

PANL

Desk Manager 3.1.0

Part 1 - Introduction



Document Version: 2.0

Issue Date: 20-05-2024

Table of Contents

1. Introduction	3
1.1 About PanL Desk Manager (PDM) User Guides	3
1.2 About this Guide	3
1.3 Intended Audience	3
2. Safety Guidelines	4
3. Product Overview	7
4. Features	8
5. What's new in PDM 3.1.0	9
6. Known Issues / Limitations	9
7. Compatible Client Applications	9
8. Appendix	10
8.1 Glossary of Terms, Acronyms & Abbreviations	10
8.2 List of Figures	10
8.3 List of Tables	10
Revision History	11

1. Introduction

1.1 About PanL Desk Manager (PDM) User Guides

This set of PDM user guides for the following components aims to provide necessary information for PanL Desk Manager (PDM) 3.1.0 hardware and software installation, configuration, and operating information.

S/N	Components	Document Name
1	Installation & Configuration <ul style="list-style-type: none">PDM Server Installation & ConfigurationMail/Calendar Server Setup & Configuration	BRTSYS_AN_045_PDM_User_Guide_-_2._Installation_and_Configuration
2	PDM Management Console and Desk Viewer	BRTSYS_AN_046_PDM_User_Guide_-_3._PDM_Management_Console_and_Desk_Viewer
3	PDM Mobile Client App (Android & iOS) and PanL PD35L Display	BRTSYS_AN_047_PDM_User_Guide_-_4._Mobile_Client_App_and_PanL_PD35L_Display
4	PDM Outlook Add-In	BRTSYS_AN_048_PDM_User_Guide_-_5._Outlook_Add-In

1.2 About this Guide

The guide introduces PanL Desk Manager Eco-system, its features and safety guidelines.

1.3 Intended Audience

The intended audience will be System Integrators, Technical / Administrative users who will assist in realizing the capabilities, functions, and the full benefits of the product.




Note:

1. Ensure the firmware version and package version number are up-to-date and update/upgrade accordingly.
2. For more information about the latest version and compatibility, contact the BRT Systems sales/support.


2. Safety Guidelines

Important Safety Instructions:

WARNINGS:

- This symbol,  , when used on the product, is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.
- If the product is damaged and any internal components can be seen through the damaged area; unusual odours or unusual noises are detected; disconnect the device from the electric outlet and contact our [support](#).
- Avoid attachments- Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous, and they may void the warranty.
- Avoid water - Do not use this or other electrical equipment near water or objects filled with water. Clean the device with dry cloth only.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this equipment during lightning storms or when unused for long periods of time.

ATTENTION:

 - This symbol, when used on the product, is intended to alert the user to important operating and maintenance (Servicing) instruction in the literature provided with equipment.

WARNING: To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.

General Guidelines:

Follow these sensible guidelines:

- Read instructions - Read and understand all safety and operating instructions before installing or using the equipment.
- Retain instructions - Keep the safety instructions for further reference.
- Follow warnings - Follow all warnings and instructions marked on the equipment or in the user information.
- Comply with codes - Install all products in accordance with international, national, and local electrical and building safety codes. Some examples for reference are as follows:
 - In the United States of America, refer to ANSI/NFPA 70, US National Electrical Code (NEC).
 - In Canada. Consult the Canadian Electrical Code, Part I, CSA C22.1.
 - Elsewhere, refer to International Electro technical Commission (IEC) guideline 60364, parts 1-7.
- This equipment shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the equipment.
- Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, such as when power supply cord or plug is damaged, liquid has been spilled, or objects have fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped.

Grounding (Earthing):

- Grounding faceplates - For products with metal faceplates, ground the faceplates to the product ground, and tie all the products in a system to a common ground. This prevents electrostatic discharge and can prevent video ground loops.
- Do not defeat the safety purpose of the polarized or grounding –type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for user's safety. If the provided plug does not fit into the outlet, consult an electrician for replacement of the obsolete outlet.

