

# *Importing and Securing Data in ServiceNow*

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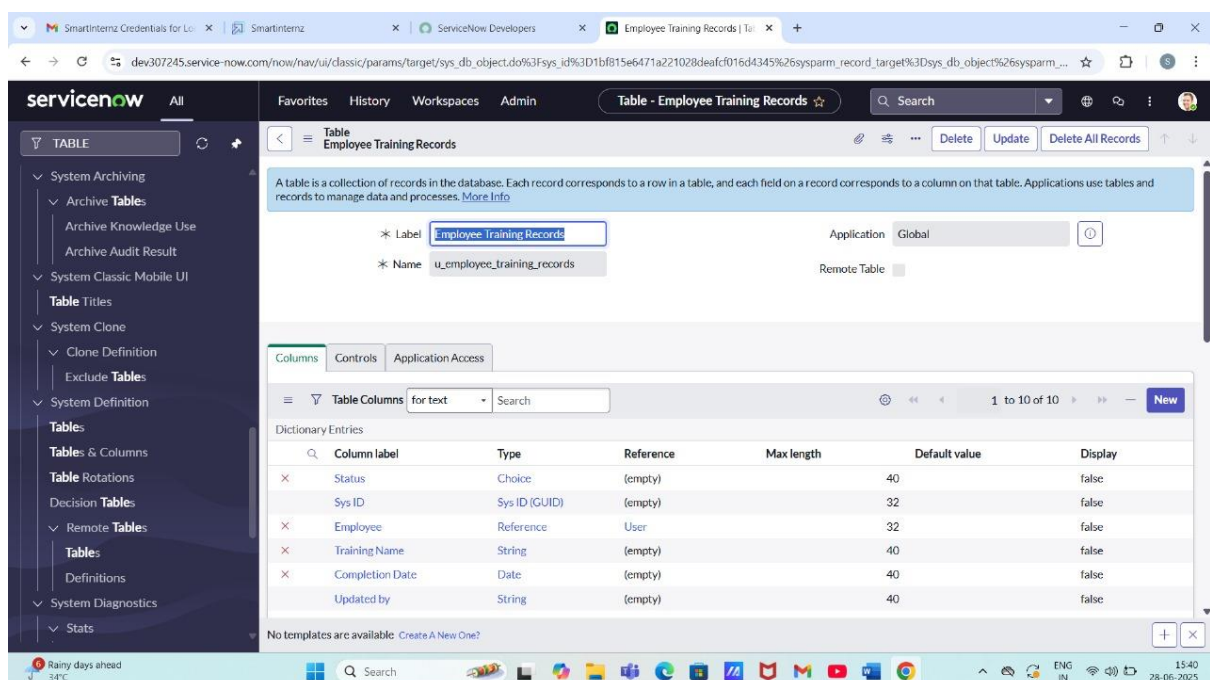
## INTRODUCTION:

ServiceNow is a cloud-based platform widely used for IT service management (ITSM), business workflow automation, and enterprise operations. One of its key capabilities is handling data — including importing, organizing, and securing it efficiently.

**Data Importing** in ServiceNow involves bringing external data (e.g., from Excel, CSV, or databases) into the platform to populate tables, automate workflows, or support business processes. This is typically done using tools like **Import Sets**, **Transform Maps**, and **Data Sources**. These tools ensure that raw data is accurately mapped to ServiceNow's structured tables, preserving data integrity and usability.

On the other hand, **Data Security** in ServiceNow is critical to protect sensitive information and ensure proper access control. ServiceNow employs a robust **role-based access control (RBAC)** system, allowing administrators to define who can view, edit, or delete specific data. Additionally, **Field-level encryption**, **Access Control Rules**, and **Data Policies** are used to safeguard data throughout its lifecycle.

## Tables in ServiceNow:



The screenshot displays the ServiceNow interface for configuring a table named 'Employee Training Records'. The left sidebar shows the navigation menu with options like 'System Archiving', 'Table Titles', and 'Table Rotations'. The main content area shows the table's configuration, including its label, name, application, and a list of columns with their types, references, and lengths.

