

Program obsługi drukarek fiskalnych

Raport Okresowy

Instrukcja użytkownika

wersja 1.0

Warszawa, 29 sierpnia 2009

Wprowadzenie

Program obsługi drukarek fiskalnych „Raport okresowy” ma za zadanie umożliwić odczyt pamięci fiskalnej oraz wykonywanie raportu okresowego z jej zawartości. Odczyt pamięci fiskalnej wykonywany jest za pośrednictwem standardowego interfejsu komunikacyjnego drukarki, a pobrane dane są zapisywane na dysku lokalnym komputera. Umożliwia to także archiwizację pamięci fiskalnej na dowolnym nośniku danych dostępnym w systemie operacyjnym komputera na którym wykonano odczyt – pamięci wymienne, nośniki optyczne (operacje archiwizacji nie wchodzi w skład aplikacji raportu okresowego – w tym celu należy wykorzystać odpowiednie mechanizmy systemu operacyjnego) oraz wykonywanie raportów okresowych w późniejszym terminie na podstawie zapisanych danych.

Aplikacja raportów okresowych została zaprojektowana w sposób minimalizujący ilość wykonywanych przez użytkownika czynności jednocześnie dostarczając następujących funkcjonalności:

- Odczyt pamięci fiskalnej z urządzenia
- Zapis odczytanych danych w plikach archiwum
- Odczyt pamięci fiskalnej z plików archiwum
- Wykonywanie raportu okresowego według numerów raportu
- Wykonywanie raportu okresowego według dat
- Przegląd wykonanego raportu na ekranie z możliwością wyszukiwania ciągów znaków
- Zapis wykonanego raportu okresowego w postaci pliku tekstowego lub pliku PDF
- Wydruk raportu okresowego na dowolnej drukarce zainstalowanej w systemie

Wymagania systemowe

Aplikacja posiada minimalne wymagania systemowe, przedstawione poniżej:

- System operacyjny Windows, wersja XP z SP2 lub nowszy
- Minimum 512MB pamięci RAM
- Odpowiedni interfejs komunikacyjny, w zależności od odczytywanej drukarki (np. port RS232 tzw. COM dla drukarek szeregowych, może być w postaci konwertera RS232-USB – aplikacja samoczynnie wykrywa dostępne porty)

Sposób użytkowania

Program raportu okresowego został zaprojektowany tak, aby maksymalnie uprościć procedurę wykonywania tego raportu. Proces składa się z trzech kroków (odczyt danych, wykonanie raportu, zapis/przegląd/wydruk raportu), które należy wykonać kolejno. Można także cofnąć się w celu na przykład wykonania ponownego raportu według innego kryterium bez konieczności ponownego odczytu danych. Widok głównego okna programu przedstawia rysunek 1. Kolejno ponumerowane zostały na nim sekcje odpowiedzialne za:

1. Konfigurację urządzenia i parametry komunikacji,
2. Krok pierwszy procedury raportu – odczyt danych z urządzenia/pliku,
3. Krok drugi procedury raportu – wykonanie raportu według kryterium,
4. Krok trzeci procedury raportu – podgląd/zapis i wydruk gotowego raportu.

Procedura wykonania raportu okresowego

Przed przystąpieniem do wykonania raportu okresowego należy w sekcji 1 na rysunku 1 wybrać odpowiedni rodzaj urządzenia fiskalnego, dla którego zostanie wykonany raport. W przypadku odczytu bezpośrednio z urządzenia należy także wybrać rodzaj interfejsu komunikacyjnego oraz parametry transmisji (w przypadku odczytu z pliku wystarczy jedynie wybrać rodzaj urządzenia).

Wybór niewłaściwego rodzaju urządzenia zostanie zasygnalizowany w trakcie odczytu, po jego zakończeniu lub w trakcie wykonywania raportu okresowego, w zależności od rodzaju niezgodności pomiędzy poszczególnymi urządzeniami.

Rysunek 1: Widok głównego okna programu

Krok 1

W pierwszym kroku procedury należy odczytać dane pamięci fiskalnej z urządzenia fiskalnego lub z pliku archiwum. W celu odczytu z urządzenia należy użyć klawisza **Odczytaj dane z urządzenia**. Po jego naciśnięciu rozpocznie się procedura odczytu pamięci fiskalnej z urządzenia. Procedura ta może trwać od kilku do kilkudziesięciu minut w zależności od wydajności i obciążenia komputera oraz wybranych parametrów transmisji. Zaleca się w miarę możliwości ustawienie w urządzeniu jak najwyższej prędkości transmisji.


W przypadku połączenia z wykorzystaniem protokołu szeregowego (RS232) po obu stronach (zarówno w komputerze jak i w drukarce) należy wybrać identyczne ustawienia transmisji w przeciwnym wypadku odczyt nie powiedzie się. Jednocześnie urządzenie posiadające wsparcie dla zdalnego logowania musi mieć ten tryb wyłączony na czas wykonywania odczytu.

