RSM Partners

The z Specialists: Skills, Services & Support

Implementation of RBAC and Data Classification

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Agenda

- Introductions
- Data Classification & Ownership
- Role-Based Access Control (RBAC)
- Maintain the environment
- Results
- Q&A

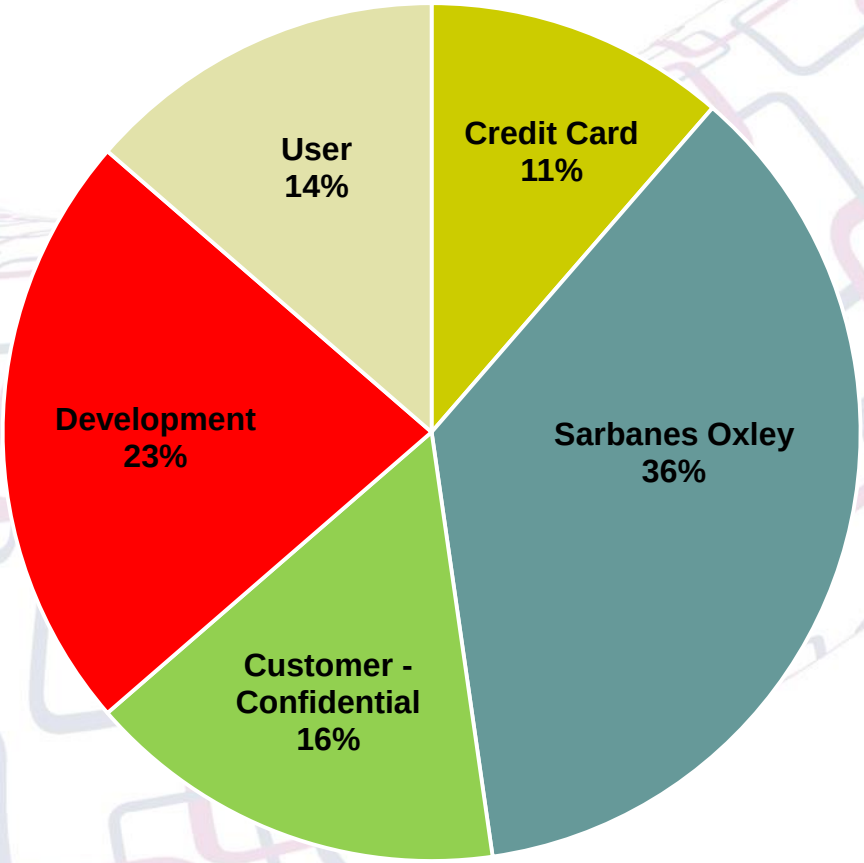
Who are we?

- ***Steve Tresadern***
  - ***27 years mainframe experience***
  - ***Former z/OS Systems Programmer***
  - ***Experience in Cryptography, RACF, Compliance***
- ***Rui Miguel Feio***
  - ***15 years mainframe experience***
  - ***Experience in z/OS, RACF, zSecure, Development***
  - ***Last 4 years working in Security and implementing RBAC***

DATA CLASSIFICATION
&
OWNERSHIP

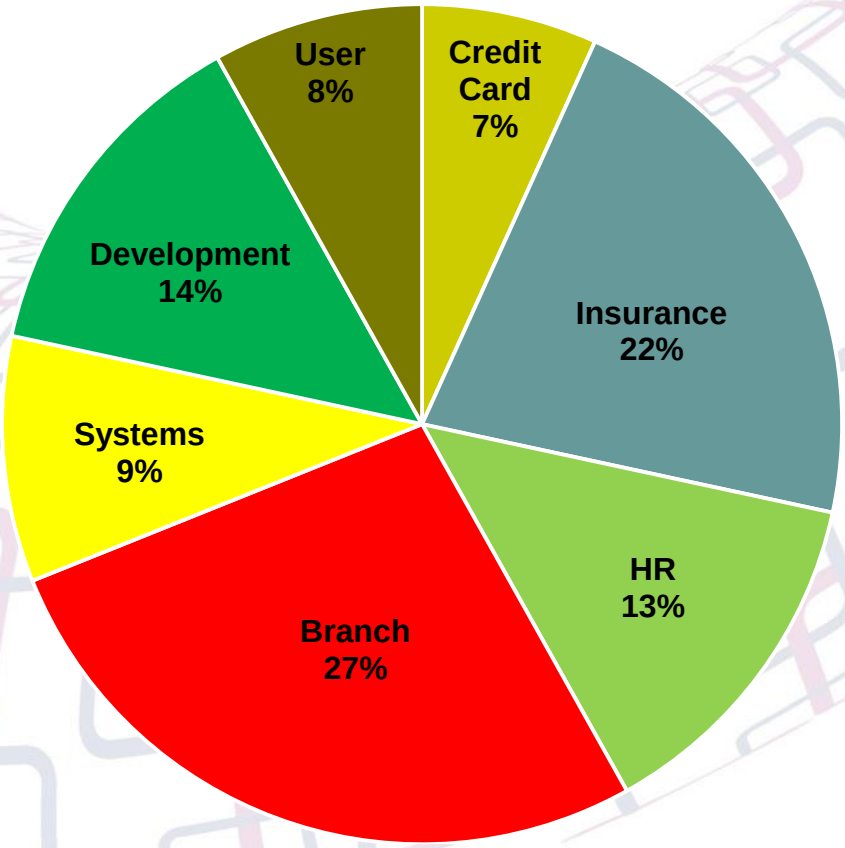
Data Classification – What is it?

- ***Understanding what your data is***



Data Classification – What is it?

