

Microsoft Dynamics

Install Guide

Note: Before installing this Power App, contact TSANet to obtain credentials and URL for the Beta and Production environments

# Installation

## Installation from the AppSource

1. Open the link <https://appsource.microsoft.com/en-us/product/dynamics-365/tsanet-org.tsanetd365>
2. Push the Contact button

Obsah obrázku text, Písmo, snímek obrazovky, řada/pruh

Obsah generovaný pomocí AI může být nesprávný.

1. Confirm all the information.

## Manual Installation of the Package

1. Open the git hub <https://github.com/tsanetgit/MS_Power_App> and download the latest managed solution.

Obsah obrázku text, snímek obrazovky, Písmo

Popis byl vytvořen automaticky

1. Open <https://make.powerapps.com> in your Microsoft tenant.
2. Select your environment.

Obsah obrázku text, snímek obrazovky, Písmo, číslo

Popis byl vytvořen automaticky

1. Click on Import Solution

Obsah obrázku text, snímek obrazovky, Písmo

Popis byl vytvořen automaticky

1. Select downloaded managed solution.
2. Confirm by the Next button.

Obsah obrázku text, snímek obrazovky, Písmo, Obdélník

Popis byl vytvořen automaticky

1. Create Connections and confirm by the Next button.

Obsah obrázku text, snímek obrazovky, řada/pruh, diagram

Popis byl vytvořen automaticky

1. Enter your credentials and URL and then click on Import

Note: Contact TSANet for Credentials and URL

Obsah obrázku text, snímek obrazovky, číslo, Písmo

Popis byl vytvořen automaticky

1. The package is now being installed.

# Configuration with TSANet Credentials

The packages uses Basic Authentication to communicate with TSANet Connect. An API user is set in environment’s variables during the package installation. You can change credentials in <https://make.powerapps.com>

Obsah obrázku text, snímek obrazovky, číslo, Písmo

Popis byl vytvořen automaticky

## Environments

TSAnet has the following environments.

* Developer: Only used by developers who are making changes to the package
* Beta: Used by Members to test before moving to production
* Prod: Used by Members in Production

Contact TSANet for credentials and URL to the correct environment.

# Use TSANET in your solution

## Add components to application.

1. Open <https://make.powerapps.com> in your Microsoft tenant.
2. Select your environment.

Obsah obrázku text, snímek obrazovky, Písmo, číslo

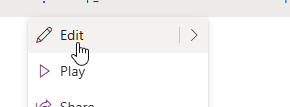
Popis byl vytvořen automaticky

1. Open existing unmanaged solution or create the new
2. Select Apps in the menu and open your application

Obsah obrázku text, snímek obrazovky, Písmo, řada/pruh

Popis byl vytvořen automaticky

1. Click on edit

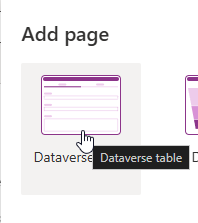


1. Click on New

Obsah obrázku text, Písmo, řada/pruh, Obdélník

Popis byl vytvořen automaticky

1. Select Dataverse table



1. Select TSANET tables

Obsah obrázku text, snímek obrazovky, číslo, Písmo

Popis byl vytvořen automaticky

1. Click on Add

## Setup TSANET table relationship

You must create relationships between tables to use TSANET within your existing solution.

1. Open <https://make.powerapps.com> in your Microsoft tenant.
2. Select your environment.

Obsah obrázku text, snímek obrazovky, Písmo, číslo

Popis byl vytvořen automaticky

1. Open existing unmanaged solution or create the new
2. Open Tables -> TSANET Case

Obsah obrázku text, snímek obrazovky, Písmo, bílé

Popis byl vytvořen automaticky

1. Create new column “Your table” with details below:

Obsah obrázku text, snímek obrazovky, dokument, číslo

Popis byl vytvořen automaticky

## Add TSANET Case subgrid to the form

Once you have created relationship, you can add the subgrid to the form.