Power and Electrical Supply:

- **Appropriate power supply**
 - Use only provided power supplies and power sources with our products. Use of unauthorized power supplies may harm the equipment, may void the warranty, and will void the regulatory compliance status.
 - For power adapters with detachable DC cords, consult the Manufacturer for guidance.
 - Power supplies are intended for continuous operation.
 - Our power supplies are universal input voltage supplies that operate from 100-240 VAC and are intended to function at 50 to 60 Hz. The ambient temperature shall not exceed 50°C and the altitude shall not exceed 2000m. Consult the Manufacturer if the input power supply being used is not provided by us. Make sure to use the appropriate power supply for corresponding models. Ensure that it is marked as "LPS" or "Class 2" if it is an LPS or Class 2 type.
- **Location of power supplies**
 - External power supplies with either plastic enclosures or metal enclosures with vents must not be located within environmental air handling spaces or a wall cavity.
 - Our power supplies are intended for indoor use only.
 - The power supply must not be permanently fixed to the building or similar structure.

Power Sources:

- This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with the main power system with a grounded_Neutral_conductor or Line to Line. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.

WARNING for Class I Products:

Class I products must be connected only to a mains socket outlet with a protective Earthing (Grounding) connection.

- Power and IT system - Consult us before installation if the product will be connected to an IT power distribution system.

WARNING: Disconnect the equipment from the AC main before performing any service to the equipment.

- There are no user serviceable parts inside our equipment.
- Refer all servicing to qualified service personnel. To prevent the risk of shock, do not attempt to service this equipment by yourself because opening or removing covers may expose users to dangerous voltage or other hazards and may void the warranty

Ventilation, Mounting and Temperature:

- Ventilation slots and opening - If the equipment has slots or holes in the enclosure do not block any ventilation opening, as this may cause the product to malfunction. Install the device in accordance with the manufacturer's instructions
- Temperature - Do not install electronic devices near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. If possible, do not expose the product to direct sunlight. Also see "Rack mounding guidelines" below for temperature guidelines.

Placement Guidelines:

The following guidelines pertain to the safe installation of our device on a desk.

- Ensure that the device is not placed on the desk edges.
- Ensure that the placement is visible to the user.
- If using a glass or slippery desk, ensure that the rubber feet are in place. Use the rubber feet to stick to the bottom of the device. The rubber feet are provided as part of the package.
- The placement desk should be flat (Horizontal to ground), should not be in a slanting position.
- Please do not mount the device on a vertical wall / table.

FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a building installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference, and
- 2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provided with antenna installation instructions and consider removing the no-collocation statement.



Note: This unit was tested with shielded cables. Using shielded cables, ensure that users maintain the appropriate EMC classification for the intended environment.



Electrical appliances classes defined in IEC 61140, and are categorized into one of the five Classes - Class I, Class II, III, 0 or 01. In a Class I products, the body or casing, which is usually made of metal, is connected to earth via an earth wire and plug. This earth connection provides an alternate path for electric current to flow in case of a fault, such as a failure of basic insulation.

3. Product Overview

The management of shared spaces particularly working desks, either in traditional corporate offices or the fast-growing co-space providers is increasingly important as real estate costs have climbed steadily over the years especially in land scarce regions. A 1:1 desk to head ratio may no longer be cost effective or a good use of shared space when desks are under-utilized. Other use case applications such as libraries, cyber cafes or community centres also face similar challenges in managing desk bookings. **PanL Desk Manager (PDM)** addresses the problem by providing a complete solution ecosystem as illustrated in Figure 1 – PanL Desk Manager Ecosystem, enabling organizations to automatically manage desk bookings and increase the number of users per desk without compromising user experience. By continuous re-conditioning of the workspace based on statistical data collected, substantial cost and space savings can be realized.

