

# **RAZ-LEE**

## **AUTHORITY ON DEMAND**

Significantly reduces the number of user profiles with special authorities

# About Raz-Lee Security

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Founded in 1983, Raz-Lee Security is one of the world's leading independent owned cybersecurity and compliance solution providers for IBM i servers (AS/400).

Raz-Lee's flagship iSecurity suite guards organizations against insider threats and unauthorized external access to business-critical information hosted on their IBM i. We have developed cutting-edge solutions that have revolutionized analysis and fortification of IBM i servers.

We build solutions that work with other companies' technologies allowing organizations to monitor IBM i activity via SIEM or DAM dashboards.

## Technology Business Partners

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# About iSecurity Suite

## Advanced Threat Protection

- Anti-Ransomware
- Antivirus / Malware protection
  - ICAP Optional Client/Server for Antivirus

## Authentication & Authorization

- MFA Multi Factor Authentication
- Self Password Reset
- Authority On Demand

## Protection

- Firewall FTP, ODBC...access
- Monitor CL Commands
- Safe-Update to protect production files

## Evaluation, Reporting & Alerts

### SIEM & DAM Support

Syslog, SNMP, CEF, LEEF

### Visualizer

Business Intelligence for Security

### Score Cards

for GDPR, SOX, PCI, HIPAA...

### Security Investigator

Data Discovery, Authority Inspector, Assessment

## Encryption

- DB2 Field Encryption (FIELDPROC)
- PGP File Encryption

## Data Base Solutions

- AP-Journal DB Audit, Filter, Alerts, SIEM
- DB-Gate Native SQL to Oracle, MSSQL...
- FileScope Secured file editor

## Auditing & Response

- Audit Journal, System Values, Status...
- Proactive re-Action in real time
- Capture screen activity
- Compliance of Users, Objects, IFS
- Change Tracker watch Production Libraries

# Authority On Demand

Significantly reduces the number of user profiles with special authorities

# When do we need to use Authority On Demand?

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Use case examples:

- Need to control and monitor the activities of “non-corporate” personnel such as consultants, auditors, contractors, etc.
- Need to provide emergency access to critical application data and processes on an “as needed” basis (i.e. Dev Team / R&D)
- Need to maintain documentation of activities of to comply with regulations and auditor’s security requirements
- Need to provide enough rights to a user to carry out unique assignments that his security level rights normally don’t allow

# What is so special about Authority On Demand?

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## Authority On Demand leads the market with Unique or Semi-Unique capabilities:

- Most important: Adding authority without changing the user profile. This allows the logs and journals to record the actual user who is responsible for the activity
- Elevating user authority in system wide approach
- Verify by TOTP (Time-Based One time password), and One time password and even
- Be part of a Program. Wrap just the required part with elevated authority
- Can run in Batch. Can be used as part of your GUI
- Best screen recording. Allows playback and search. Compresses 1000 screens to 1MB
- Include database activity during elevated authority in field mode, highlighting changes
- Most comprehensive logs and activity end reports
- And more...

# How is authority elevated?

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All regulations require that authorities, particularly Special Authorities (\*ALLOBJ, \*SECADM, \*AUDIT etc.), should be provided on an as needed basis.

Authority on Demand simplifies the process of temporarily granting special or regular authorities. A set of rules designates how a user can elevate his authority. To elevate the user authority in his job or throughout the system, all that is needed is to enter the Get Authority On Demand (GETAOD) command.

This command is usually requires verification measures such as:

- Pin code
- One time password
- TOTP (Time-Based One time password)
- Approval by an administrator

Based on previously defined rules, user gets temporary elevated authority and his activity is thoroughly logged

This ends by the user or when the set time expires. Auditor then automatically receives a report via email, which includes commands used, recorded screen activity and list of Database updates.