1. Open <https://make.powerapps.com> in your Microsoft tenant.
2. Select your environment.

Obsah obrázku text, snímek obrazovky, Písmo, číslo

Popis byl vytvořen automaticky

1. Open existing unmanaged solution or create the new.
2. Open Tables -> “Your custom table”
3. Open the main form
4. Select Components -> Grid -> Subgrid
5. Check “Show related records”
6. Select table “TSANet Cases” and confirm by the button “Done”

Obsah obrázku text, snímek obrazovky, číslo, Písmo

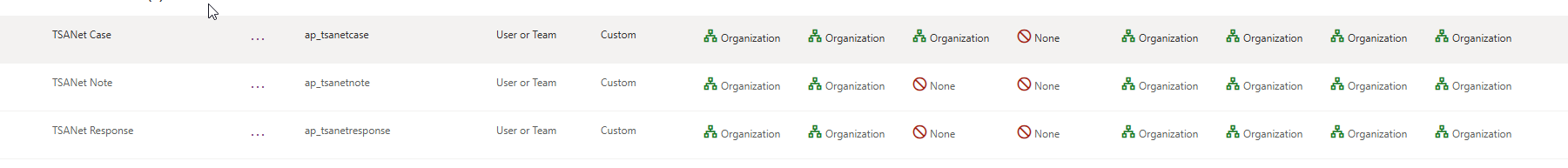
Popis byl vytvořen automaticky

## Assign Permissions

Users must have assigned “TSANET User” role, or you can modify your role with the following permissions.

Permissions:

* TSANET Case
* TSANET Note
* TSANET Response



You can follow these instructions to assign the role.

1. Open <https://admin.powerplatform.microsoft.com/>
2. Select your environment
3. Click on settings

Obsah obrázku text, Písmo, řada/pruh, snímek obrazovky

Popis byl vytvořen automaticky

1. Click on Users + permissions -> Users
2. Select the user
3. Click on Manage security roles

Obsah obrázku text, Písmo, snímek obrazovky, bílé

Popis byl vytvořen automaticky

1. Select the “TSANET User” role and click on save

# Package Details and Configuration Options

## Data model



### TSANet Case

A collaboration case within the TSANet framework that serves as the primary record for tracking collaboration between member organizations during a support issue.

| Logical Name | Display Name | Attribute Type | Description | Additional data |
| --- | --- | --- | --- | --- |
| ap\_companycode | Company Code | Integer | Company Code | Minimum value: 0 Maximum value: 2147483647 |
| ap\_companyname | Company Name | String | Company Name | Format: Text Max length: 100 |
| ap\_direction | Direction | Picklist |  | Options: 0: Inbound 1: Outbound Default: 1 |
| ap\_formjson | Form JSON | Memo | The current form data from the TSANET. | Format: Text Max length: 200000 |
| ap\_name | ID | String | TSANET Unique identifier | Format: Text Max length: 100 |
| ap\_sentjson | Sent JSON | Memo | Sent JSON data, only for outbound cases for logging purposes. | Format: Text Max length: 200000 |
| ap\_submittercasenumber | Submitter Case Number | String |  | Format: Text Max length: 100 |
| ap\_tsanetcaseid | TSA Net Case | Uniqueidentifier | Unique identifier for entity instances |  |
| createdby | Created By | Lookup | Unique identifier of the user who created the record. | Targets: systemuser |
| createdon | Created On | DateTime | Date and time when the record was created. | Format: DateAndTime |
| createdonbehalfby | Created By (Delegate) | Lookup | Unique identifier of the delegate user who created the record. | Targets: systemuser |
| importsequencenumber | Import Sequence Number | Integer | Sequence number of the import that created this record. | Minimum value: -2147483648 Maximum value: 2147483647 |
| modifiedby | Modified By | Lookup | Unique identifier of the user who modified the record. | Targets: systemuser |
| modifiedon | Modified On | DateTime | Date and time when the record was modified. | Format: DateAndTime |
| modifiedonbehalfby | Modified By (Delegate) | Lookup | Unique identifier of the delegate user who modified the record. | Targets: systemuser |
| overriddencreatedon | Record Created On | DateTime | Date and time that the record was migrated. | Format: DateOnly |
| ownerid | Owner | Owner | Owner Id | Targets: systemuser team |
| owningbusinessunit | Owning Business Unit | Lookup | Unique identifier for the business unit that owns the record | Targets: businessunit |
| owningteam | Owning Team | Lookup | Unique identifier for the team that owns the record. | Targets: team |
| owninguser | Owning User | Lookup | Unique identifier for the user that owns the record. | Targets: systemuser |
| statecode | Status | State | Status of the TSA Net Case | States: 0: Active 1: Inactive |
| statuscode | Status Reason | Status | Reason for the status of the TSA Net Case | States: 1: Open 2: Closed 120950001: Information 120950002: Rejected 120950003: Accepted |
| timezoneruleversionnumber | Time Zone Rule Version Number | Integer | For internal use only. | Minimum value: -1 Maximum value: 2147483647 |
| utcconversiontimezonecode | UTC Conversion Time Zone Code | Integer | Time zone code that was in use when the record was created. | Minimum value: -1 Maximum value: 2147483647 |
| versionnumber | Version Number | BigInt | Version Number | Minimum value: -9223372036854775808 Maximum value: 9223372036854775807 |