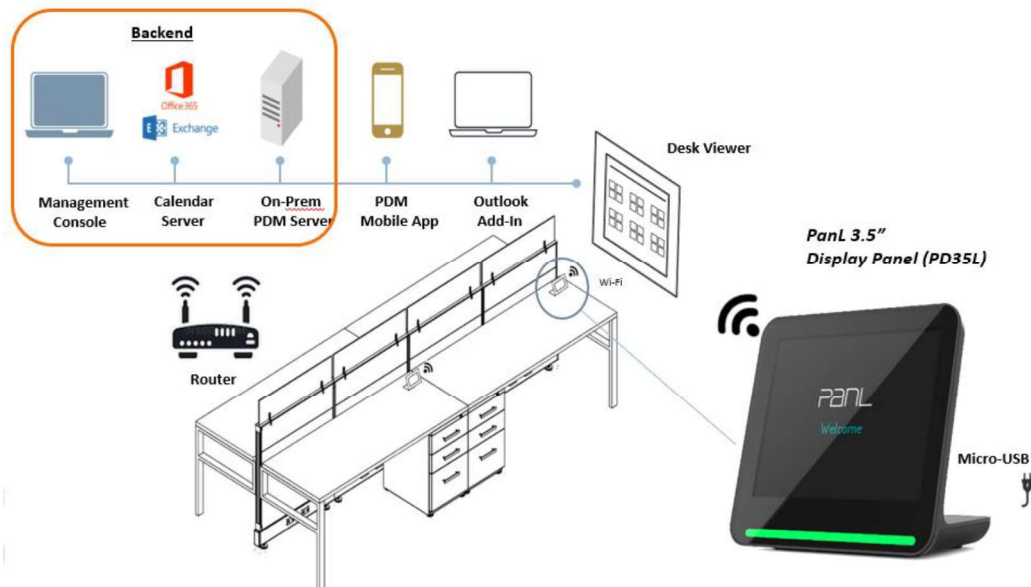


Figure 1 – PanL Desk Manager Ecosystem

PDM Server Software installed on on-premises server can be configured via a simple web console interface (PDM Management Console) to connect to supported Microsoft Exchange or Microsoft 365 calendars. The PDM Management Console also allows system administrators to assign desk layouts across local or multi-site locations, setup PanL PD35L display panels remotely and configure a variety of desk booking policies to suit administrator’s preference such as maximum desk booking hours per day or desk claim time limit to ensure desks are in good use. A dashboard which displays booking statistical data provides valuable insights to management to understand and manage user behaviour to further improve desks utilization.

Users can book desks via Outlook Add-In, mobile devices and right from the desk panels. On the spot desk booking through the PD35L display panel is as easy as scanning the QR code through the PDM mobile app and setting the desired booking time slot. The panel comes with a bright LED indicator to provide at-a-glance desk availability status from a distance. One or more desk panels are added to the network as clients through on-boarding (refer to **Section 4.9 On-board Desk Panel Device (PanL PD35L)** in BRTSYS_AN_047_PDM User Guide - 4. Mobile Client App and PanL PD35L Display at <https://brtsys.com/resources/> (under PanL Desk Manager > Application Notes /Installation Guides/User Guides). PDM enables the panels, mobile apps, and the calendars to integrate seamlessly, synchronizing all scheduling data across all platforms on the same network. All communications in between are encrypted to ensure data security. The Desk Viewer interface provides an overall view of desks availability across different locations of a building spanning across different locations. This can be displayed on any network enabled screen placed at public access areas.

