Evolveum

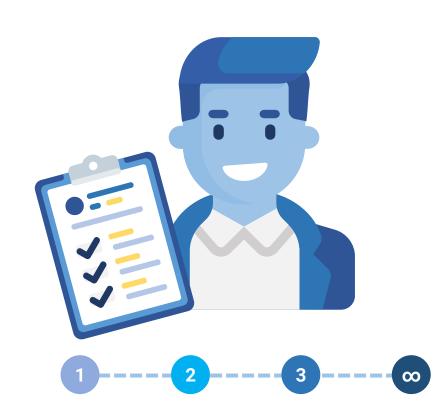
Role Mining in MidPoint: Transformative Access Governance

Tadeáš Chrapovič, 09 / 2024

Java Developer & Identity Engineer

Agenda

- Overview & Benefits
 - Introduction to Role Mining
 - Significant advantages of Role Mining
- Process Insights
 - Understanding the Role Mining Workflow
 - Detailed Walkthrough of the Role Mining Process
- Live Demonstration
 - Practical Application of Role Mining using midPoint
 - Transitioning to Business Role-Centric Access Control
- Future Perspective
 - Potential Advancements and Innovations
 - Implications for Access Control and Governance





Bottom-Up RBAC Approach



Data-Driven Approach
Focuses on analyzing existing
user-permission relationship



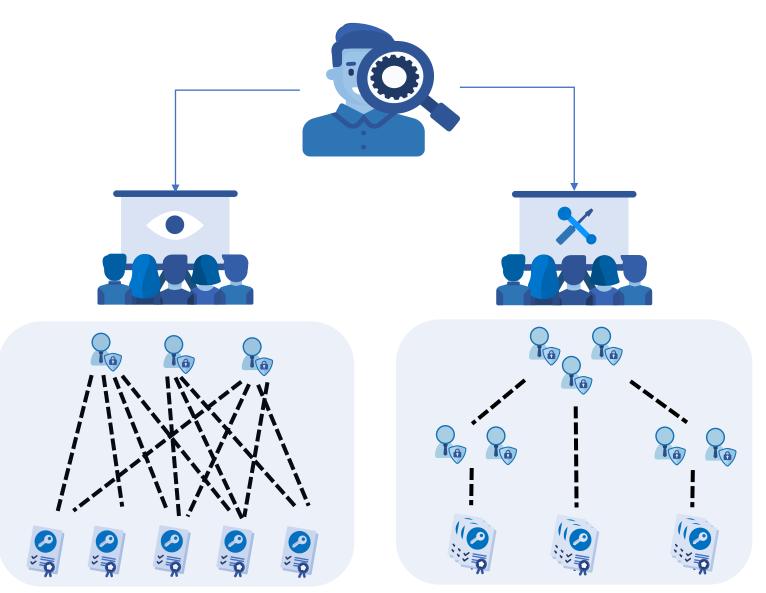
Cluster-Based Discovery Groups user that act similar from access rights perspective



Uncover hidden information Identifies hidden roles that manual processes may miss



Refinement
Discovered roles need to be refined and validated





The Essence of Role Mining



Analysis-driven process

- Utilizing Data-Driven Insights for Role Definition
- Uncovering Patterns and Clusters in User Permissions



Simplification

- Reducing Complexity for Access Management
- Aligning Permissions with Clear Business Roles



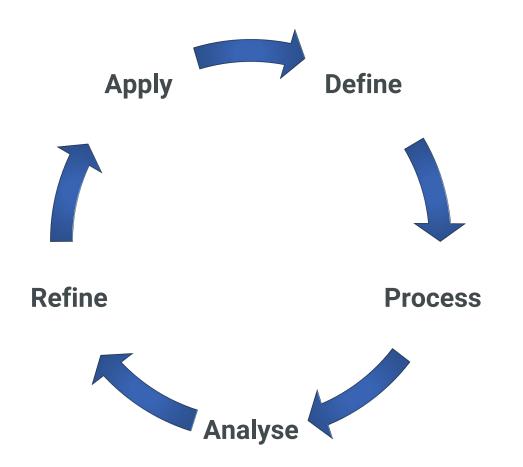
Algorithmic Data Processing

- Leveraging Advanced Algorithms and Al Techniques
- Processing Access Control Data for Hidden Insights





Process insights



- Role Mining Initiation
- Clustering and Pattern Detection
- Refinement of Business Role Candidates
- Integration and Implementation
- Iteration and Continuous Improvement



Impact of Role Mining

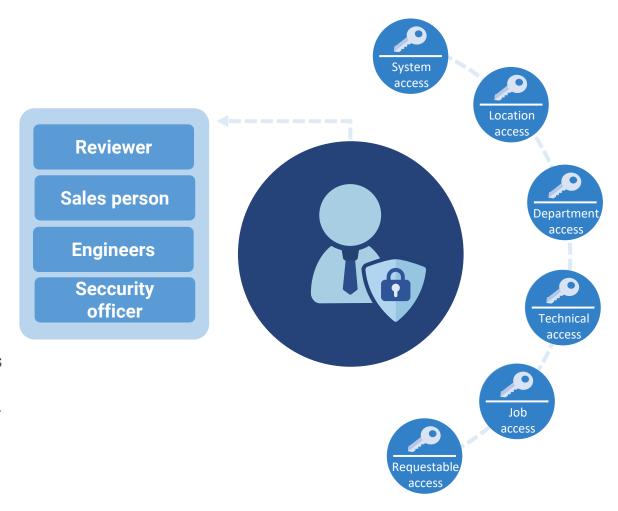
- Challenges without Role Mining:
 - Complex access data navigation
 - Manual customization of permissions
- Role Mining Solution:
 - Pattern identification and proposed modifications
 - Smart alignment of access rights with roles
- Benefits:
 - Enhanced security and reduced manual effort
 - Empowerment for innovation and security reinforcement