### TSANet Note

The object is used for logging and managing communications or updates related to a TSANet Case. It allows members to document important information about the case in real-time.

| Logical Name | Display Name | Attribute Type | Description | Additional data |
| --- | --- | --- | --- | --- |
| ap\_creatoremail | Creator (Email) | String |  | Format: Text Max length: 100 |
| ap\_creatorname | Creator (Name) | String |  | Format: Text Max length: 100 |
| ap\_description | Description | Memo | Note description | Format: Text Max length: 2000 |
| ap\_name | Summary | String | Not subject | Format: Text Max length: 100 |
| ap\_priority | (DEPRECATED) Priority | Picklist |  | Options: 3: Low 2: Medium 1: High Default: 3 |
| ap\_tsanetcaseid | TSA Net Case | Lookup |  | Targets: ap\_tsanetcase |
| ap\_tsanetnoteid | TSA Net Note | Uniqueidentifier | Unique identifier for entity instances |  |
| ap\_tsanotecode | Note ID | String | TSANET unique identifier | Format: Text Max length: 100 |
| createdby | Created By | Lookup | Unique identifier of the user who created the record. | Targets: systemuser |
| createdon | Created On | DateTime | Date and time when the record was created. | Format: DateAndTime |
| createdonbehalfby | Created By (Delegate) | Lookup | Unique identifier of the delegate user who created the record. | Targets: systemuser |
| importsequencenumber | Import Sequence Number | Integer | Sequence number of the import that created this record. | Minimum value: -2147483648 Maximum value: 2147483647 |
| modifiedby | Modified By | Lookup | Unique identifier of the user who modified the record. | Targets: systemuser |
| modifiedon | Modified On | DateTime | Date and time when the record was modified. | Format: DateAndTime |
| modifiedonbehalfby | Modified By (Delegate) | Lookup | Unique identifier of the delegate user who modified the record. | Targets: systemuser |
| overriddencreatedon | Record Created On | DateTime | Date and time that the record was migrated. | Format: DateOnly |
| ownerid | Owner | Owner | Owner Id | Targets: systemuser team |
| owningbusinessunit | Owning Business Unit | Lookup | Unique identifier for the business unit that owns the record | Targets: businessunit |
| owningteam | Owning Team | Lookup | Unique identifier for the team that owns the record. | Targets: team |
| owninguser | Owning User | Lookup | Unique identifier for the user that owns the record. | Targets: systemuser |
| statecode | Status | State | Status of the TSA Net Note | States: 0: Active 1: Inactive |
| statuscode | Status Reason | Status | Reason for the status of the TSA Net Note | States: 1: Active 2: Inactive |
| timezoneruleversionnumber | Time Zone Rule Version Number | Integer | For internal use only. | Minimum value: -1 Maximum value: 2147483647 |
| utcconversiontimezonecode | UTC Conversion Time Zone Code | Integer | Time zone code that was in use when the record was created. | Minimum value: -1 Maximum value: 2147483647 |
| versionnumber | Version Number | BigInt | Version Number | Minimum value: -9223372036854775808 Maximum value: 9223372036854775807 |

### TSANet Response

The object captures formal replies or actions taken with an inbound TSANet Case.