# Types of elevation of authority

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Authority on Demand can elevate authority in different ways, mainly:

- By adding authority (without changing the current user) for the job  
**This unique feature logs the real user as responsible to his activity.**
- By swap (changing the current user of the job)
- By adding authority to the user throughout the system  
**This semi-unique feature enables elevated authority for all user jobs**
- By using trace (Does not elevate authority, but follows and report the user's activities)

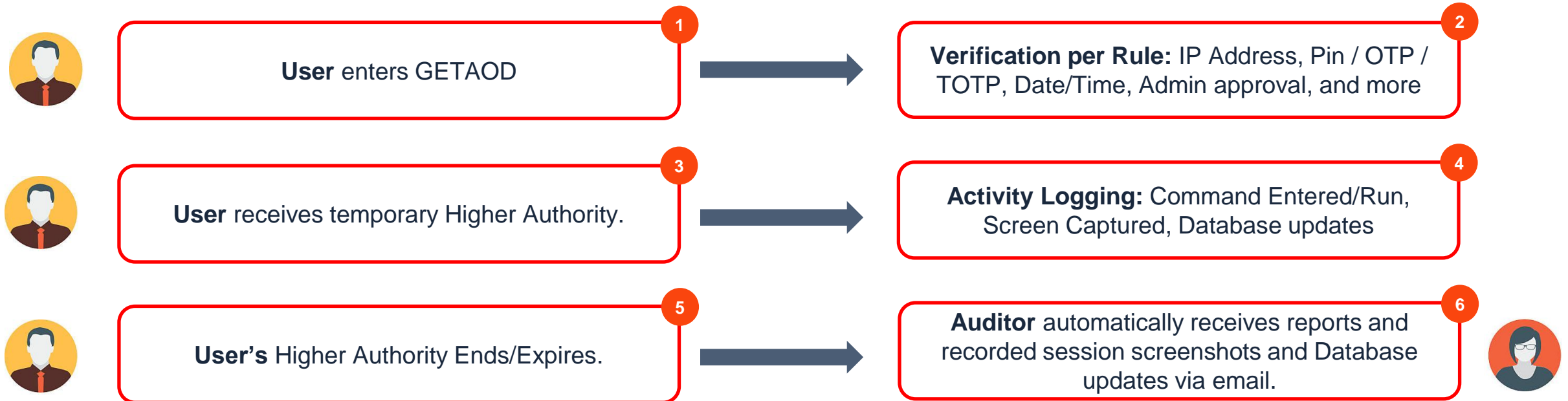
The Get Authority On Demand (GETAOD) command works in:

- Interactive or Batch environments
- Native or GUI
- Programs or Menus



# Workflow

Authority on Demand saves valuable time and resources, enforces segregation of duties and enables relevant personnel to obtain access to approved information when needed. Its real-time audit of access rights protects sensitive corporate assets and significantly reduces the number of profiles with powerful special authorities.



Emergency rules can be defined for use during night shifts.  
These rules require the agreement of 2 or 3 people.

# Authority Reports

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During the elevated session, the product records:

- Screens observed
- Entered commands
- Database changes (in the field level, comparing the before-after values).

These recording are composed in a document which is sent to the auditor, providing a comprehensive log of activity. This is how sensitive and potentially dangerous capabilities are controlled.

Emergency rules are also enables to enable secured access for faster recovery from different types of emergency situations with minimum chances for human error.

# Authority On Demand in Action

The screenshot shows the iSecurity web interface. The left sidebar contains a tree view of the system's organizational structure. Under the 'RLDEV' environment, the 'iSecurity [1] - Jul 26, 2023 11:08:32 AM' folder is expanded to show the 'Authority On Demand' menu. The menu items include:

- Activation
  - AOD Active Jobs
  - Authority Providers
  - Authority Rules
  - Deleted Authority Rules
  - Display Authority On Demand
  - Global Configuration
- Log
  - Authority On Demand Log
  - Print Log + Attachments
  - Print Log + Entered Commands
  - Time groups
  - Display AOD History

```
ODMENU                                     Authority On Demand                                     iSecurity
                                                                                                     System: RLDEV
Authority                                     Log, Queries and Reports
  1. Authority On Demand Rules                 41. Display History
  2. GETAOD Requests Pending Your Approval    42. Queries and Reports
  5. Authority Providers
  6. Time Groups
  7. OTP (One Time Password) Setup

Control
11. Activation
15. Display AOD Active Jobs DSPAODACT

Operations
31. Get Authority On Demand GETAOD
32. Display Authority On Demand DSPAOD
33. Release Authority On Demand RLSAOD

Related Items
51. Password-Reset
52. MFA-Multi Factor Authentication
53. iSecurity

Maintenance
81. System Configuration
82. Maintenance Menu
89. Base Support

Selection or command
===>

F3=Exit F4=Prompt F9=Retrieve F12=Cancel
F13=Information Assistant F16=System main menu
```