Column label	Type	Reference	Max length	Default value	Display
Status	Choice	(empty)	40		false
Sys ID	Sys ID (GUID)	(empty)	32		false
Employee	Reference	User	32		false
Training Name	String	(empty)	40		false
Completion Date	Date	(empty)	40		false
Updated by	String	(empty)	40		false

In ServiceNow, tables are the foundational components where data is stored. Each table contains fields (columns) and records (rows) similar to a relational database.

Tables can represent:

- Users (sys\_user)
- Incidents (incident)
- Departments (cmn\_department)
- Assets (alm\_asset)
- Configuration Items (cmdb\_ci)
- Custom business records (via custom tables)

## Field Types in Tables

Each table contains **fields**, each with a defined data type. Common field types include:

Field Type	Description
String	Text values (e.g., Name, Description)
Integer	Whole numbers
Date/Time	Date and time information
Reference	Link to another table
Choice	Dropdown list of predefined values
Boolean	True/False checkbox
Glide List	List of references to other table records
Journal (Notes)	Tracks history (e.g., comments/work notes)

## System Tables:

ServiceNow also includes **system tables** that handle internal configurations:

Table Name	Purpose
sys_user	User profiles
sys_group	User groups
sys_user_role	User roles
sys_dictionary	Defines fields and attributes
sys_metadata	Stores metadata about configurations
sys_properties	Global system properties
sys_audit	Audit logs

## Importing Data:

Import Process Overview:

To bring data into ServiceNow, follow these steps:

### Step 1: Prepare Your Data

- Format the data in CSV, Excel, or XML.

- Include necessary fields like employee\_id, name, department, etc.

## Step 2: Create an Import Set

### Progress

Name ImportProcessor  
 State **Complete**  
 Completion code **Success**  
 Message Processed: 4, inserts 4, updates 0, errors 0, empty and ignored 0, ignored errors 0 (0:00:01.178)

### Next steps...

- [Import sets](#) Go to the import sets for this data load
- [Loaded data](#) Go to the newly imported data inside the staging table: u\_employee\_training
- [Create transform map](#) Create a transform map for the newly staged data
- [Import log](#) View the import log

- Go to System Import Sets > Load Data.
- Upload your file and create a new Import Set Table.

## Step 3: Create a Transform Map

The screenshot shows the ServiceNow interface for creating a Table Transform Map. The top section is the configuration form, and the bottom section is the field mapping table.

**Configuration Form:**

- Name:** Employee Transform
- Source table:** Employee Training [u\_employ...]
- Active:** ☒
- Run business rules:** ☒
- Enforce mandatory fields:** No
- Copy empty fields:** ☐
- Create new record on empty coalesce fields:** ☐
- Application:** Global
- Created:** [empty]
- Target table:** Employee Training Records [u...]
- Order:** 100
- Run script:** ☐

**Field Mapping Table:**

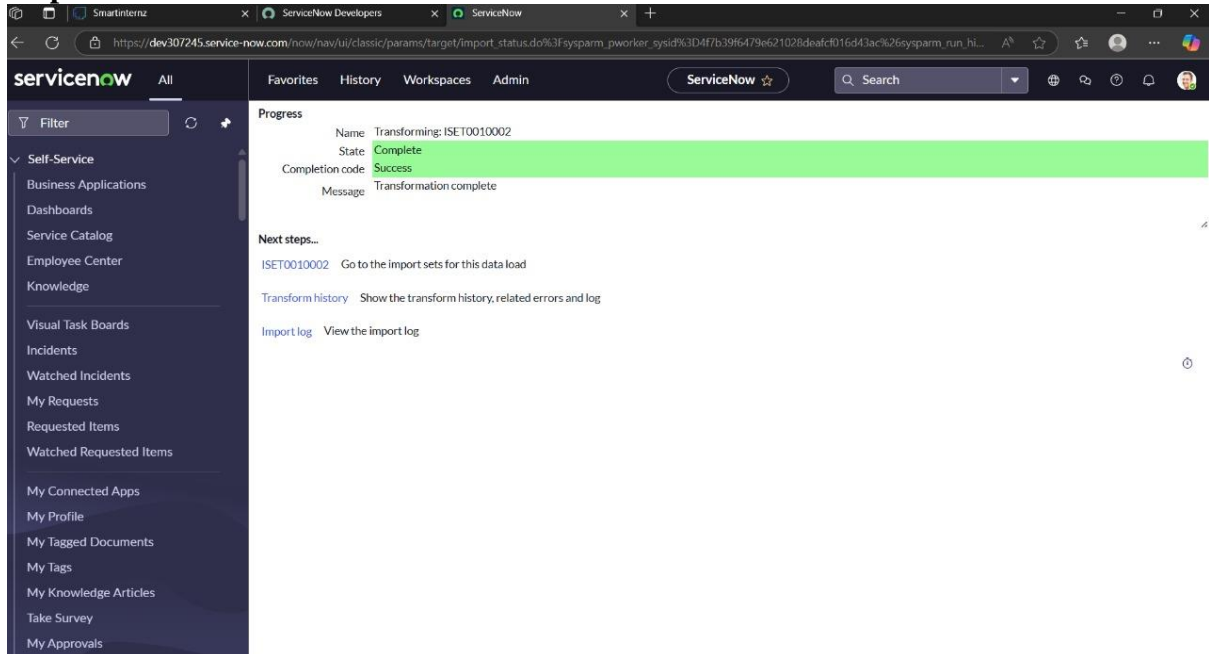
Source field	Target field	Coalesce
u_completion_date	u_completion_date	false
u_status	u_status	false
u_training_name	u_training_name	false
u_employee_email	u_employee	false