Dostępne ustawienia i odpowiadające im ustawienia w drukarce są następujące:

- Szybkość transmisji – od 1200 do 115200 kbps
- Ilość bitów danych – 8 lub 7
- Sposób kontroli parzystości – O – nieparzyste, E – parzyste, N – brak
- Ilość bitów stop – 1 lub 2
- Sposób kontroli przepływu danych – N – brak, S – XON/XOFF (programowa), H – Sprzętowa RTS/CTS

Po prawidłowym odczytaniu danych użytkownik zostanie poinformowany o tym odpowiednim komunikatem oraz odblokowane zostaną operacje dostępne w kroku drugim. Automatycznie zostanie także wykonany zapis odczytanych informacji w plikach archiwum. Są to dwa pliki o nazwach zawierających numer unikatowy kasy oraz rozszerzeniach .fm i .hdr dla danych pamięci i nagłówka. Jeżeli pliki danych dla danego urządzenia już istnieją użytkownik zostanie zapytany o to, czy należy istniejące dane nadpisać.

Alternatywnym sposobem pobrania danych do programu jest wczytanie ich z pliku archiwum. W


tym celu należy użyć klawisza . Po jego użyciu należy wskazać plik modułu fiskalnego (.fm) do wczytania. Automatycznie wczytany zostanie także plik nagłówka (.hdr) o tym samym numerze unikatowym. W przypadku jego braku użytkownik zostanie o tym fakcie poinformowany stosownym komunikatem, a na wykonywanych raportach nagłówki będą puste.

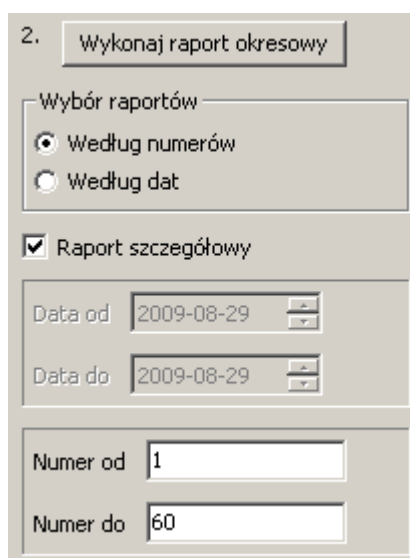
Krok 2

W następnym kroku na podstawie odczytanych danych można wykonać właściwy raport okresowy. W tym celu w sekcji oznaczonej numerem 3 na rysunku 1 należy wybrać odpowiednie parametry raportu - por. rysunek 2. W sekcji tej można wybrać następujące warianty:

- Raport według numerów – raport okresowy zostanie wykonany w podanym zakresie numerów raportów dobowych
- Raport według dat – raport zostanie wykonany w podanym zakresie dat.

W zależności od wybranego wariantu zostaną odblokowane odpowiednie pola parametrów.

Dodatkowo możliwe jest wybranie wariantu skróconego raportu okresowego (tylko podsumowanie) poprzez odznaczenie pola  Raport szczegółowy.



2. Wykonaj raport okresowy

Wybór raportów

☒ Według numerów
☐ Według dat

☒ Raport szczegółowy

Data od: 2009-08-29
Data do: 2009-08-29





Numer od: 1
Numer do: 60

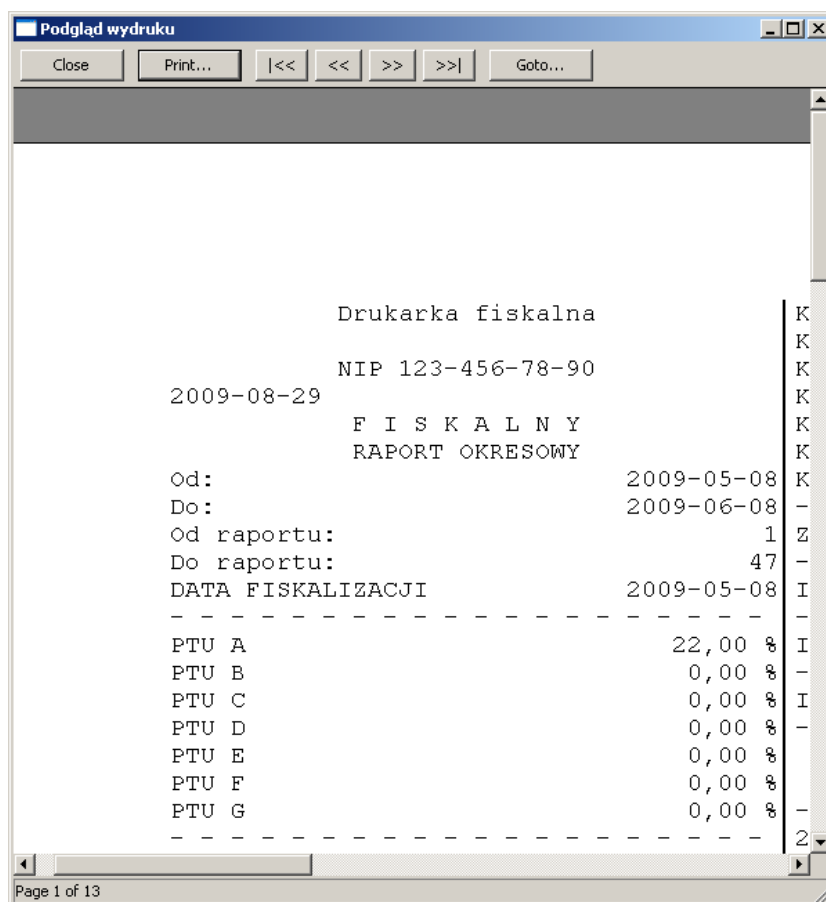
Rysunek 2: Krok 2 - parametry raportu

Wykonanie raportu okresowego zostanie zakomunikowane odpowiednim komunikatem, oraz zostanie odblokowana sekcja 4.

