

Automotive industry
The automotive industry requires secure and efficient internal business processes. For many customers in the automotive industry, Siemens has installed IAM solutions in which the HR database and an array of other systems, including Microsoft Outlook, Exchange and Active Directory Services or SAP systems, have been synchronized – for ordering processes, for example. The result is a secure and efficient user and rights management system.

Increasingly, manufacturers also want to enable the secure integration of their partners in their processes. As part of a Federated Identity Management project (SESAM), involving Siemens and other IAM vendors and their customers, IAM is being developed in an SOA environment so that auto makers and suppliers can access shared identities.

Universities
Colleges and universities must manage a large volume of data on students and temporary academic staffs and give them the necessary IT access rights. Since the fluctuation rate in these user categories is high, universities need a very flexible system to handle such tasks. Moreover, many offices, labs and other rooms require special protection, so there is a particular need for integrated solutions that cover both physical access and access to IT.

Thanks to IAM, Siemens has been able to slash the administrative overhead at universities, enable flexible role-based assignment of user rights and successfully deploy its portfolio for integrated physical and logical access.