



DPD Poland Shipping Module 2.0

Installation Server Version

Table of Contents

1. Version	3
2. Introduction	4
3. System Requirements	5
4. Logical Architecture	6
5. Environment Setup	7
6. Application Installation	8
7. Onboarding	11
8. Security Configuration	12
9. Printing Settings	13
10. Troubleshooting	14
11. Technical Support	15
12. Updates	16

1. Version

Version	Changes	Author
15.11.2024	Document draft	Mateusz Kumanowski
13.12.2024	Updated to version 4.0.1	Mateusz Kumanowski
15.01.2025	Updated to version 4.2.0	Mateusz Kumanowski
03.03.2025	English version	Mateusz Kumanowski

2. Introduction

Application Description

The DPD Poland – Shipping Module application enables comprehensive management of the shipment dispatching process using the DPD Poland API or in offline mode via the GeoRDB or RDB routing database.

The application's functionalities allow for generating shipments with various configurations tailored to the user's needs.

The core process involves dispatching shipments through the Recipients Book, manual data entry, automatic imports from external files, and data imports from external systems such as Wapro MAG, Comarch ERP Optima, Comarch ERP XL, Magento 1, Magento 2, and SOTE.

The application generates a tracking number for the entered data, which includes sender address, recipient address, services, additional information, and the number of shipments. This tracking number later enables the monitoring of shipment status in the shipment history as well as the printing of labels on a label printer or an A4 printer.

The Shipping Module supports simultaneous operation by multiple users. Based on user groups, it provides the option to choose between shared and individual content. For the application to operate, it requires a connection to an existing MSSQL database, or the use of an independent SQLite database created from the Shipping Module.

The application also supports generating dynamic shipment history reports and special reports, including pricing reports and reports on successful and failed shipment generation.

This guide is intended to provide a step-by-step process for installing and launching the DPD Poland – Shipping Module application in its server version, which is based on .NET Core and Angular. The application is delivered as a “.zip” archive and is designed for deployment in a local network environment, without Internet exposure. The installation process includes environment preparation, IIS server configuration, and application startup.

Important!

The application is intended for deployment in a local network environment (Intranet) and should not be exposed to the Internet. All administrative actions must be carried out by qualified personnel with the appropriate permissions and a sound understanding of application security.

3. System Requirements

Hardware

Minimal Requirements:

- **Processor:** dual-core 2.0 GHz;
- **RAM:** 4 GB
- **Hard drive:** 20 GB free space
- **Network card:** Ethernet 1 Gbps.

Recommended Requirements:

- **Processor:** quad-core 3.0 GHz or faster.
- **RAM:** 8 GB or more.
- **Hard drive:** 50 GB free space
- **Network card:** Ethernet 1 Gbps.

Software

- **Operating System:** Windows Server 2022 with the latest updates installed.
- **Internet Information Services (IIS):** Version 10 or later.
- **.NET Desktop Runtime:** Required to run the .NET Core application on the IIS server. Version 8.0.11
- **ASP.NET Core Runtime – Hosting Bundle:** Required to run the .NET Core application on the IIS server. Version 8.0.11
- **Database:** Microsoft SQL Server or SQLite, depending on the application configuration.
- **Administrative privileges:** Required for installation and configuration of system components.