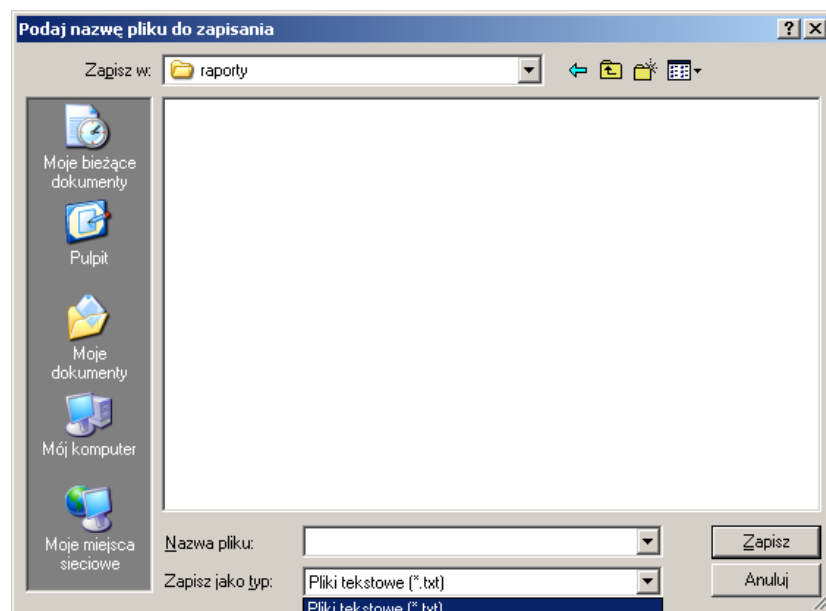
Krok 3

W trzecim kroku możliwe jest zapoznanie się z wykonanym raportem okresowym. Możliwe są następujące operacje:

- **Wydruk raportu na drukarce** – poprzez użycie klawisza  wywoływane jest okno podglądu wydruku (rysunek 3) w którym używając klawisza  możemy raport ten wydrukować na dowolnej zainstalowanej w systemie drukarce,
- **Zapis raportu** – poprzez użycie klawisza  wywołujemy standardowe okno wyboru nazwy pliku do zapisania (rysunek 4), w którym należy podać nazwę pliku do zapisania oraz wybrać format tego pliku (tekstowy czy PDF) korzystając z pola wyboru poniżej nazwy pliku,
- **Podgląd raportu** – poprzez użycie klawisza  wywołujemy okno podglądu raportu (rysunek 5), w którym możemy zapoznać się z treścią wygenerowanego raportu oraz wyszukiwać fragmenty tekstu.



Rysunek 3: Okno podglądu wydruku



Rysunek 4: Okno wyboru pliku do zapisu

Podgląd raportu

Drukarka fiskalna

NIP 123-456-78-90

2009-08-29

F I S K A L N Y

RAPORT OKRESOWY

Od: 2009-05-08

Do: 2009-06-08

Od raportu: 1

Do raportu: 47

DATA FISKALIZACJI 2009-05-08

PTU A 22,00 %

PTU B 0,00 %

PTU C 0,00 %

PTU D 0,00 %

PTU E 0,00 %

PTU F 0,00 %

PTU G 0,00 %

2009-05-08 1

SPRZEDAŻ OPODATK. PTU A 0,00

SPRZEDAŻ OPODATK. PTU B 0,00

SPRZEDAŻ OPODATK. PTU C 0,00

SPRZEDAŻ OPODATK. PTU D 0,00

SPRZEDAŻ OPODATK. PTU E 0,00

SPRZEDAŻ OPODATK. PTU F 0,00

SPRZEDAŻ OPODATK. PTU G 0,00

SPRZEDAŻ OPODATK. PTU AFV 0,00

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SPRZEDAŻ OPODATK. PTU CFV 0,00

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SPRZEDAŻ OPODATK. PTU EFV 0,00

SPRZEDAŻ OPODATK. PTU FFV 0,00

SPRZEDAŻ OPODATK. PTU GFV 0,00

KWOTA PTU A 0,00

KWOTA PTU AFV 0,00

ŁĄCZNA KWOTA PTU 0,00

Szukaj

Kierunek

☒ W dół

☐ W górę

Znajdź

Zamknij

Rysunek 5: Okno podglądu raportu

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C++ Portable Types Library (PTypes)

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Komponent: Serial library (DLL)

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Serial.cpp - Implementation of the CSerial class

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