

Technical Specification

[**Integrated Port Management System (IPMS)]**



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Operator notes:

This document is help for programmer for coding stuff and flow in [**IPMS**]

# Document Control

**Document location**

| Location |
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**Revision history**

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**Related documents**

| Document | Location |
| --- | --- |
| [**IPMS**] Technical Document | NIT, Jublee Hill, Hyderabad |

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# INTRODUCTION

Project code: **CNPA 445**

Project name: **IPMS**

IPMS is a solution for solving automating the port operations, which helps port employees and vessel agents to plan and collaborate their work in an efficient way.IPMS solution is customized as per TNPA requirements, documented in SRS documents. As part of this customization it also provides operational and BI reports to port authorities. And, IPMS will be integrated with TNPA SAP system, and other external systems like AIS, IPOSS, and Lloyds Register of Vessels. IPMS will also contain admin interface to setup the masters and setup business rules and customization parameters.

This document gives a high level technical architecture of the system. It describes the technology stack used for solution implementation and high level components in each layers. It also describes the physical architecture/server layout for IPMS.

DAR Reference: TNPA – IPMS - DAR. DAR conducted on the Technology selection. Output of DAR is .Net.

## Objectives

The objective of the application is to get the highest competitiveness by maximizing the work efficiency, enabling effective usage of port facilities and achieving customer satisfaction by high quality service. It also provides you with various enterprise based function, operational and management modules with seamless integration and interoperability.

## Scope

There are many scope and features of IPMS.

* Online Access for Stakeholders
* Application Security
* Alerts and Notifications (SMS/ Email)
* Dashboard with drilldown features
* Automated Visual Berth Planning
* Auto Resource Planning
* Integration with External Systems
* Reporting
* Easy System Administration
* 24x7 Support

# Technology

## 2.1 Detail

Technology used in IPMS.

|  |  |  |  |
| --- | --- | --- | --- |
| **Backend** | **UI Level** | **Server Side** | **Middle Tier Integration** |
| **SQL Server** | **JQuery**  **Knockout.js** | **Asp.net MVC**  **C#** |  |

# Functionality

## Use Case Diagram

--After Complete the Code--

## Site Map

--After Complete the Code--

# Achitecture

## Architecture Overview

## Component Structure

## Application Interfaces

# Design

## Object Diagram

This part deals with data base level.

## Entity Relationship Diagram

The ER diagram

## Data Dictionary

Descriptions of all the fields in the system

# CODE

## Code with Db Structure its Functionality with Task Heading

This part deal each and every task in detail, what function did and its DB schema (if require for task) and code stuff.