4. Logical Architecture

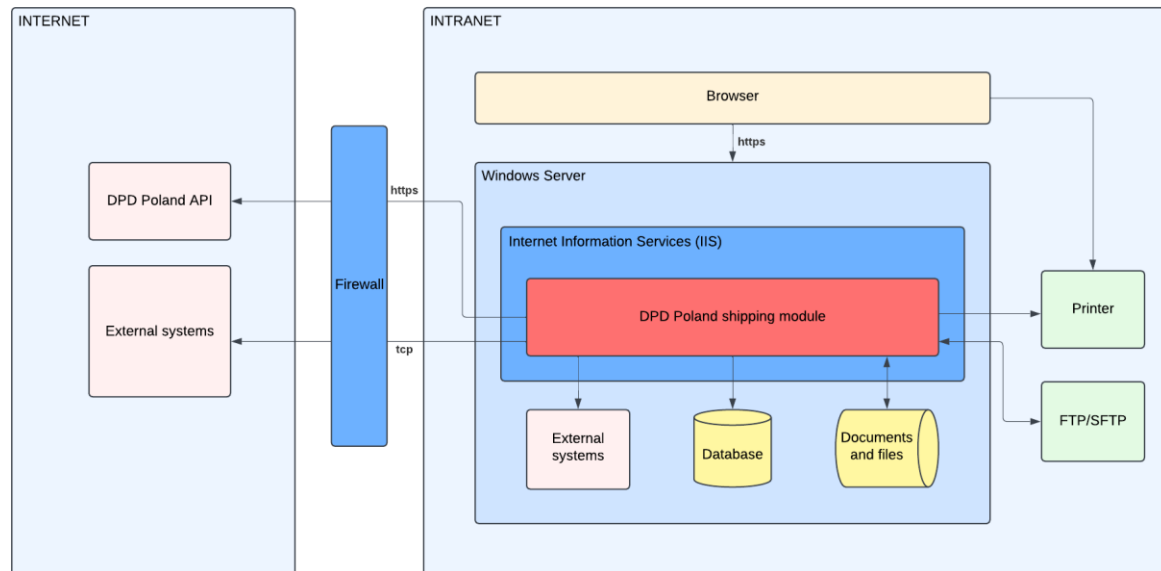


Diagram 1: Shipping Module in the IIS Environment

5. Environment Setup

IIS Installation

This step should be performed if IIS is not installed on the server. IIS documentation is available on the manufacturer's website <https://learn.microsoft.com/pl-pl/iis/>

1. **Open Server Manager**
2. **Select** the option **Add Roles and Features**
3. In the installation wizard:
 - **Installation Type:** Choose **Role-based or feature-based installation**.
 - **Server Selection:** Select the local server from the list.
4. **Server Roles:**
 - Check Web Server (IIS).
5. **Role Services:**
 - Ensure that the following services are selected:
 - **Web Server:**
 - **Common HTTP Features:**
 - Static Content
 - Default Document
 - HTTP Errors
 - **Application Development:**
 - .NET Extensibility 4.8
 - ASP.NET 4.8
 - ISAPI Extensions
 - ISAPI Filters
 - **Management Tools:**
 - IIS Management Console
6. **Confirm** your selection and **complete** the installation.

.NET Desktop Runtime Installation

1. **Download** the **.NET Desktop Runtime** package from the official Microsoft website in version **8.0.11** (<https://dotnet.microsoft.com/en-us/download/dotnet/8.0>)
2. **Download** the **ASP.NET Core Runtime 8.0.11 – Hosting Bundle** package (<https://dotnet.microsoft.com/en-us/download/dotnet/8.0>)
3. **Run** the downloaded installers as administrator
4. **Proceed** with the installation
5. After the installation is complete, **restart the server** to apply the changes

6. Application Installation

Preparing the Application Files

1. **Prepare** a .zip archive containing the application files provided by DPD Poland.
2. **Extract** the contents of the archive to the target directory on the server, e.g., C:\inetpub\wwwroot\DpdPoland.