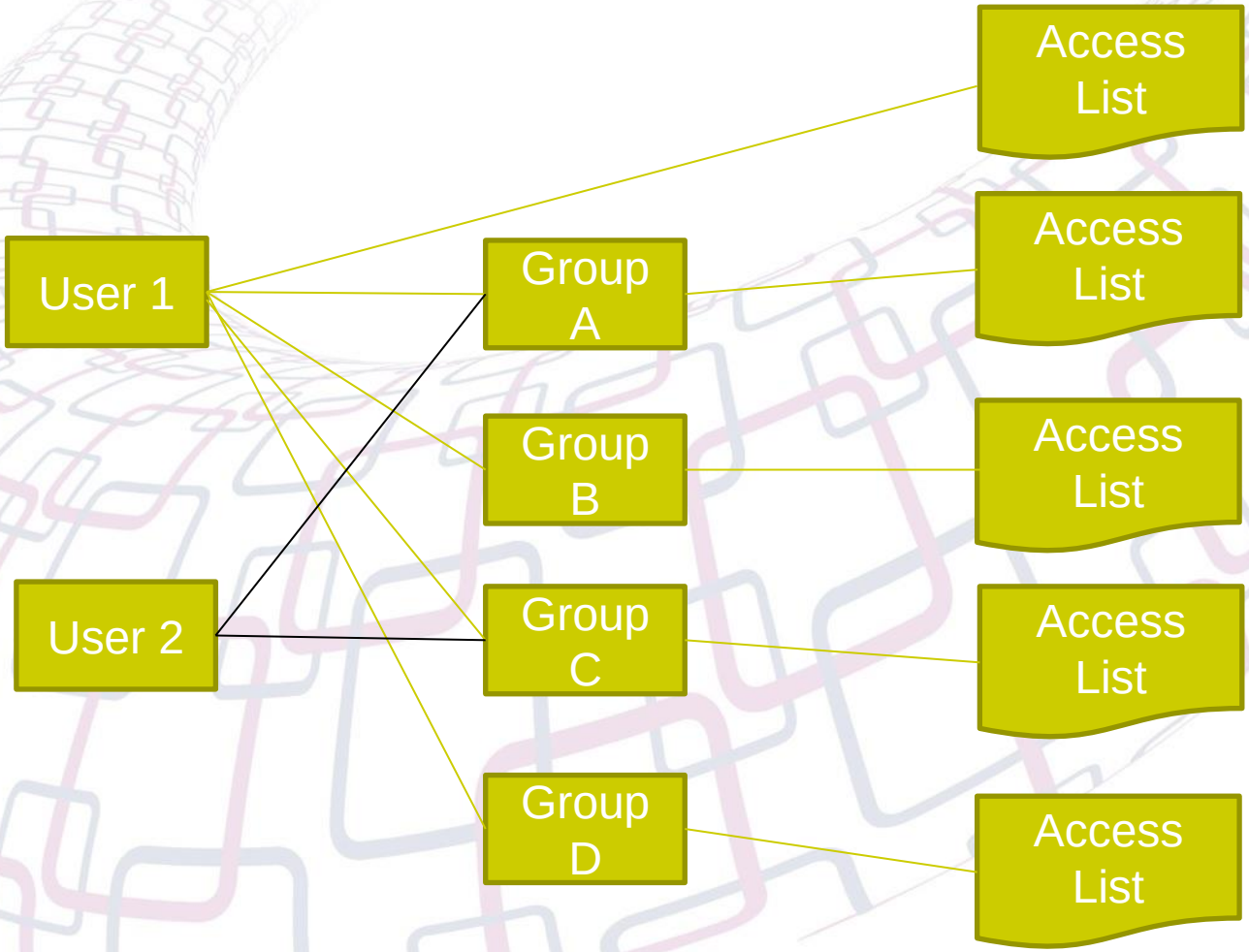
- ***Who owns your data***



Data Classification – Reasons to do it

- ***Audit requirements***
- ***Compliance***
- ***Who has privileged access?***
- ***Who is accessing confidential information?***
- ***Reduce the risk of fraud?***

