**Background**

Currently, users with a **Global Entitlement** can access **Malaysia and India data** without additional approval. However, **local compliance teams in these countries** have raised concerns about unauthorized access. Given that the entitlement is managed via **RSAM**, we need a solution that:

* **Does not modify the RSAM structure**
* **Meets strict timelines** for implementation
* **Provides transparency & accountability**
* **Ensures minimal operational overhead**

This document outlines a set of solutions and a recommended approach that balances **security, compliance, and usability.**

**Recommended Approach: Hybrid Model**

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

1. **Attribute-Based Access Control (ABAC) for real-time enforcement**
2. **ServiceNow (SNOW) Ticketing for approvals where necessary**
3. **Access Logging & Periodic Review for compliance and auditability**

**How This Works:**

✅ **Users with Global Entitlement can request access via ServiceNow (SNOW) Ticket**  
✅ **Once approved, access is enabled dynamically via ABAC rules**  
✅ **All access is logged for compliance monitoring**

**Proposed Implementation Solutions**

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

**How It Works:**

* User requests **Malaysia/India data**
* System checks the **user’s attributes** (e.g., country-specific approval flag)
* If approved, access is granted. Otherwise, access is denied with a prompt:
  + *"Access to Malaysia data requires approval. Please raise a SNOW ticket."*

**Example Implementation:**

**API Gateway Rule (Example in JSON):**

json

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{

"rule": "country-data-restriction",

"conditions": [

{

"if": "user.global\_entitlement == true && data.country == 'India'",

"then": "requireHeader('X-India-Access-Approved')"

}

],

"errorMessage": "Access to India data requires ServiceNow approval."

}

**Benefit:**

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

**2. SNOW Ticket-Based Approval for One-Time or Periodic Access**

**How It Works:**

1. **User submits a ServiceNow (SNOW) request** for India/Malaysia data access.
2. **Business Data Owners** (for India/Malaysia) approve/reject the request.
3. If approved, **the user’s attribute is updated in the system** (e.g., india\_access = true).
4. The user **can now access India data** for a defined period (e.g., 30 days).

**Example ServiceNow Workflow:**

✅ **Request Type:** Data Access Request  
✅ **Approval Required From:** India/Malaysia Data Owner  
✅ **Fields in Request:**

* Justification
* Duration Needed (e.g., 7 days, 30 days)
* Type of Data Requested

**SNOW Automation:**

* The approval **automatically updates the access attribute** in the system.
* No **manual intervention** required post-approval.

**Benefit:**

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

**3. Access Logging & Compliance Review**

**How It Works:**

* **Every access request is logged** (username, timestamp, dataset, country).
* A **monthly report** is sent to India/Malaysia teams.
* If anomalies are found, **escalations can be made via SNOW tickets.**

**Example Audit Log Format:**

| **Username** | **Accessed Country** | **Date** | **Dataset** | **Approval Source** |
| --- | --- | --- | --- | --- |
| Ali | India | 2025-04-01 | Vendor Payments | SNOW-REQ-1234 |
| Jane | Malaysia | 2025-04-03 | Payroll | SNOW-REQ-5678 |
| Mike | India | 2025-04-05 | Sales | AUTO-GRANTED |

**Benefit:**

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

**Why This Approach?**

**Key Advantages:**

| **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 |

**Why Not Just RSAM?**

* **Modifying RSAM is complex and time-consuming**
* **ServiceNow-based approval provides a flexible, fast alternative**
* **ABAC rules can enforce security at the API level immediately**

**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 |

**Conclusion & Next Steps**

This hybrid approach provides **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**.

**Action Items:**

✅ **Review proposal with Senior Management**  
✅ **Seek approval for ServiceNow workflow automation**  
✅ **Kick off implementation plan with respective teams**