



# Authorization assignment & control of IT entitlements

Modern management of IT permissions ask for role based as well as attribute based access control (RBAC; ABAC). Future requirements of a cloud environment, Internet of Things (IoT), Mobile IT ... have to be met. Furthermore, the highest compliance requirements such as being tamper proof and an intuitive operability are essential. By using the software "ORG – The authorization management", you are well prepared.

According to leading analysts, in 2020, at least 70 % of all companies will use attribute-based access control to protect their critical resources. The nowadays mainly used role-based RBAC must then be supplemented by attribute-based ABAC. ORG supports both, role based and attribute based access control.

ORG can automatically provision and de-provision all major target memories. Due to its RBAC and ABAC ability, authorization policies can be enforced company wide.

ORG's platform independency enables easy integration into an existing environment. Using ORG reduces the administrative overhead and the error rate.

The excellent usability enables a smooth authorization assignment and approval process. Furthermore, it provides the necessary overview for business and technical administrators.

ORG is "made in Germany". FSP is authorized to use the TeleTrusT quality mark "IT Security made in Germany".

As the regional office of TeleTrusT in Cologne, FSP is committed to IT security and participates in all developments at an early stage.

**GARTNER** cites FSP as a "notable vendor" in the Magic Quadrant for Identity Governance and Administration (IGA) 2016.\*



"Gartner, Magic Quadrant for Identity Governance and Administration (IGA), Heix Gaettigens, Brian Iverson, Perry Carpenter, 26 February 2016. Disclaimer: Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.





## Identity Governance & Administration

Leading analysts call the allocation and control of IT entitlements ,Identity Governance and Administration' (IGA). The IGA model defines all points that have to be covered by a sustainable authorization management system.

Using FSP's software, you can meet these requirements easily.

#### ► REQUEST

The application for a new user, to change or withdraw the user's rights is often initiated by an HR system.

Alternatively, the authorization assignment can be done by using the ORG Process Manager - in a configurable framework as a self-service.

Workflow systems, that are already used in the company can be connected via interfaces and then be used for the application process.

#### ► POLICYCHECK / APPROVAL

As part of the process, the software ensures that managers can review and approve the requested permissions. The ORG Process Manager organizes the whole process; this includes the authorization assignment, the review and the approval process.

#### ► ADMINISTRATION

After completing the approval process, the requested rights are registered in the central access management system ORG automatically. The ORG database includes attribute based and role based rights which are provisioned to the connected systems in the next step.

#### ► PROVISIONING

Provisioning is the automatic distribution of user account information and their permissions to all target systems, no matter what technical platform they run on. Depending on the target environment, either fine-grained attribute based authorization information, or, in case of role based target stores, information about the user and their roles is transferred via connector technology.

#### ► AUDIT / REPORTING

Periodically auditing of the company's authorization storages (ORG, RACF, LDAP, SAP, individual systems, ...) makes it possible to identify operational risks associated with user permissions. To create these reports, BI principles are applied. Inspection reports are sent to managers, e.g. to verify accounts, authorization rules and personal permissions.

#### ► COMPLIANCE / VERIFICATION

The audit results are verified by the responsible officials regarding timeliness, internal company rules, legal requirements and other compliance requirements. Changes with regard to user rights may be necessary after the audit.

### **ORG – The Access Management**

The sophisticated architecture is the foundation of the unique features. The software is fail safe, provides high performance and supports RBAC and ABAC. Numerous connectors make sure that ORG can be used across many different platforms.

#### Failsave

The ORG system is divided into the administrative and the productive environment (see illustration: left and right side). This separation ensures a high reliability.

#### **High Performance**

ORG supports two ways to transfer the current authorization settings to the productive environment.

To supply homegrown applications, the fine grained access rights are denormalized in tables using ORG runtime data distribution. Afterwards, they are transfered into the ORG runtime database in the productive environment. Optional, these ORG specific tables can be part of the application's database.

The access of the standard applications to the access rights occurs via API's. Specific ORG connectors transmit the settings of the relation between user and role into the permission storage (e.g. LDAP, RACF, SAP, ...) of connected standard software systems.

The ORG architecture enables fast requests and ensures a high performance.

#### **Single Point of Administration & Control**

The ideal solution is a centralized and standardized user rights administration.

Access rights are automatically provisioned to the business applications. It makes no difference whether these are Mainframe, C/S or Web applications.

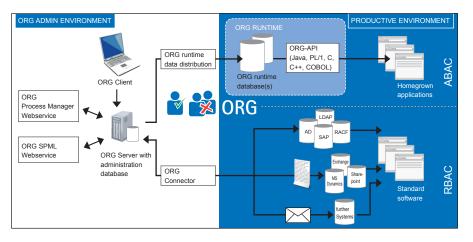
The central administration database of ORG contains all current, future and past permissions of all applications (standard applications and custom developments). Because of that, ORG meets the highest auditability and enables a Single Point of Administration and Control.

#### **Cross Platform**

The central component of the administration environment is the ORG server with the ORG administration database.

The ORG server runs on z/OS, Unix and Windows. Within the ORG Admin DB (DB/2 or Oracle), the entire company's implemented permission model is mapped.

In addition to the current valid data, the whole history and the planned administration are also stored tamper and audit proof.



#### **ORG Connector (RBAC)**

The ORG connector architecture for the bidirectional exchange of authorization information with standard software is of modular structure. The interface to the ORG Server and the logic for the exchange of access information is the same for all connected systems.

Just the interface specific parts of the connected systems are implemented into so-called agents.

This architecture enables the connection of further applications with little effort.

RBAC: ORG supports business applications that organize their user rights role based. The ORG connector pushes the user role information into the specific user rights data storage. The business applications still use their role based access control without any changes.

#### **ORG API (ABAC)**

ORG provides three APIS for the finegrained access to privileged information on the runtime databases:

The Java API can be used in Java EE and Java SE environments. The z/OS API is available for Cobol and PL/1. It can be used within transaction monitors (IMS or CICS) or batch applications. The Windows/Unix API is designed for C/C++ development on these operating systems. Because of the de-normalized tables of the runtime databases the access is highly performant.

ABAC: Business applications that need fine grained access right information use one of the ORG APIs. An ORG access right decisi-

on is based on attributes that are supplied by the business application. The business application itself no longer needs a business application specific access rights storage.

#### Data Model

ORG's authorization model supports on the basis of its multi-stage the provisioning of permissions on the base of professional objects (position). These can be composed of technical authorization objects (roles).

The lowest level of authorizations consists of the fine grained and attribute based access rights. ORG calls them competences.

Which authorization objects are used, is an individual decision depending on the customer's requirements as well as the technical environment.

#### Links to upstream systems

The ORG SPML interface is a web service, which implements SPML 1.0 specification. Via the ORG SPML interface ORG objects (e.g. user, position, role, mappings, etc.) can be created, changed, deleted or read by an external system (e.g. SAP HR). Every activity is checked and historicized by ORG.

An existing IDM system can be upgraded by ORG by defining complex technical authorization rules. The administrative access to the ORG Server is done via web or Fat-Client. Upstream systems (e.g. SAP HR) are able to send contracts for the automated administration to the ORG Server via SPML web service.

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