- Go to System Import Sets > Create Transform Map.

Choose the Import Set Table as the source and your target table (e.g., sys\_user) as the destination.

- Map source fields to target fields.

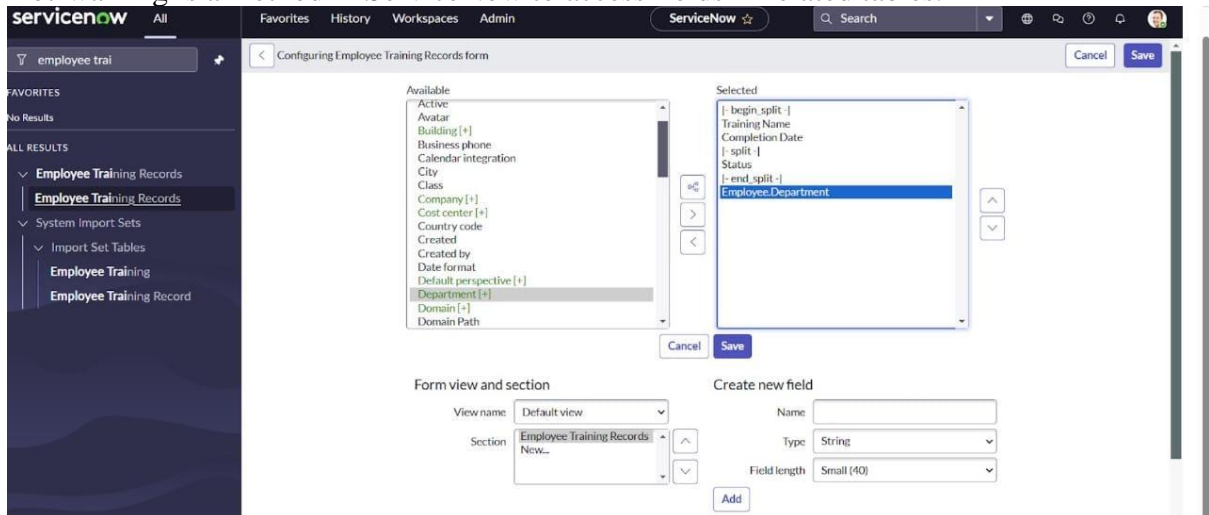
#### Step 4: Run the Transform



- Go to the import set and click Transform.
- Data will be moved from the import set into the actual ServiceNow table.

#### Using Dot-Walking to Access Employee Department Information:

Dot-walking is a method in ServiceNow to access fields in related tables.