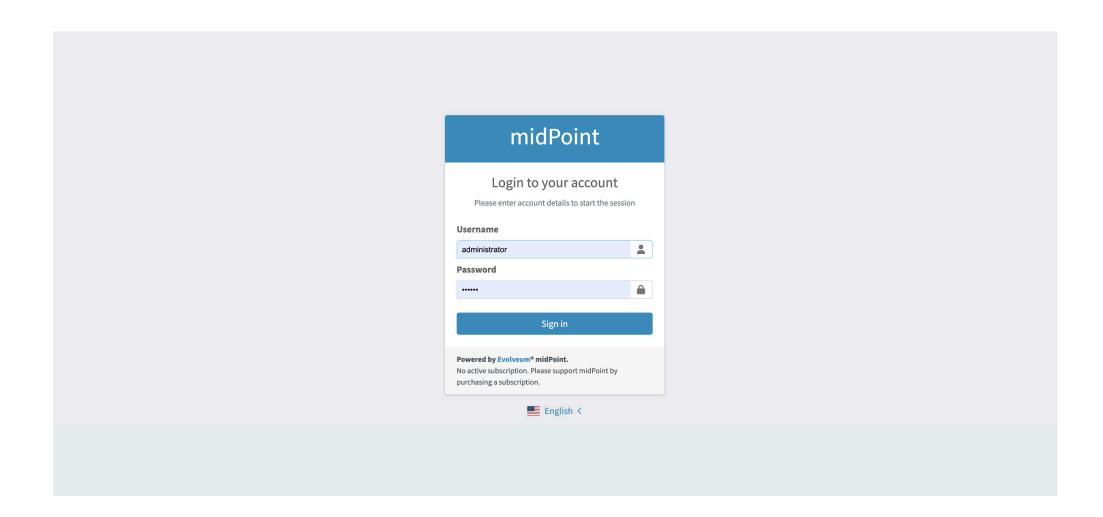
Live Demonstration (DEMO)

- **Scenario 1:** Discover system common roles
 - Automatically assigned to 95% of users
 - Core functions like Active Directory group membership, email access.
 - Ensure users have basic access.
- **Scenario 2:** Discover job related roles
 - Based on key attributes such as title, location, department
 - Tailored for specific job responsibilities and business locations
 - Includes requestable roles, available for temporary or specialized access based on user needs



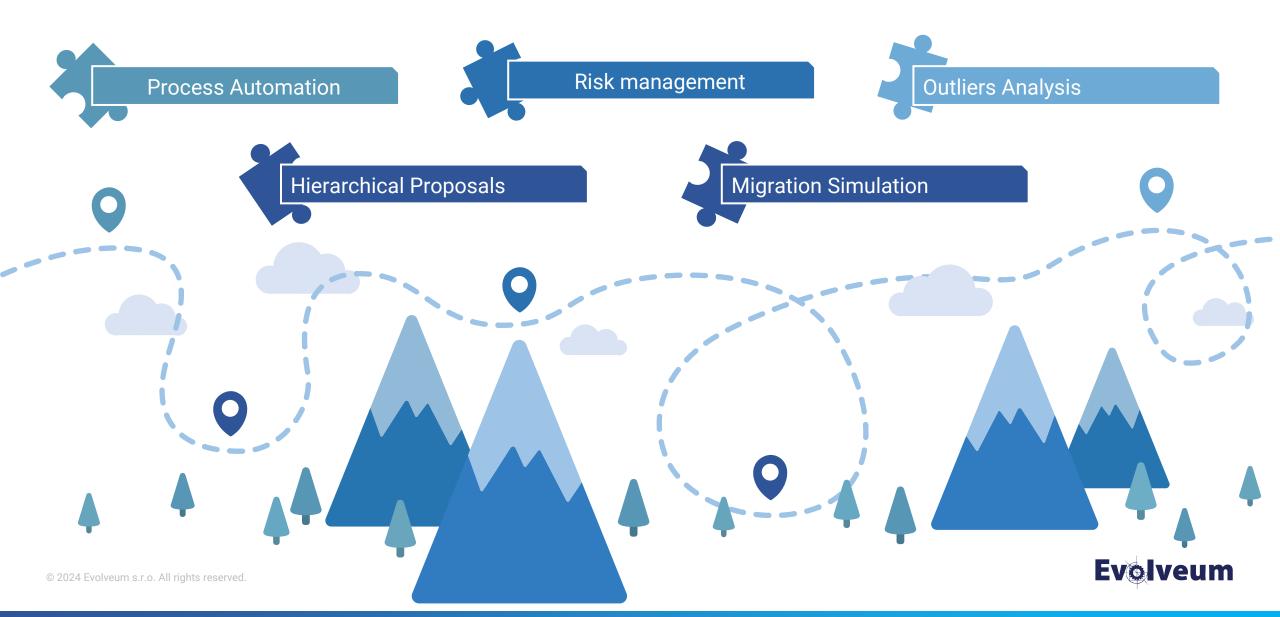


Live Demonstration (DEMO)





Potential Advancements and Innovations



Conclusion

- Role Mining is a powerful tool revolutionizing access control and governance
- Helps in the transition to a business model
- It is a configurable process
- For more information about Role Mining in the midPoint, explore our documentation:
 - https://docs.evolveum.com/midpoint/reference/roles-policies/mining/





Thank you for your attention

Do you have any questions? Feel free to contact us at info@evolveum.com

Follow us on social media or join us at GitHub or Gitter!