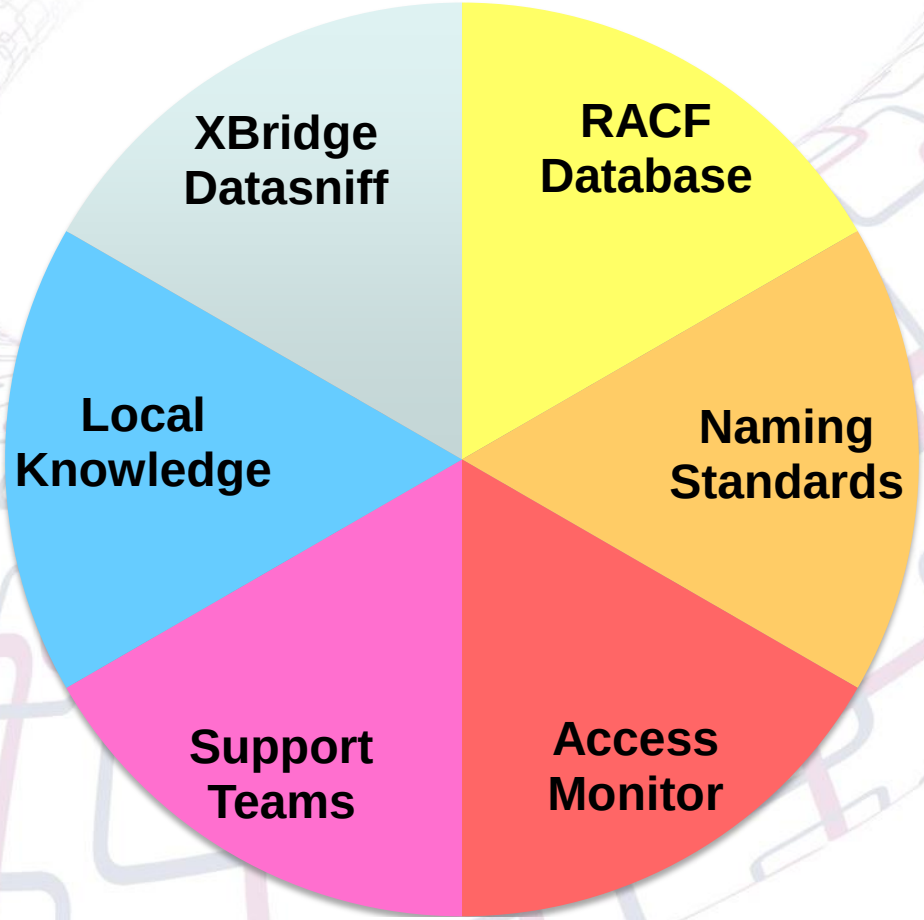
Data Classification – Reasons to do it



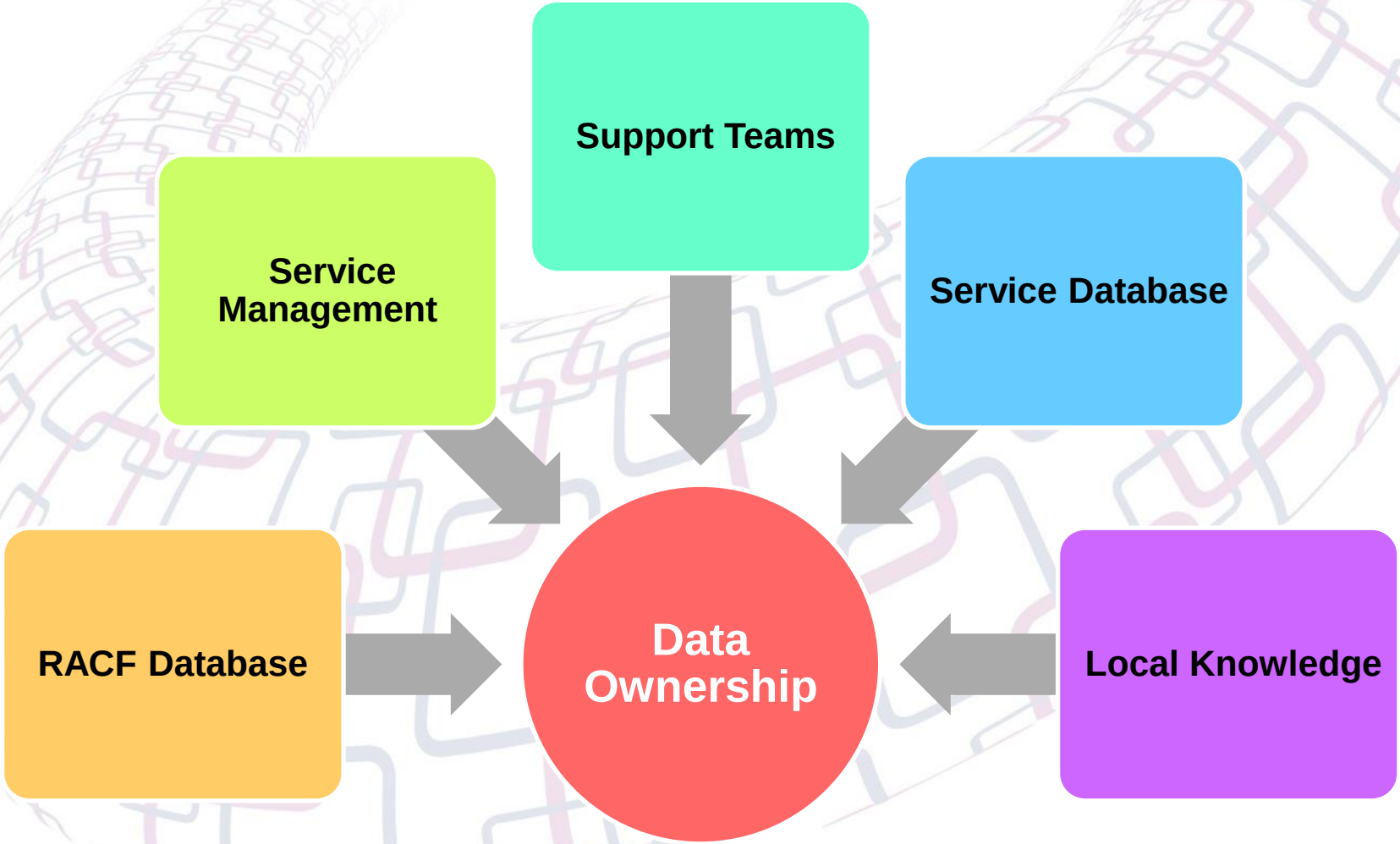
Data Classification – Aims

- ***Every dataset and resource profile must be;***
  - ***Classified in terms of confidentiality and integrity.***
  - ***All linked to an application.***
  - ***The basic security correctly defined***
  - ***Understand who has privileged access***
- ***All applications have a business/data owner.***
  - ***Ideally they should approve all access***
  - ***Review who has access***

