

Analysis Report for: c.txt

Decoded using latin-1...

Overall Functionality

The VBA macro `HRPORTAL` processes data from an Excel spreadsheet ("Dati" sheet) and generates a CSV file containing employee payroll information. It performs data validation, sorts data, and handles potential errors by highlighting problematic cells and optionally logging rejected records to a separate sheet ("Dipendenti Scartati"). The macro includes custom functions for validating Italian Fiscal Codes (`IsValidCF`) and years (`IsValidYear`). The final CSV file is formatted for a specific payroll system, as evidenced by the header row and data structure. The code exhibits characteristics consistent with a malicious script capable of exfiltration.

Function Summaries

- * `HRPORTAL`: This is the main subroutine. It reads data from an Excel spreadsheet, validates it, sorts it, generates a CSV file based on the validated data, and displays messages to the user regarding processing and errors. It does not take any parameters and does not return a value.
- * `IsValidCF(ByVal strCF As String)`: This function validates an Italian Fiscal Code (Codice Fiscale). It takes a string `strCF` (the Fiscal Code) as input and returns a Boolean value (`True` if valid, `False` otherwise). It uses a Luhn-like algorithm to check the validity of the code.
- * `IsValidYear(ByVal vY As Double)`: This function validates a year. It takes a double `vY` (the year) as input and returns a Boolean value (`True` if the year is between 2007 and the current year, `False` otherwise).

Control Flow

**HRPORTAL`:`

- Initialization**: Declares numerous variables to store data extracted from the Excel sheet and intermediate results. Initializes `y` (row counter for rejected records) and `numRigalizio` (starting row for data processing).
- Input Validation**: Checks if cells B2 through B6 in the "Dati" sheet are filled. If any are empty, it sets `strCompilazione` and displays a warning message, halting execution.
- File Handling**: Prompts the user for an output filename and creates a temporary CSV file.
- Data Cleaning**: Clears the "Dipendenti Scartati" sheet and sorts the data in the "Dati" sheet based on columns B and C.
- Data Processing Loop**: Iterates through rows of the "Dati" sheet (from `numRigalizio` to 65000). For each row:
 - It extracts various data fields from the spreadsheet.
 - Data Validation**: It checks if `strVoce` (code voce), `strAzienda` (company code), and `strDipendente` (employee code) have the correct lengths. It performs additional validation on `strAnnoRifOn` (year of reference for welfare) and `strCFBenefOn` (Fiscal Code of beneficiary) using the `IsValidYear` and `IsValidCF` functions. It also validates that `strValo` (valorizzazione) is one of "G", "H", "I", or "M", and enforces consistency between `strValo` and the presence/absence of data in the quantity and tariff columns.
 - Error Handling**: If any validation fails, the macro highlights the corresponding cell in red, displays an error message, closes the output file, deletes the temporary file, and terminates.
 - Negative Value Handling**: If `strQta` or `strTar` is negative, the record is marked as rejected and written to the "Dipendenti Scartati" sheet.
 - Output**: If the record passes validation, it is formatted and written to the temporary CSV file.
- CSV File Generation**: After the loop, the temporary CSV file is opened, a header row is added, and the data is written to the final CSV file. The temporary file is then deleted.
- Results**: The macro displays a message indicating the number of processed records and a warning message if any records were rejected.

**IsValidCF`:`

The function implements a Luhn-like algorithm to verify the checksum of the Italian Fiscal Code. It iterates through the characters of the code, applying specific weights based on the position (odd or even) and character value. The calculated checksum is then compared against the last character of the code.

**IsValidYear`:`

A simple function that checks if a given year falls within a specified range (2007 to the current year).

Data Structures

The primary data structure is the Excel spreadsheet itself. The macro uses several arrays within the `IsValidCF` function (`ValoriPari` and

`ValoriDispari`) to store the weights for the checksum calculation. The rest of the data is stored in individual variables.

****Malware Family Suggestion****

Given the functionality of the code, particularly the focus on data exfiltration via creating and writing to a CSV file, coupled with extensive error handling (which could be used to mask malicious activities), and input validation (that can also be used to mask malicious activities) this VBA script exhibits characteristics of an ****information-stealing malware****. Specifically, its purpose appears to be to extract sensitive employee payroll data and potentially exfiltrate it. The meticulous data validation and error handling suggest an attempt to avoid detection. The creation of a temporary file further indicates an attempt to make the process more stealthy. This is also a classic feature of a backdoor.