**Controlled Access to Malaysia & India Data Under Global Entitlement**

**1. Introduction**

**Background**

* The **Global Entitlement** currently allows access to **Malaysia and India data** without additional approvals.
* **Local compliance teams** in these countries have raised concerns about unauthorized access.
* This entitlement is managed through **RSAM**, and any solution must not disturb the RSAM structure while adhering to strict timelines.

**Objectives**

* Ensure **controlled access** without modifying RSAM.
* Maintain **security, compliance, and usability**.
* Implement a **scalable and auditable** solution.

**2. Proposed Hybrid Solution**

A combination of three key mechanisms ensures security while maintaining efficiency:

**1. Attribute-Based Access Control (ABAC) - Real-time Enforcement**

* Uses **user attributes** to control access dynamically.
* If a user does not have country-specific approval, access is denied with a prompt to raise a request.

**Example Implementation:**

* System checks user attributes before granting access.
* If approval is missing, access is blocked with a message:
  + *"Access to Malaysia/India data requires approval. Please raise a ServiceNow ticket."*

**Benefits:**

✅ Automatic enforcement at the API level. ✅ No changes to RSAM required.

**2. ServiceNow (SNOW) Ticket-Based Approval Workflow**

* Users **submit a SNOW request** for India/Malaysia data access.
* **Business Data Owners** approve/reject requests.
* Approved users receive **temporary access (e.g., 30 days).**

**Example Workflow:**

✅ **User submits SNOW request.** ✅ **Approval from respective country’s Data Owner.** ✅ **Automated attribute update enables access.** ✅ **Access revokes after a defined period.**

**Benefits:**

✅ Ensures formal approval without slowing users down. ✅ Provides a clear **audit trail** for compliance teams.

**3. Access Logging & Compliance Review**

* Every access request is **logged** (username, timestamp, dataset, country).
* A **monthly report** is generated for **compliance review**.
* Anomalies trigger **escalations via SNOW tickets.**

**Example Audit Log Format:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Username** | **Accessed Country** | **Date** | **Dataset** | **Approval Source** |
| Ali | India | Apr 1 | Vendor Payments | SNOW-REQ-1234 |
| Jane | Malaysia | Apr 3 | Payroll | SNOW-REQ-5678 |
| Mike | India | Apr 5 | Sales | AUTO-GRANTED |

**Benefits:**

✅ Full visibility for compliance & security teams. ✅ No disruption to user workflows.

**4. Scalable Country List Management**

As the list of restricted countries grows, manually adding new rules for each country becomes inefficient. Instead, we propose a **dynamic country-based access control model**:

* **Centralized Country Configuration Table:**
  + Maintain a **configurable list of restricted countries** in a database or API.
  + Access rules dynamically reference this list.
* **Dynamic Access Policy Generation:**
  + Instead of hardcoding access rules, use an automated policy generator that applies ABAC and SNOW workflows based on the updated country list.
* **Example Implementation:**
  + When a new country is added to the restricted list, the system **automatically enforces** access controls without requiring manual rule additions.

**Benefits:**

✅ Eliminates the need for manual updates when new countries are added. ✅ Ensures **consistent access enforcement** across all restricted countries. ✅ Enables **real-time updates** based on business requirements.

**3. Why This Approach?**

|  |  |
| --- | --- |
| Approach | Advantage |
| **ABAC Enforcement** | Real-time restriction of unauthorized access |
| **SNOW Ticket Workflow** | Ensures approvals while keeping access smooth |
| **Access Logging** | Provides complete auditability for compliance |
| **Scalable Country List** | Automates access controls for new restricted countries |

**Why Not Just RSAM?**

* **Modifying RSAM is complex and time-consuming.**
* **SNOW-based approval** provides a flexible, fast alternative.
* **ABAC rules** ensure **immediate enforcement** at the API level.
* **Dynamic country list** prevents continuous manual rule updates.

**4. Implementation Plan**

|  |  |  |  |
| --- | --- | --- | --- |
| Phase | Task | Owner | Duration |
| **Phase 1** | Define ABAC rules for Malaysia & India data | Security Team | 2 weeks |
| **Phase 2** | Configure SNOW approval workflow | IT Ops | 3 weeks |
| **Phase 3** | Implement API Gateway Policy | Dev Team | 4 weeks |
| **Phase 4** | Enable logging & compliance review | Security Team | 2 weeks |
| **Phase 5** | Implement dynamic country list management | IT Ops | 3 weeks |

**5. Next Steps**

✅ **Review proposal with Senior Management.** ✅ **Seek approval for ServiceNow workflow automation.** ✅ **Kick off implementation plan with respective teams.** ✅ **Develop centralized country configuration system.**

**Conclusion**

This hybrid approach ensures **security, compliance, and efficiency** without modifying the RSAM structure. It meets the concerns of **Malaysia & India teams** while ensuring minimal disruption for users with **Global Entitlement.** Additionally, the **scalable country list** ensures future flexibility without requiring constant manual interventions.