Sources for Data Classification



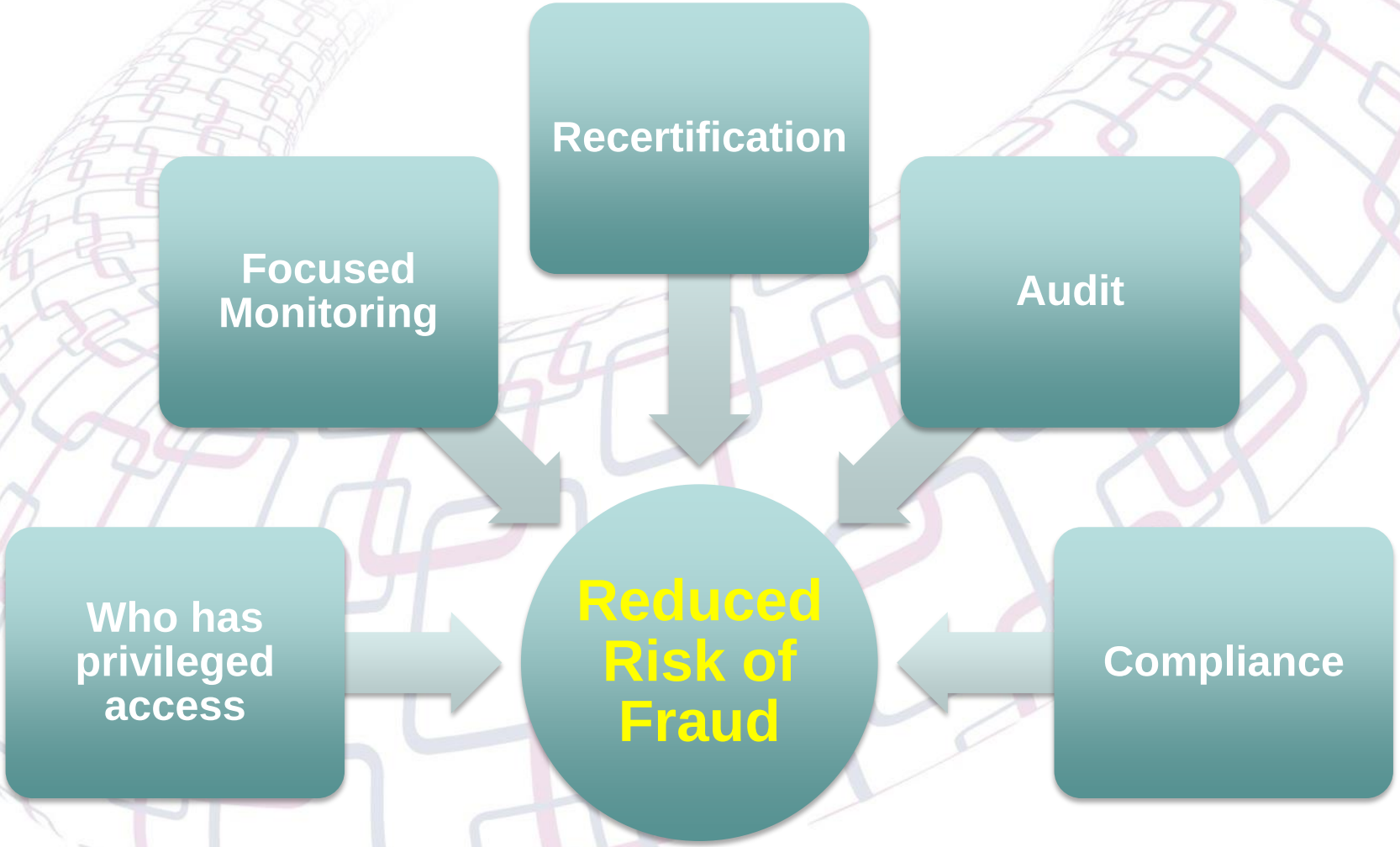
Sources for Data Ownership



Data Classification – Challenges

- Lack of knowledge in support teams
- Development Team Processes
- Business areas cooperation
- Non-RACF based security
- Unravelling of the environment
- Service Database – Up to date?

Data Classification Benefits



ROLE-BASED ACCESS CONTROL (RBAC)

RBAC – Reasons to do it

- ***Business organisation keeps changing***
- ***Managing the mainframe security environment***
- ***Audit requirements***
- ***Compliance***
- ***Recertification***
- ***Remove access not required***

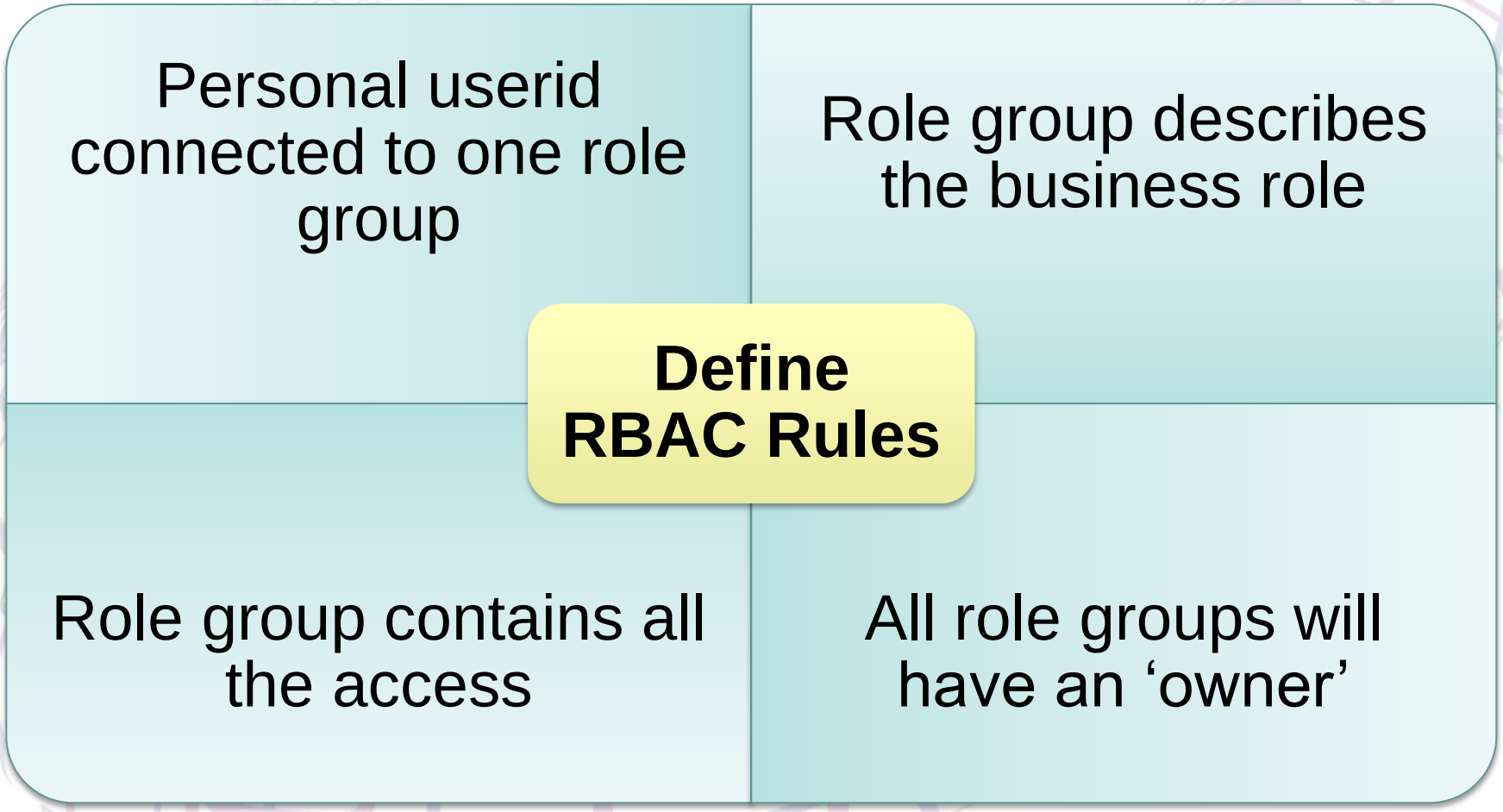
RBAC Common Challenges - I

- Historical code
- Global Access Table (GAT)
- Lack of technical knowledge
- Business areas cooperation
- Least Privilege access implementation
- DB2