Example:

If you're accessing a user (sys\_user) record and want to get the department name:  
user.department.name

- user: sys\_user record
- department: reference field to cmn\_department
- name: the name of the department

Use Case in a Script or Report:

## Java script

```
var user = gs.getUser();  
var dept = user.getRecord().getValue('department.name');  
gs.info ("Department: " + dept);  
Dot-walking also works in:
```

- Reports
- Email Templates
- Business Rules
- UI Policies

## Access Control List (ACL):

Created new ACL

The screenshot shows the ServiceNow web interface for creating or editing an Access Control List (ACL). The left sidebar contains a navigation menu with categories like 'roles', 'System Security', 'Users and Groups', and 'Roles'. The main content area is titled 'Access Control - u\_employee\_training\_records'. It displays the following details:

- Name:** u\_employee\_training\_records
- Description:** Allow write for records in u\_employee\_training\_records, or users with role Hr Manager.
- Applies To:** No. of records matching the condition: 4 (empty)
- Conditions:** A section explaining that Access Control Rules have two decision types: 'Allow Access' and 'Deny Access'. It includes a 'More Info' link.
- Requires role:** A table with one entry: 'Hr Manager'.
- Security Attribute Condition:** A section stating 'No templates are available. Create A New One?'.

The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 15:56 on 28-06-2025.

## Roles in ServiceNow:

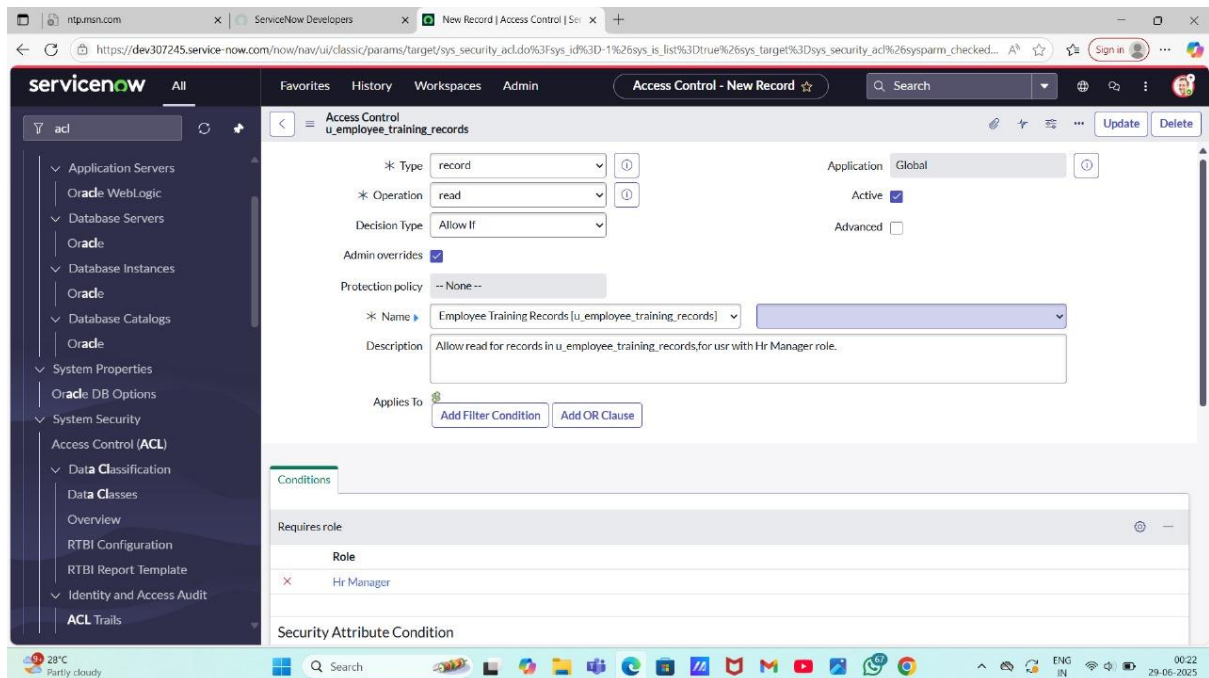
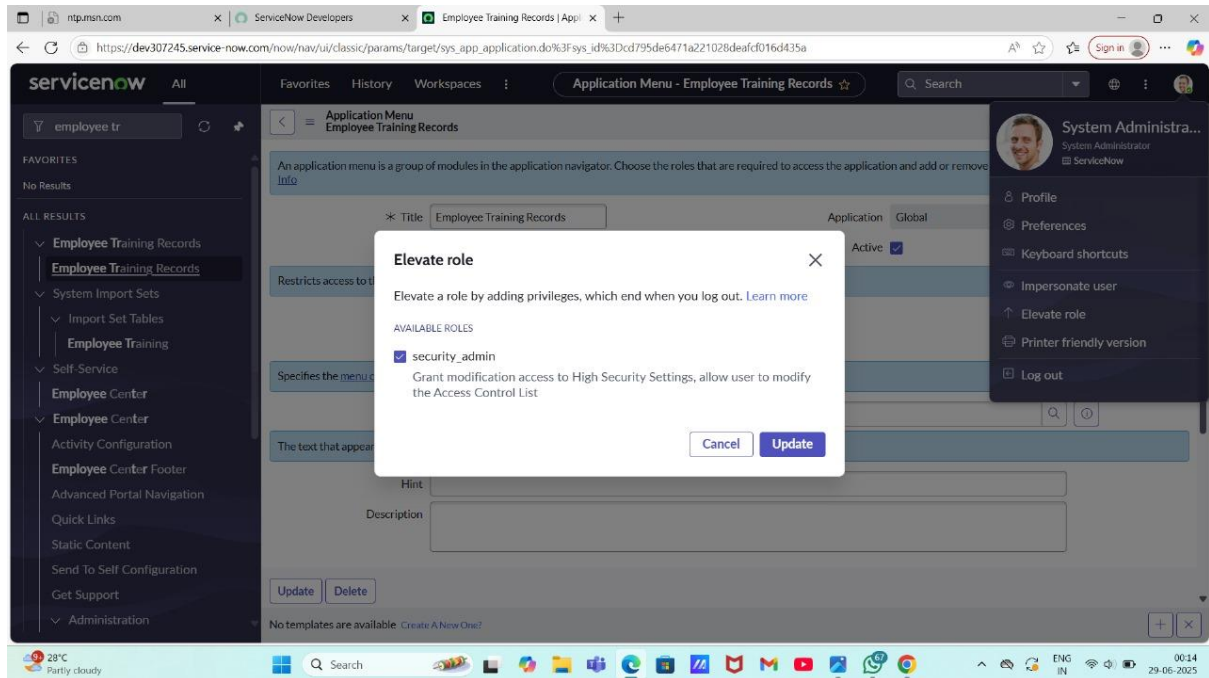
Created a new role HR Manager