Configuring Access Permissions

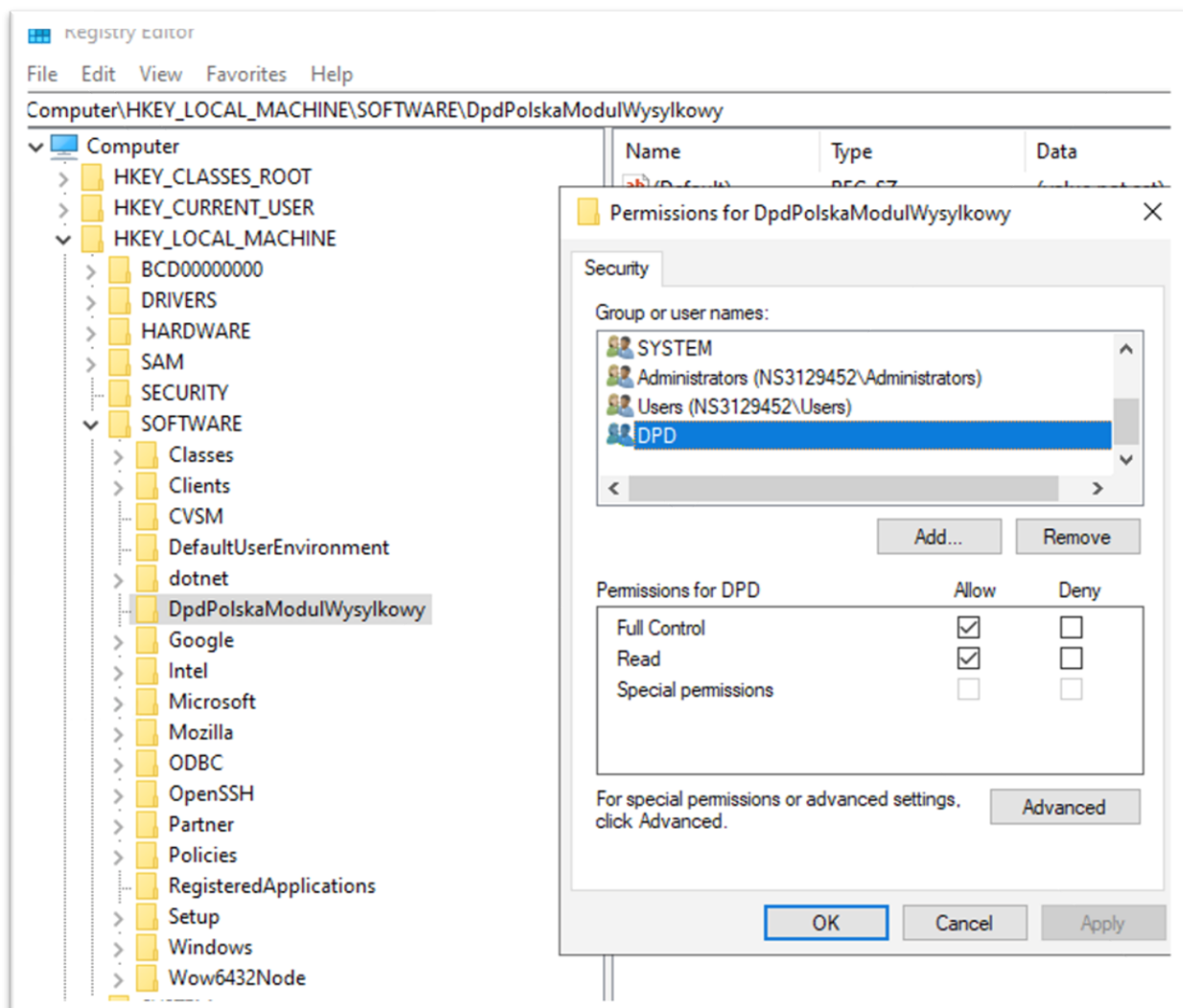
1. **Assign** permissions to the application directory:
 - The IIS_IUSRS user must have **Read** and **Execute** permissions.
2. **Assign** permissions to the directories where application files are stored:
 - The application saves data on the disk for Labels, Protocols, Reports, and Imports. The default path is C:/DPD Polska.
 - The IIS_IUSRS user must have **Read**, **Write**, and **Execute** permissions for these directories. The path can be changed in the application's GUI.
3. **Verify** printer permissions: described in the **Printing Settings** chapter.

Configuring the IIS Server

1. Launch **Internet Information Services (IIS) Manager**.
2. Create a new site:
 - Right-click on **Sites** and select **Add Website...**
 - **Site Name**: Enter the site name, e.g., DpdPoland.
 - **Physical Path**: Specify the directory where you extracted the application files, e.g., C:\inetpub\wwwroot\DpdPoland.
 - **Binding**:
 - **Type**: Select http.
 - **IP Address**: Leave as All Unassigned or choose the appropriate IP address.
 - **Port**: Enter 80.
 - **Host Name**: Optional, if you are using a domain name on the local network.
 - Click **OK** to create the site.
3. **Application Pool Configuration**:
 - Go to **Application Pools** in IIS Manager.
 - Find the Application Pool created for the new site.
 - Set:
 - **.NET CLR Version**: Select **No Managed Code**.
 - **Managed Pipeline Mode**: Set to **Integrated**.