RBAC Common Challenges - II

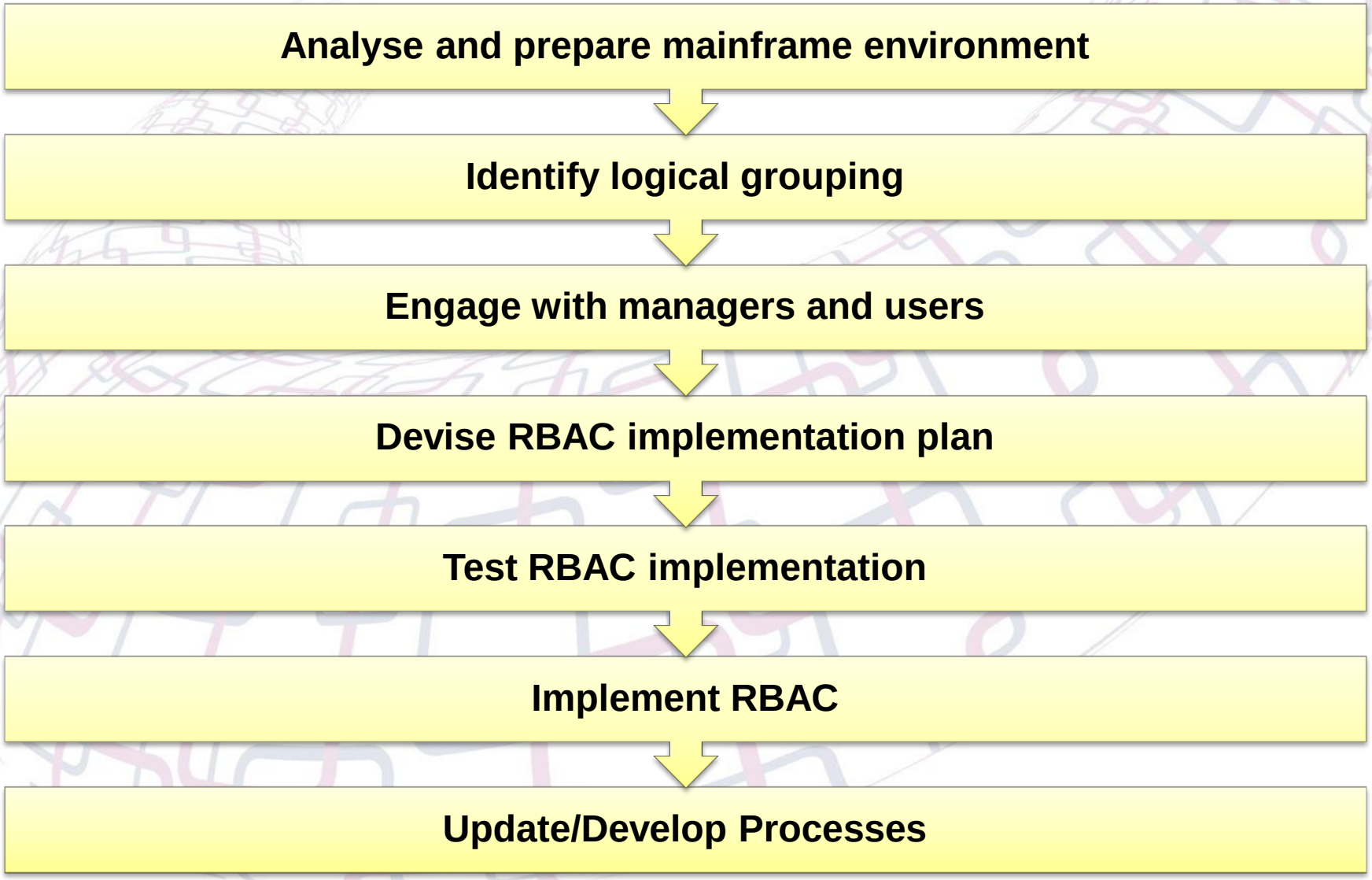
- **Recertification tools**
- **Unravelling of the RBAC**