The screenshot shows the ServiceNow web interface for creating or editing an Application Menu. The left sidebar contains a navigation menu with categories like 'employee tr', 'Employee Training Records', 'System Import Sets', and 'Self-Service'. The main content area is titled 'Application Menu - Employee Training Records'. It displays the following details:

- Title:** Employee Training Records
- Application:** Global
- Active:** ☒
- Roles:** A table with one entry: 'u\_employee\_training\_records, user, Hr Manager'.
- Category:** Custom Applications
- Hint:** A text input field.
- Description:** A text input field.

The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 00:13 on 29-06-2025.

## Elevate role:





ServiceNow Developers | u\_employee\_training\_records | Access Control - u\_employee\_training\_records

Filter

Self-Service

- Business Applications
- Dashboards
- Service Catalog
- Employee Center
- Knowledge
- Visual Task Boards
- Incidents
- Watched Incidents
- My Requests
- Requested Items
- Watched Requested Items
- My Connected Apps
- My Profile
- My Tagged Documents
- My Tags
- My Knowledge Articles
- Take Survey

Access Control - u\_employee\_training\_records

\* Type: record

\* Operation: write

Decision Type: Allow If

Application: Global

Active: ☒

Advanced: ☐

Admin overrides: ☒

Protection policy: -- None --

\* Name: Employee Training Records [u\_employee\_training\_records]

Description: Allow write for records in u\_employee\_training\_records, for user with Hr Manager role.

Applies To: No. of records matching the condition: 4

Add Filter Condition Add OR Clause

-- choose field -- -- oper -- -- value --

Conditions

Access Control Rules have two decision types, and these types will behave differently depending on conditions.

1. Allow Access: Allows access to a resource if all conditions are met. Additional ACLs may grant access to records where this ACL has not granted access.
2. Deny Access: Denies access to a resource unless all conditions are met. Additional ACLs may not grant access to records where this ACL has denied access.