Registry Configuration

1. **Add** an entry to the system registry:
 - Open the **regedit** application
 - Add a new key at the location:
HKEY_LOCAL_MACHINE\SOFTWARE\DpdPolskaModulWysylkowy
2. **Assign** permissions for the **DpdPolskaModulWysylkowy** key for the previously created Application Pool:
 - Select **Edit Permissions**
 - Find the Application Pool, e.g., IIS AppPool\DpdPoland
 - Add **Full Control** permissions for the **DpdPolskaModulWysylkowy** key



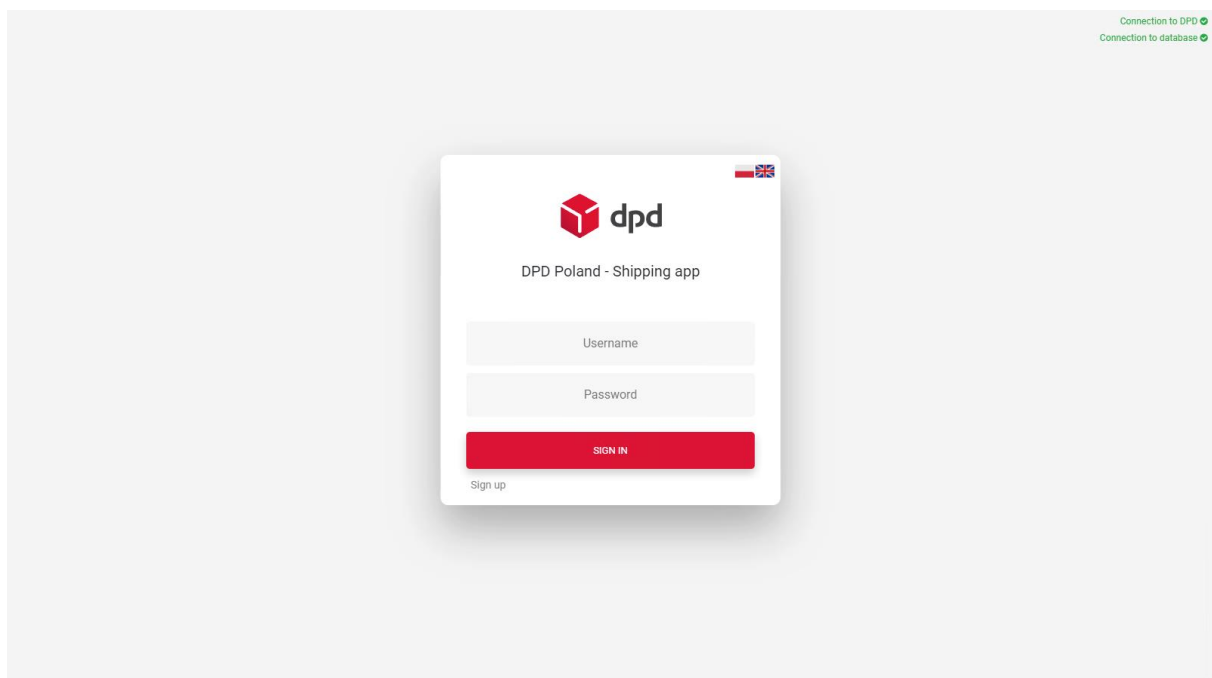
SSL Certificate Installation (optional)

By default, the application is launched using the http protocol (port 80). It is possible to install an SSL certificate. The installation instructions are provided by the manufacturer at: <https://learn.microsoft.com/en-us/iis/manage/configuring-security/how-to-set-up-ssl-on-iis>

After installing the SSL certificate and opening port 443, the application is available at [https://\[server_IP_address\]](https://[server_IP_address]) or <https://localhost>.

Verifying Application Operation

1. **Follow** the steps described in the “**Onboarding**” section.
2. **Open** a web browser on the server or another computer on the local network.
3. **Enter** the application's URL, e.g., [http://\[server_IP_address\]](http://[server_IP_address]) or <http://localhost>.
4. **Verify** that the application loads correctly and operates as expected.



7. Onboarding



First launch of the DPD Poland - Shipping app

Step 1

Database connection

DPD Poland - shipping application requires a connection to the MSSQL or SQLite database. Please enter the connection data in the fields below and check the connection with the "Connect to database" button. data is available, an attempt will be made to automatically create a new database.

Database type

SQLite

Microsoft SQL Server

Database path*

C:\DPDPoland\database.db



Connect to database

Next >

The first time the application is launched, an onboarding process is required to connect the application to the database, the DPD Poland API, and to grant administrative access. This process must be completed before making the application available to other users and before opening outgoing ports to the private network.

To utilize the Imports functionality and access Labels, Protocols, or Reports files from end-user workstations, it is possible to use shared network locations. Import files can be retrieved for the specified location on the server.

8. Security Configuration

Restricting Access to the Application

- **Windows Firewall:**
 - Configure firewall rules to allow access to port 80 only from specific IP addresses or local network ranges.
 - **Block access from external IP addresses** if the server is connected to the Internet.