# Rule Definition

Authority on Demand simplifies the process of granting special authorities temporarily, when necessary, by a set of rules which designated who and how can a user authority be elevated.

Description	Provider	Requester	Emergency	System	Provide authority by	Modification Date	Modification Time
3333	AU	LOWUSR		*ALL	SWAP	Jan 19, 2023	12:32:12 AM
Victor Totp test	AU	OD		*ALL	SWAP	Mar 13, 2023	6:17:48 PM
test	QSECOFR	ALEX3		*ALL	SWAP	Jul 25, 2023	6:17:34 PM
3333	QSECOFR	LOWUSR		*ALL	SWAP		
test ssh script	QSECOFR	PEPE		*ALL	SWAP		
Emergency VV1 -> QSECOFR	QSECOFR	VV1	Emergency	*ALL	SWAP		

```

Screen 1/3
Modify Authority Rules
Requester / *ANY . . . LOWUSR      If GrpPrf: Accept for its members  Y=Yes
Provider / *TRACE . . . AU
System . . . . . *ALL
Rule description . . . 3333
Number of uses left . . 99      0-98, 99=*NOMAX

Real-Time Approval
Get approval from . . _____  UsrPrf/GrpPrf, *SECADM, *AOD-ADMIN

Authentication
Authenticate user by . 0
Pin code. _____

Perform
Provide authority by . 2

By Session      Globally
1=Add authority
2=Swap profile
3=Add *SPCAUT
4=Trace          9=Add *SPCAUT

Last used by: LOWUSR      6/11/22 19:39 Job: QPADEV0004/LOWUSR/211424
F3=Exit   F4=Prompt   F12=Cancel
Last update was done by VICTOR (*UPDATE), at 19/01/23 12:32:12.
More...
  
```

# Authority Logs

These recordings are composed in a document which is sent to the auditor, providing a comprehensive log of activity. This is how sensitive and potentially dangerous capabilities are controlled.

The screenshot displays the iSecurity Authority On Demand Log interface. The left sidebar shows a tree view of the system hierarchy, with 'Authority On Demand Log' selected. The main pane shows a table of log entries with the following columns: Timestamp of entry, System name, Name of job, Number of job, User of job, Current user profile name, Auth. Provider, Auth. Requester, REASON, Status, MSG ID, and Message.

Timestamp of entry	System name	Name of job	Number of job	User of job	Current user profile name	Auth. Provider	Auth. Requester	REASON	Status	MSG ID	Message
2023-07-26 11:27:19.278	RLDEV	QPADEV0004	518143	ALEX3	ALEX3	QSECOFR	ALEX3	test		ODE4002	26/07/
2023-07-26 11:30:11.792	RLDEV	QPADEV0004	518143	ALEX3	QSECOFR	QSECOFR	ALEX3	test		ODE4102	26/07/
2023-07-26 11:30:35.496	RLDEV	QPADEV0004	518143	ALEX3	ALEX3	QSECOFR	ALEX3	test		ODE4002	26/07/

# iSecurity Authority On Demand Advantages

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- Provides users higher authority as needed according to pre-defined rules
- Logs all activities as well as all users' activities while operating with a different authority
- Site-definable email message alerts and SYSLOG messages
- Capabilities for restricting requestors
- Real Time approval request
- PIN number verification
- OTP Verification
- User-friendly GUI interface

# RAZ-LEE

## Thank You

For more information about our company and products please visit  
[www.razlee.com](http://www.razlee.com)