RBAC – Define Standards and Rules



RBAC - Sources of data

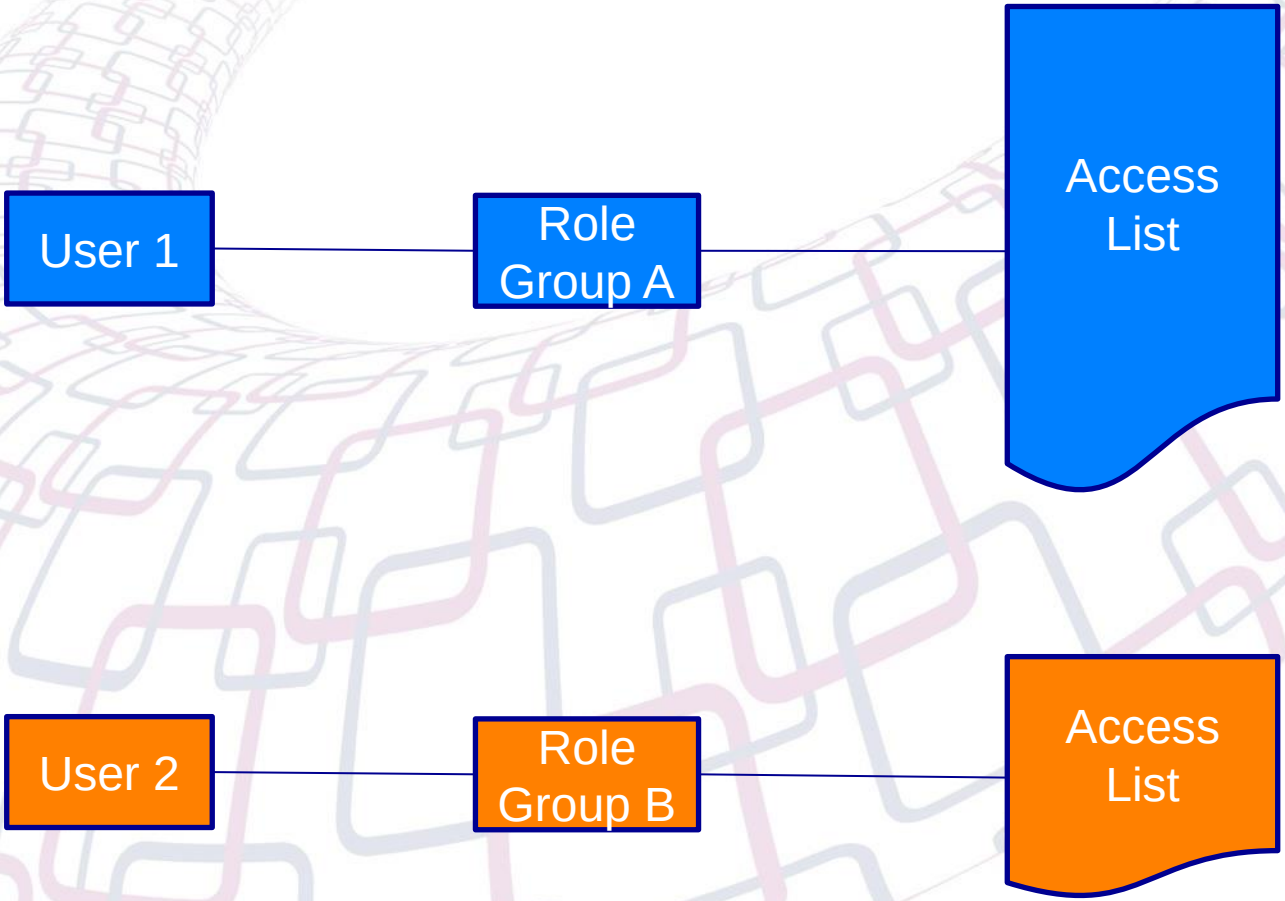
RBAC Stages – An overview



RBAC Implementation Tools

- RSM RBAC tool
- RSM DB2 RBAC Tools
- Access Monitor data
- RACF Offline
- CARLa code

RBAC Benefits – Some examples



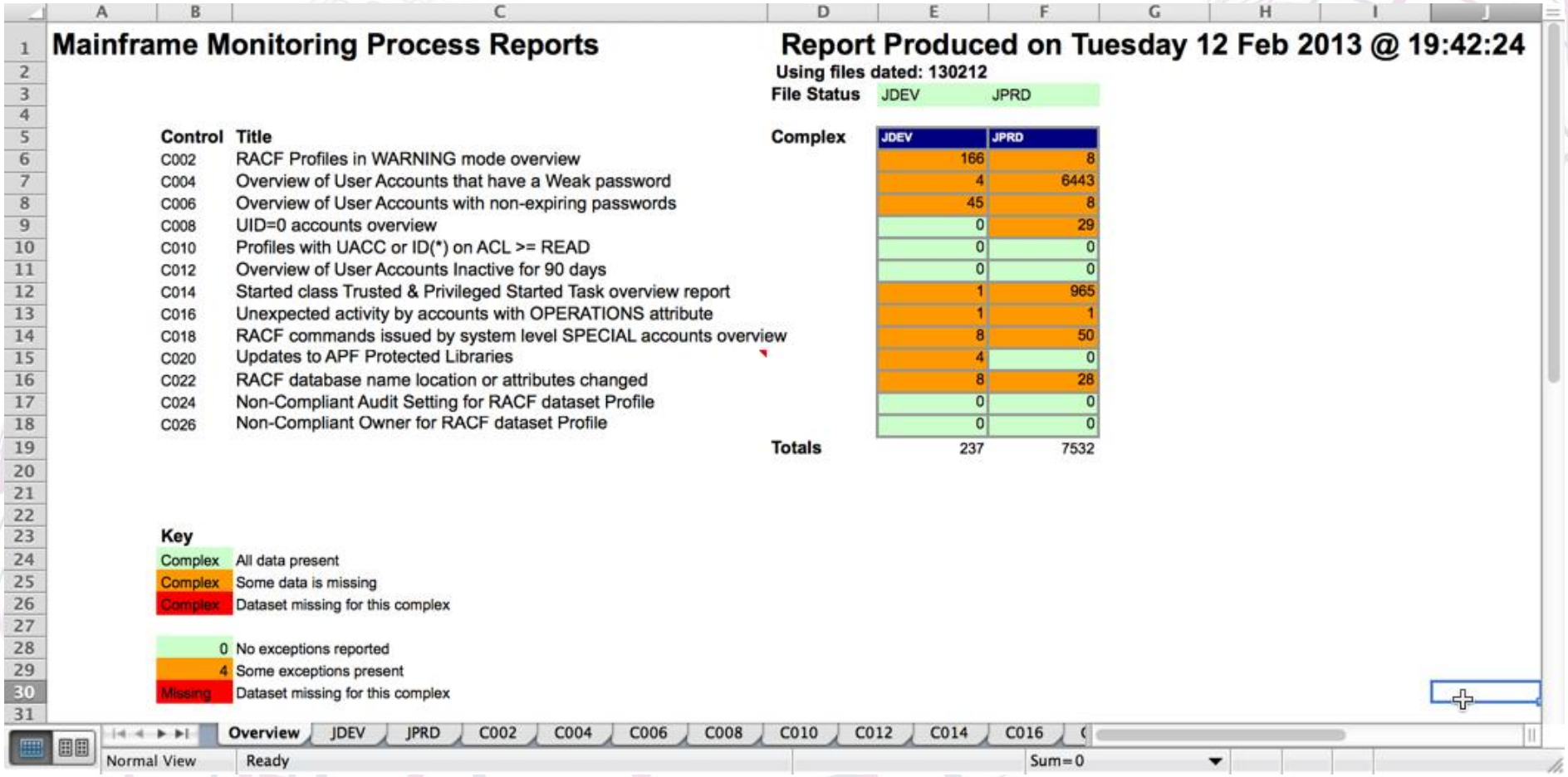
RBAC Benefits – Some examples

MAINTAINING THE ENVIRONMENT

Tools – Maintain the environment

- In-House Security Panels
- IBM zSecure Command Verifier
- IBM zSecure Alert
- RSM ExceptionReporter
- RSM RealtimeDashboard