| Logical Name | Display Name | Attribute Type | Description | Additional data |
| --- | --- | --- | --- | --- |
| ap\_description | Description | Memo | Description or next steps | Format: Text Max length: 2000 |
| ap\_engineeremail | Engineer Email | String |  | Format: Email Max length: 300 |
| ap\_engineername | Engineer Name | String |  | Format: Text Max length: 300 |
| ap\_engineerphone | Engineer Phone | String |  | Format: Text Max length: 300 |
| ap\_internalcasenumber | Internal Case Number | String | Internal Case Number is used for incoming case approvals. | Format: Text Max length: 100 |
| ap\_name | Name | String |  | Format: Text Max length: 100 |
| ap\_tsanetcaseid | TSA Net Case | Lookup |  | Targets: ap\_tsanetcase |
| ap\_tsanetresponseid | TSA Net Response | Uniqueidentifier | Unique identifier for entity instances |  |
| ap\_tsaresponsecode | Response ID | String | TSANET unique identifier | Format: Text Max length: 100 |
| ap\_type | Type | Picklist | Response type | Options: 1: Approval 0: Reject 2: Request Information 3: Information Response 4: Close 5: Approval Update Default: -1 |
| createdby | Created By | Lookup | Unique identifier of the user who created the record. | Targets: systemuser |
| createdon | Created On | DateTime | Date and time when the record was created. | Format: DateAndTime |
| createdonbehalfby | Created By (Delegate) | Lookup | Unique identifier of the delegate user who created the record. | Targets: systemuser |
| importsequencenumber | Import Sequence Number | Integer | Sequence number of the import that created this record. | Minimum value: -2147483648 Maximum value: 2147483647 |
| modifiedby | Modified By | Lookup | Unique identifier of the user who modified the record. | Targets: systemuser |
| modifiedon | Modified On | DateTime | Date and time when the record was modified. | Format: DateAndTime |
| modifiedonbehalfby | Modified By (Delegate) | Lookup | Unique identifier of the delegate user who modified the record. | Targets: systemuser |
| overriddencreatedon | Record Created On | DateTime | Date and time that the record was migrated. | Format: DateOnly |
| ownerid | Owner | Owner | Owner Id | Targets: systemuser team |
| owningbusinessunit | Owning Business Unit | Lookup | Unique identifier for the business unit that owns the record | Targets: businessunit |
| owningteam | Owning Team | Lookup | Unique identifier for the team that owns the record. | Targets: team |
| owninguser | Owning User | Lookup | Unique identifier for the user that owns the record. | Targets: systemuser |
| statecode | Status | State | Status of the TSA Net Response | States: 0: Active 1: Inactive |
| statuscode | Status Reason | Status | Reason for the status of the TSA Net Response | States: 1: Active 2: Inactive |
| timezoneruleversionnumber | Time Zone Rule Version Number | Integer | For internal use only. | Minimum value: -1 Maximum value: 2147483647 |
| utcconversiontimezonecode | UTC Conversion Time Zone Code | Integer | Time zone code that was in use when the record was created. | Minimum value: -1 Maximum value: 2147483647 |
| versionnumber | Version Number | BigInt | Version Number | Minimum value: -9223372036854775808 Maximum value: 9223372036854775807 |

## Flows

The TSANet managed package includes flows designed for flexible automation. These flows enable actions such as updating TSANet records, creating new TSANet Cases, accepting or rejecting requests, requesting more information, or adding new notes. Additionally, all these actions are available in flows under the TSANet section, allowing you to customize the logic to meet your needs.

Obsah obrázku text, Písmo, číslo, snímek obrazovky

Popis byl vytvořen automaticky

**Flows**

* Child Flow – Login: The flow authorizes to the API and returns the token.
* Scheduled – Create/Update Cases/Responses/Notes: The scheduled flow that retrieves the current case status or creates new inbound cases.

## Actions

The TSANet managed package includes various actions designed to enhance and streamline workflows in Dynamics/Power Apps. These actions enable seamless integration and automation, such as retrieving data, creating cases, and updating existing records. You can incorporate these actions into custom flows to tailor functionality to specific business requirements.

**Available Actions**

* **GetCase**: Fetches case details based on the specified criteria.
* **GetCompanyByName**: Retrieves companies using its name as the search parameter.
* **GetFormByCompany**: Retrieves a form linked to a specific company for further processing.
* **PostCase**: Creates a new case with all required and optional fields populated.
* **PostCaseApproval**: Initiates the approval process for a case, ensuring compliance and proper documentation.
* **PostCaseApprovalUpdate**: Updates the status of an approval, reflecting changes to the case approval process.
* **PostCaseNote**: Adds notes to an existing case, enabling better tracking and communication.
* **GetCases:** Fetches cases details based on the specified criteria.
* **GetFormByDepartment:** Retrieves a form linked to a specific department for further processing.
* **GetMe:** Gets the information about the user’s company and account.
* **GetAttachmentConfig:** Gets the attachment configuration for the selected partner.

## Plugins

The TSANet managed package includes a set of plugins that handle various customizations and business logic within Power Apps. These plugins can be triggered by specific user actions, API calls, or system events. Together, they provide flexibility and automation to meet diverse business requirements.