4. Features

The following are some key features offered by PanL Desk Manager (PDM) -

- ❖ Make on the spot desk reservations right from the desk panel (QR Code) or advance booking through MS Outlook or mobile app. Integrate seamlessly with supported calendars such as Microsoft Exchange and Microsoft 365
- ❖ Book by desk or time options. Easy access to all booking information and status through My Booking feature
- ❖ PanL Desk Panel Display availability status light indicators allow users to locate a vacant space from afar - LED color code: Green (Available), Yellow (Pending Claim), Red (In-Progress)
- ❖ Claim and automatic release feature, reduces no show time ensuring unused desks are available for the next user. Frequent ghost booking offenders can be identified
- ❖ One glance desks occupancy status and navigation through Desk Viewer. Search building/location/desk's function enables users to book neighbouring desk to work on the same project
- ❖ Outlook Add-In and Mobile App feature enable users or admin to book and assign desks on behalf of other users
- ❖ Number of devices and users can be scaled accordingly, and settings can be centrally managed and synchronized across multi-site locations
- ❖ Booking statistical data dashboard provides insights on desk utilization and user booking behaviour to better optimize user experience and desk to head ratio
- ❖ A single admin console (PDM Management Console) interface provides a one stop management of resource assignment, desk booking policies, display panel and calendar configurations etc.
- ❖ Remote desk panel firmware OTA updates, activation, brightness control through Wi-Fi
- ❖ Easy desk panel power up with 5V micro-USB cable
- ❖ Secure communications between the clients and server over https. Database encryption over user account credentials and passcodes
- ❖ Customizable desk notification email template
- ❖ User feedback through mobile app/Outlook Add-In/Desk Viewer
- ❖ Static / Dynamic QR Code

5. What's new in PDM 3.1.0

- ❖ **Enhanced Device Onboarding:** The setup process has been streamlined, allowing administrators to easily configure network settings and onboard multiple devices at once for quicker and more efficient system integration.
- ❖ **Advanced Security Enhancements:** The system's security has been strengthened with comprehensive Dynamic Application Security Testing (DAST) and Static Application Security Testing (SAST), ensuring robust protection against vulnerabilities.
- ❖ **Performance Enhancements:** Users will notice improved performance, as the system has been optimized for smoother and more responsive interactions, enhancing the overall user experience.

6. Known Issues / Limitations

NA

7. Compatible Client Applications

The following client applications are compatible with this release:

- iOS mobile app v4.1.0
- Android mobile app - v4.1.0
- Microsoft Add-in - 3.7.0

8. Appendix

8.1 Glossary of Terms, Acronyms & Abbreviations

Term or Acronym	Definition or Meaning
ANSI	The American National Standards Institute is a private nonprofit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.[3] The organization also coordinates U.S. standards with international standards so that American products can be used worldwide.
FCC	The Federal Communications Commission is an independent agency of the United States government that regulates communications by radio, television, wire, satellite, and cable across the United States.
HTTPS	Hypertext transfer protocol secure is the secure version of HTTP, which is the primary protocol used to send data between a web browser and a website. HTTPS is encrypted to increase security of data transfer.
IEC	International Electrotechnical Commission is an organization that prepares and publishes international standards for all electrical, electronic, and related technologies.
LED	Light Emitting Diode is a semiconductor device that emits light when current flows through it.
NEC	The National Electrical Code is a regionally adoptable standard for the safe installation of electrical wiring and equipment in the United States.
NFPA	The National Fire Prevention Association is a global, non-profit organization that promotes safety standards, education, training, and advocacy on fire and electrical-related hazards
OTA	Over-The-Air update is an update to an embedded system that is delivered through a wireless network, such as Wi-Fi or a cellular network.
PDM	PanL Desk Manager is a desk booking system that addresses the desk resource allocation problems by enabling organizations to automatically manage hotdesks.

8.2 List of Figures

Figure 1 – PanL Desk Manager Ecosystem 7

8.3 List of Tables

NA

Revision History

Document Title : BRTSYS_AN_044 PDM User Guide - 1. Introduction
Document Reference No. : BRTSYS_000115
Clearance No. : BRTSYS#076
Product Page : <https://brtsys.com/pdm/>
Document Feedback : [Send Feedback](#)

Revision	Changes	Date
Version 1.0	Initial release for PanL Desk Manager (PDM) V2.6.0	28-07-2023
Version 2.0	Updated release for PanL Desk Manager (PDM) V3.1.0	20-05-2024