Tools – RSM ExceptionReporter



Mainframe Monitoring Process Reports

Report Produced on Tuesday 12 Feb 2013 @ 19:42:24

Using files dated: 130212

File Status	JDEV	JPRD

Control	Title	Complex	JDEV	JPRD
C002	RACF Profiles in WARNING mode overview		166	8
C004	Overview of User Accounts that have a Weak password		4	6443
C006	Overview of User Accounts with non-expiring passwords		45	8
C008	UID=0 accounts overview		0	29
C010	Profiles with UACC or ID(*) on ACL >= READ		0	0
C012	Overview of User Accounts Inactive for 90 days		0	0
C014	Started class Trusted & Privileged Started Task overview report		1	965
C016	Unexpected activity by accounts with OPERATIONS attribute		1	1
C018	RACF commands issued by system level SPECIAL accounts overview		8	50
C020	Updates to APF Protected Libraries		4	0
C022	RACF database name location or attributes changed		8	28
C024	Non-Compliant Audit Setting for RACF dataset Profile		0	0
C026	Non-Compliant Owner for RACF dataset Profile		0	0
		Totals	237	7532

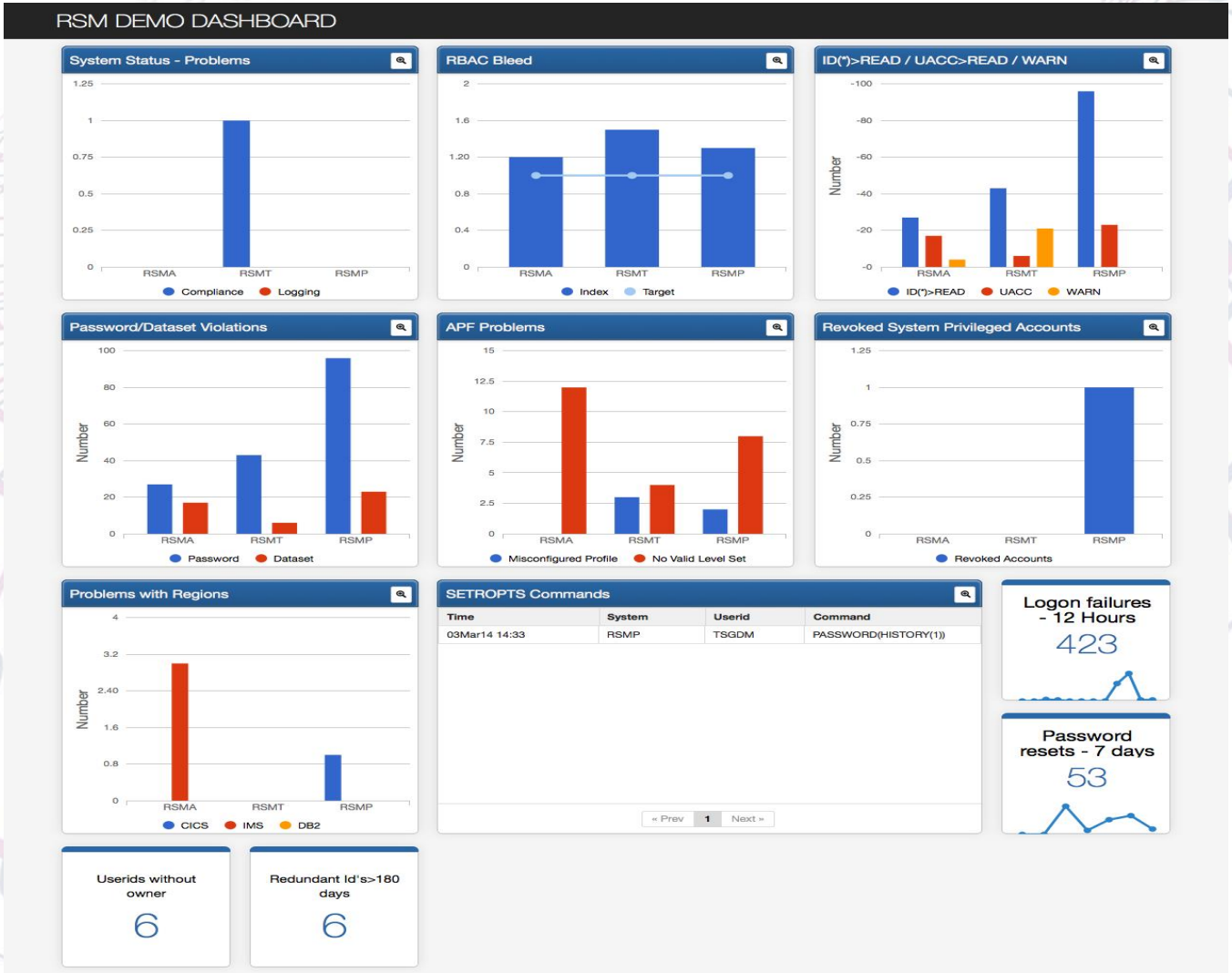
Key

Complex	All data present
Complex	Some data is missing
Complex	Dataset missing for this complex
0	No exceptions reported
4	Some exceptions present
Missing	Dataset missing for this complex