**Available Plugins**

* **CommonIntegrationPlugin**: A generic integration plugin used for managing common tasks and actions, ensuring seamless data flow between systems.
* **GetCasePlugin**: Retrieves case information based on predefined parameters. Typically triggered by the GetCase action.
* **GetCompanyPlugin**: Fetches company details by name or identifier. Triggered by the GetCompanyByName action.
* **GetFormByCompanyPlugin**: Returns forms associated with a specific company. This plugin is linked to the GetFormByCompany action.
* **PostCasePlugin**: Handles the creation of new cases. It is triggered when the PostCase action is executed, ensuring that all data is validated and recorded accurately.
* **PostCaseApprovalPlugin**: Manages the approval process for cases. This plugin is invoked when the PostCaseApproval action is performed.
* **PostCaseApprovalUpdatePlugin**: Updates case approval statuses and is tied to the PostCaseApprovalUpdate action for real-time approval tracking.
* **PostCaseNotePlugin**: Adds notes to an existing case. Triggered by the PostCaseNote action, it facilitates better communication and documentation.
* **PostCaseResponseOnCreatePlugin**: Automatically generates a response when a case is created. Triggered by system events to streamline case follow-ups.
* **GetMePlugin:** Retrieves the information about the company and the user.
* **GetAttachmentConfigPlugin:** Retrieves the information about the attachment confiugration of the partner.

**Key Features**

* **Action-Triggered Plugins**: These plugins are invoked by specific actions performed in Dynamics or Power Apps, providing precise control over workflow customization.
* **System-Triggered Plugins**: Plugins like **PostCaseResponseOnCreatePlugin** are automatically triggered by internal events, ensuring seamless operations without manual intervention.
* **Customizable Logic**: Each plugin contains specific business logic that can be tailored to meet unique organizational needs, enabling a fully adaptable Dynamics/Power Apps experience.

Obsah obrázku text, snímek obrazovky, Písmo, číslo

Popis byl vytvořen automaticky

## JavaScripts

The TSANet solution includes a set of JavaScript files that extend the functionality of Power Apps forms and actions. These scripts handle front-end customizations, UI enhancements, and client-side integrations to improve the user experience and ensure seamless interactions.

**JavaScript Files Overview**

* **CaseResponse.js**: Manages client-side logic for case responses. This script ensures that responses are appropriately captured and displayed on the form.
* **CaseTSA.js**: Contains specific logic and actions related to TSANet cases. It drives custom behaviors for case management, ensuring compliance with TSANet workflows. This script uses html webresource and generates the form for displaying or creating cases.
* **CaseTSAButtons.js**: Handles button actions on case forms.
* **CommonIntegration.js**: Manages frontend to backend integration for connecting external systems with Dynamics. All scripts uses backend API that handling the communication with the TSANET.
* **CommonScripts.js**: A library of reusable JavaScript functions and utilities used across various forms and modules. This script reduces redundancy and ensures consistent behavior.
* **CaseMappingDynCS**: Contains specific logic for the Case mapping form.
* **CaseResponseDynCS:** Custom configurable logic for Case Response Form that can be use with the Dynamics application.

Obsah obrázku text, Písmo, řada/pruh, číslo

Popis byl vytvořen automaticky

## HTML Webresource

The **CaseCustomForm.html** file serves as the core HTML template for rendering the TSANET case UX in Power Apps. It is designed to provide a user-friendly and responsive form for creating, updating, and managing cases. The file incorporates custom JavaScript, CSS, and Power Apps form elements to ensure seamless functionality and a modern user experience.

**Key Features**

* **Custom Layout**: Provides a structured and intuitive layout for case-related fields, ensuring users can easily input and view case details.
* **Integration with JavaScript**: Works in conjunction with scripts like **CaseTSA.js** and **CaseTSAButtons.js** to enable dynamic actions and form behavior.
* **Dynamic Elements**: Includes buttons, dropdowns, and interactive components for improved usability.
* **Styling**: Utilizes custom CSS (or SCSS if extended) to align the form with organizational branding and ensure responsive design.

## Partner’s Configuration

### Automatically create TSA Note by email

This function enables the automatic creation of a TSA Note whenever an email is received or sent within the Dynamics Case. The system monitors email activities linked to the case and triggers the creation of a new TSA Note, capturing the content and metadata of the email. This ensures that all email communications are logged and associated with the relevant TSANet Case for better traceability and collaboration.

You can enable or disable the functionality using environment variable “Auto Create TSANote by Email”.