System and Software Updates

- **Operating System:**
 - Ensure all the latest updates and security patches are installed.
- **Application Software:**
 - Monitor the availability of updates for .NET Core and other components used by the application.

User and Group Permissions

- **Apply** the Principle of Least Privilege:
 - **Limit** the permissions of user and service accounts to the minimum necessary.
 - **Secure** configuration files containing sensitive information (e.g., credentials).

Access to External Systems

For the application to function properly, outgoing traffic must be allowed to the following addresses:

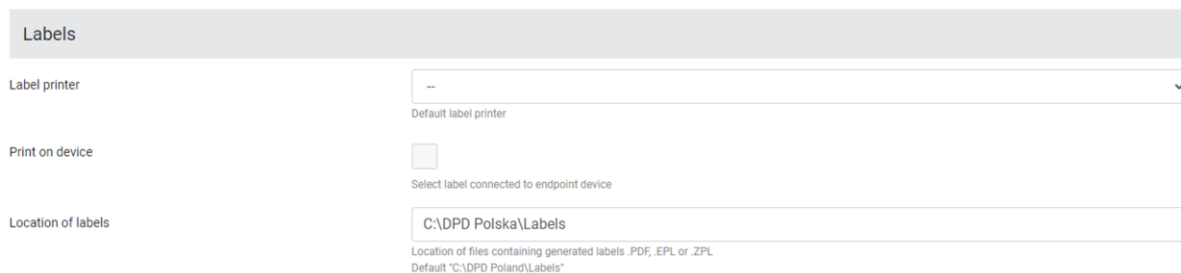
- <https://dpdinfoservices.dpd.com.pl>
- <https://dpdservices.dpd.com.pl>
- <https://dpdservicesdemo.dpd.com.pl>
- <https://pudofinder.dpd.com.pl>

If integrations with external systems are used, access to the appropriate resources is required, for example, via the HTTPS protocol.

9. Printing Settings

By default, the application uses the network printers available on the server, and files are sent to the printer directly by the server. Each logged-in user can select the appropriate printer in the configuration, which is then saved in the user's application configuration.

Manually generating shipments from the "Send Shipment" or "Shipment History" screens also allow printing on end devices. To enable this, select the "Print on end device" option in the application settings.



The screenshot shows the 'Labels' configuration section. It contains three settings:

- Label printer:** A dropdown menu with a downward arrow, currently showing '--'. Below it, the text 'Default label printer' is visible.
- Print on device:** A checkbox that is currently unchecked. Below it, the text 'Select label connected to endpoint device' is visible.
- Location of labels:** A text input field containing 'C:\DPD Polska\Labels'. Below it, the text 'Location of files containing generated labels .PDF, EPL or .ZPL' and 'Default "C:\DPD Poland\Labels"' is visible.

The IIS server must have the appropriate permissions to access the printers.

Process of Granting Printer Permissions

1. Go to **Control Panel > Devices and Printers**.
2. Right-click on the chosen printer and select **Printer Properties**.
3. Modify the security settings:
4. Go to the **Security** tab.
5. Click **Edit**, then **Add**.
6. Enter the name of the application pool identity user and click **Check Names**.
7. Grant the necessary permissions (**Print**).
8. Click **OK** to save the changes.
9. Verify that printing from the application is functioning correctly.

10. Troubleshooting

Errors when launching the Application

- Check the application logs in the application directory or in the locations specified in the configuration.

The application is not accessible in the browser

- Ensure that the IIS service is running.
- Check whether the firewall is blocking traffic on the required ports.
- Verify the site configuration in IIS, particularly the binding settings.

Database connection issues

- Check the connection details in the application's configuration.
- Make sure the database is running and accessible.
- Verify the database user's permissions.
- Check the firewall settings.

External systems connection issues

- Check the connection details in the application's configuration.
- Ensure that the external system is running and accessible with the specified connection parameters and authorization data.
- Verify the firewall settings.

11. Technical Support

In case you encounter issues that are not resolved by the above steps:

- Contact the IT Technical Support department of DPD Poland at:
itcustomersupport@dpd.com.pl.
- Provide a detailed description of the issue, including error messages and steps taken during installation
- Supply the application logs and IIS logs

12. Updates

To receive the latest version of the application, contact the IT department at:
itcustomersupport@dpd.com.pl

Regular system updates and monitoring of the application's operation are crucial for maintaining system stability and security.