[More Info](#)

No templates are available. [Create A New One?](#)

ServiceNow Developers | u\_employee\_training\_records | Access Control - u\_employee\_training\_records

Filter

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Access Control - u\_employee\_training\_records

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[More Info](#)

Requires role: 1 to 1 of 1

Role

- X Hr Manager
- + Insert a new row...

Security Attribute Condition

Local or Existing: ☐ Existing ☒ Local

Condition: All of these conditions must be met

-- choose field --

OR AND

New Criteria

Data Condition

Condition: No. of records matching the condition: 4

No templates are available. [Create A New One?](#)

## Results:

After importing and securing data:

- Data is structured in tables like `sys_user`, `cmn_department`.
- Using dot-walking, you can easily reference related data fields.
- ACLs ensure that only authorized users can see or edit sensitive data.
- Roles control what users can do, from viewing reports to importing data.

You can verify successful import by:

- Viewing records in the target table.
- Creating reports to visualize user and department info.
- Checking logs for transform errors.



servicenow All Favorites History Employee Training Rec... ☆

Employee Training Records  
New record

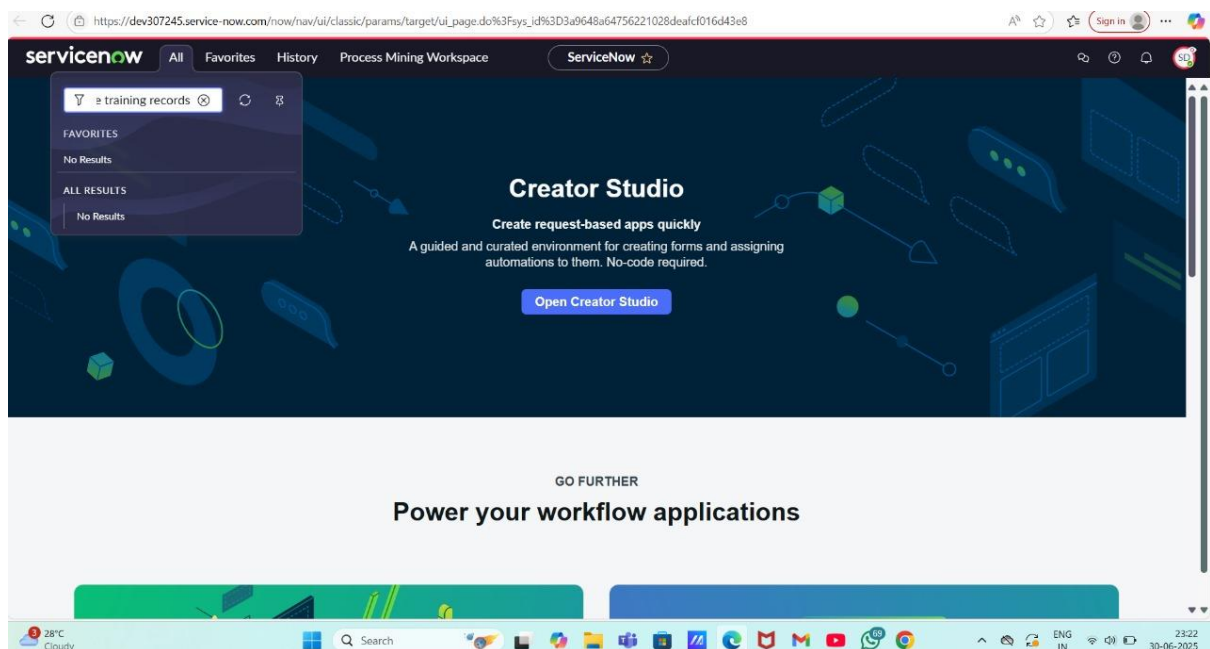
Training Name

Completion Date

Department

Status -- None --

Submit



## Conclusion:

Importing and securing data in ServiceNow ensures **data integrity, accessibility, and security**. The process involves:

- Structuring data in tables.
- Using **Import Sets** and **Transform Maps** to bring in external data.
- Leveraging **dot-walking** to navigate related records easily.
- Applying **ACLs** and **roles** to safeguard data access.

Proper data handling is critical for efficient ServiceNow operations and ensures compliance with organizational security standards.