Obsah obrázku text, snímek obrazovky, číslo, Písmo

Obsah generovaný pomocí AI může být nesprávný.

### Automatically create TSA Note by note

This function allows for the automatic generation of a TSA Note when a new note is manually added to a Dynamics Case. Upon detecting a new note entry, the system creates a corresponding TSA Note record, ensuring that all updates and annotations are consistently reflected in the TSANet Case. This automation helps maintain comprehensive documentation and improves the efficiency of case management.

You can enable or disable the functionality using environment variable “Auto Create TSANote by Note”.

Obsah obrázku text, snímek obrazovky, Písmo, číslo

Obsah generovaný pomocí AI může být nesprávný.

### Automatically create Case

This feature allows members to automatically create a Dynamics Case when a TSA Case is accepted, streamlining case management and reducing manual effort. It uses Case Mappings to map data from the TSANET Case Response table to the Dynamics Case entity.

The process supports custom fields. Administrators can add new fields to the TSANET Case Response table. These fields can be prefilled from TSANET Case data using the Case Mappings configuration.

The process allows to use the data from TSACASE without custom coding. Administrators can map any field from the TSANET Case Response table to the Dynamics Case creation logic. They can also define which fields are mandatory, ensuring all required data is captured before case creation.

#### Configuration

You can find configuration example here



1. **Navigate to Case Mappings Table**
   * Open **Dynamics**
   * Go to **Menu** and search for **Case Mappings**.

Obsah obrázku text, Písmo, snímek obrazovky, bílé

Obsah generovaný pomocí AI může být nesprávný.

1. **Create a New Mapping**
   * Click **+ New Record** to add a new mapping.

Obsah obrázku text, snímek obrazovky, Písmo, číslo

Obsah generovaný pomocí AI může být nesprávný.

1. **Fill in the Required Fields**
   * **Name**: Enter a descriptive name (e.g., *Case – Customer Field*).
   * **Mapping Type**: Select the type (*Response Form or Case Create*).
     1. **Response Form** – It defines fields prefilled from the TSANET Case into the TSANET Response form.
     2. **Case Create** – It defines fields prefilled when the new Case is created by the response form information.
   * **Source (Json Path or Attribute)**: Specify the source field or JSON path from TSANET Case (e.g., customFields.Customer Case #).
     1. **JSON Path** – Path is used for Response Form prefill. Path is from the TSANET JSON case be find in the Connect API documentation.
     2. **Attribute** – Field is used for Case creation and the field must be from the TSANET Response table.
   * **Target Attribute**:
     1. **Response Form** - Enter the Dynamics attribute in TSANET Response (ap\_tsanetresponse) where the value should be mapped (e.g., ap\_incidentid).
     2. **Case Create** - Enter the Dynamics attribute in Case (incident) where the value should be mapped (e.g., title).
2. **Configure Attribute Type and Lookup Details**
   * **Attribute Type**: Choose the type (e.g., *Lookup*).
   * In Case of Response form and lookup, you must define following parameters so the system knows how to get the lookup value:
     1. **Lookup Table Name**: If using a lookup, specify the related table (e.g., incident).
     2. **Lookup Search Attribute**: Provide the attribute used for searching in the lookup table (e.g., ticketnumber).
3. Select whether **Field is required for the Case create** – Yes/No
4. **Save and Verify**
   * Click **Save & Close**.
   * Confirm that the new mapping appears in the list and verify its details.

Obsah obrázku text, snímek obrazovky, číslo, Písmo

Obsah generovaný pomocí AI může být nesprávný.

#### Usage

System prefills the information by Case Mapping type Response form when the user push the button Accept.

Obsah obrázku text, snímek obrazovky, řada/pruh, Písmo

Obsah generovaný pomocí AI může být nesprávný.

System opens the Response form with prefilled data.

Obsah obrázku text, snímek obrazovky, Písmo, design

Obsah generovaný pomocí AI může být nesprávný.

System allows user to select the “Create Case” only if there is no Case selected.

Obsah obrázku text, Písmo, snímek obrazovky, logo

Obsah generovaný pomocí AI může být nesprávný.

When the user selects yes, the system shows the fields from the section “createcasesection” of the quick create form.

Obsah obrázku text, snímek obrazovky, Písmo, bílé

Obsah generovaný pomocí AI může být nesprávný.

System uses the information by Case Mapping type Case Create when the user saves the Case response to create the Case (incident) and relate it to the TSANET Case.