Overview | JDEV | JPRD | C002 | C004 | C006 | C008 | C010 | C012 | C014 | C016

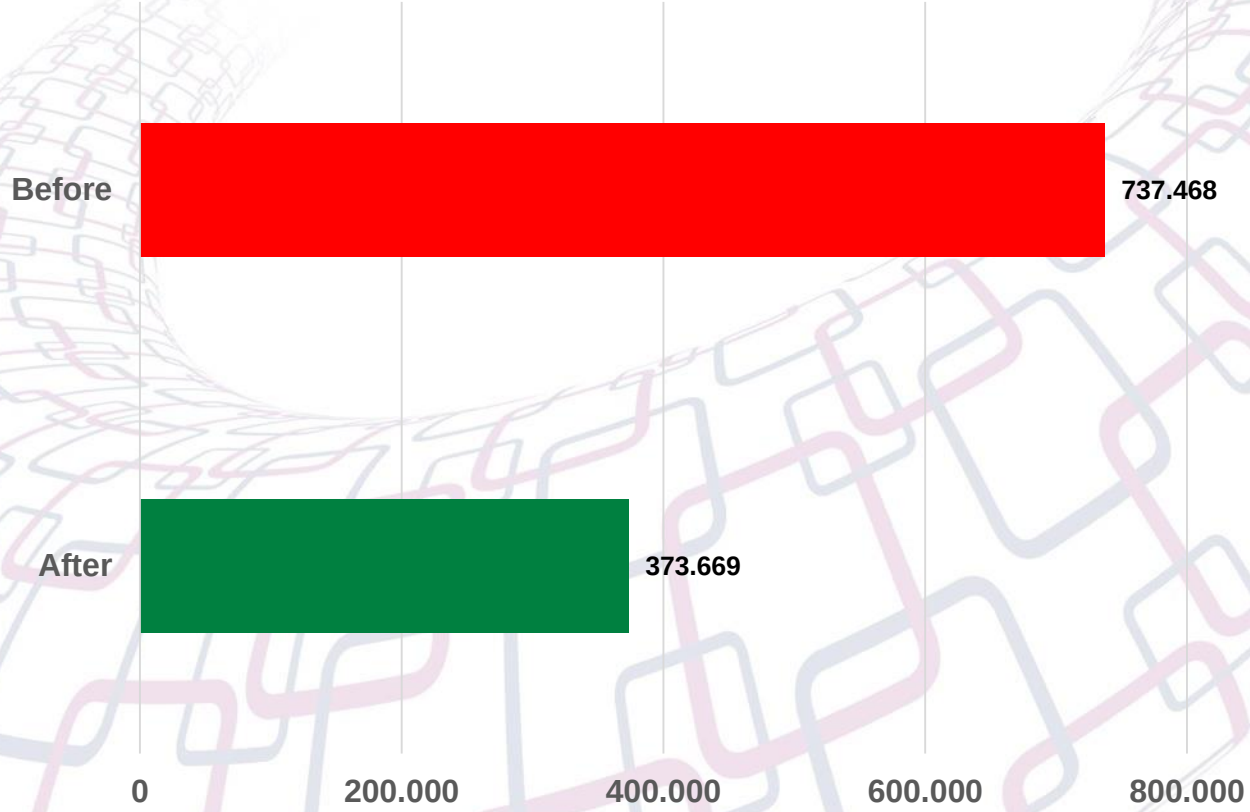
Normal View | Ready | Sum=0

Tools – RSM RealtimeDashboard

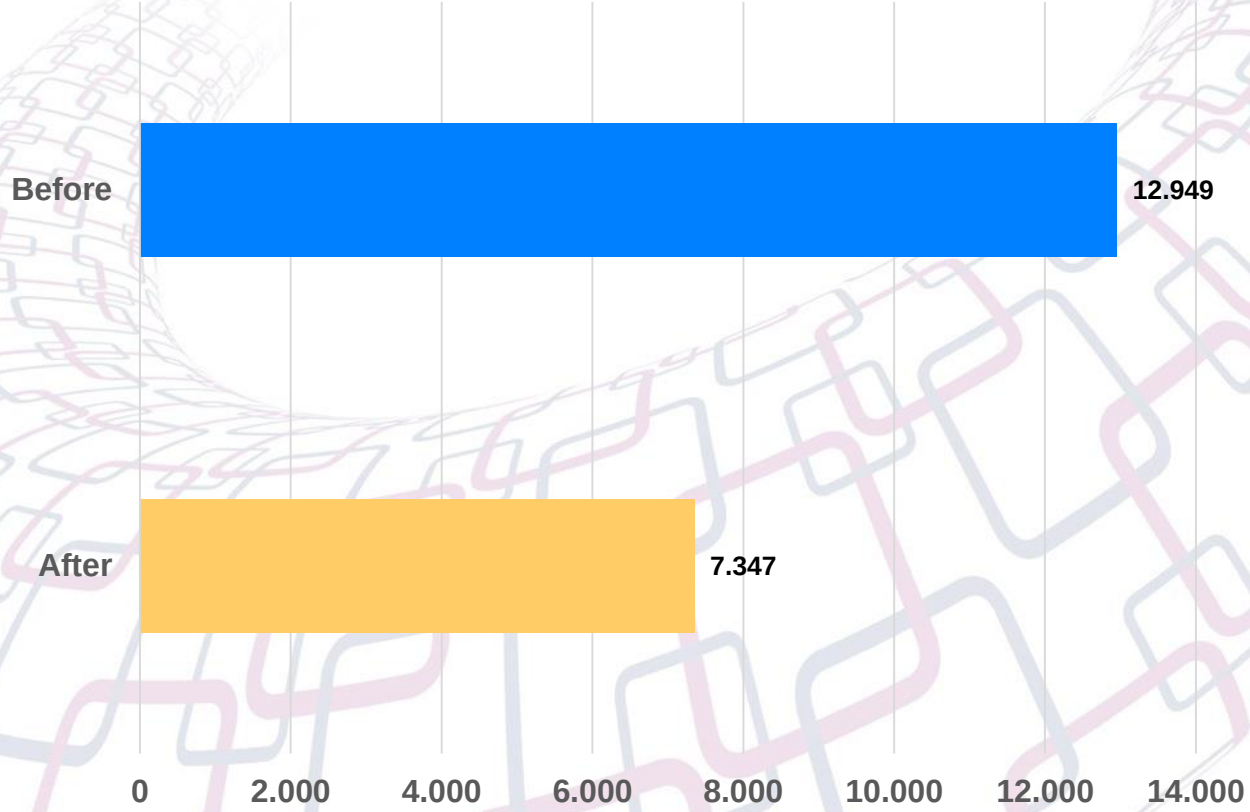


RESULTS

Reduction in Privileged Accesses



Reduction in Privileged Users



Questions

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