



**COMPUTERIZED MAINTENANCE MANAGEMENT
SYSTEM (CMMS)**

**USER REQUIREMENT STUDY
(URS)**

IS IKHLAS SUCI SDN BHD

Document Version 1.0

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Prepared By:
Evantage Solutions Sdn Bhd



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TABLE OF CONTENT

TABLE OF CONTENT.....	3
1. EXECUTIVE SUMMARY	8
2. ACRONYMS AND ABBREVIATIONS.....	10
3. INTRODUCTION	11
3.1. PURPOSE OF THIS DOCUMENT	11
3.2. SCOPE OF IMPLEMENTATION	12
3.3. APPROACH.....	13
4. APPLICATION ARCHITECTURE AND DESIGN	14
4.1. PROPOSE URL	14
4.2. NETWORK DIAGRAM	14
5. SYSTEM SPECIFICATIONS AND REQUIREMENT	15
5.1. HELPDESK WORKSTATION & CLIENT’S PC.....	15
5.2. MOBILE DEVICE.....	15
6. REQUIREMENT STUDY FINDINGS.....	16
6.1. OBJECTIVE	16
6.2. ASSET (MACHINE/EQUIPMENT) FINDINGS.....	16
6.3. PROPOSE ASSET IMPLEMENTATION PLAN	18
6.4. EXISTING MAINTENANCE FINDINGS.....	19
6.5. PROPOSE MAINTENANCE IMPLEMENTATION PLAN.....	20
6.6. EXISTING PREVENTIVE MAINTENANCE FINDINGS	22
6.7. PROPOSE PREVENTIVE MAINTENANCE IMPLEMENTATION PLAN	23
7. RECOMMENDED WORKFLOW	25
7.1. LABELLING STANDARD OF BUSINESS PROCESS FLOW CHART	25
7.2. RECOMMEND CORRECTIVE MAINTENANCE WORKFLOW.....	27

7.3.	RECOMMEND PREVENTIVE MAINTENANCE WORKFLOW	28
8.	CRITICAL REQUIREMENT	29
9.	FUNCTIONALITY GAP ANALYSIS	30
10.	IMPLEMENTATION RECOMMENDATION	32
10.1.	KEY BENEFITS OF CMMS IMPLEMENTATION:	32
10.2.	SUGGESTED IMPLEMENTATION PATH:	32
10.3.	PERSONNEL MODULE.....	33
10.4.	ASSET MODULE.....	35
10.5.	WEB WORK REQUEST	37
10.6.	REVIEW WORK REQUEST	38
10.7.	WORK ORDER MODULE	39
11.	DATA MIGRATION PLAN.....	40
11.1.	ASSET RECORDS	40
11.2.	EMPLOYEE RECORDS.....	40
11.3.	PREVENTIVE MAINTENANCE RECORDS	40
11.4.	CHECKLIST RECORDS	41
12.	TRAINING PLAN	42
12.1.	TRAINING CATEGORIES.....	42
12.2.	TRAINING METHODOLOGY	43
12.3.	TRAINING SCHEDULE.....	43
13.	ACCEPTANCE TESTING.....	44
14.	APPENDICES	45
14.1.	APPENDICES A: WORK DONE ACKNOWLEDGEMENT	46
14.2.	APPENDICES B: PERIODIC CLEANING.....	47
14.3.	APPENDICES C: PREVENTIVE WORK ORDER (PWO)	48

14.4.	APPENDICES D: PREVENTIVE MAINTENANCE SCHEDULE.....	49
14.5.	APPENDICES E: DAILY COMPRESSOR CHECKLIST.....	50
14.6.	APPENDICES F: DAILY TEMPERATURE MONITORING	51
14.7.	APPENDICES N: CMMS SUPPORT MAINTENANCE	52
15.	EVANTAGE CMMS SOLUTIONS SUPPORT WORK FLOW.....	54

Computerized Maintenance Management System (CMMS)

IMPLEMENTATION PAPER

We hereby understand and agree to the implementation of the CMMS based on the Evantage Application. Upon agreement on the final copy of the Implementation Paper, IS Ikhlas is to sign, date and stamp the Document Acceptance Form provided.

In the event of any new requirements arising outside the scope of the proposal, it is the decision of IS Ikhlas to raise a change request through a Request for Service Form provided. The comprehensiveness of this system is superseded by the contract. Any change request arising outside the scope of the contract and implementation paper may involve financial implications.

Acceptance of this paper does not constitute acceptance of the system. It is a document for which the implementation is to be based on. Acceptance of the system will be conducted in the User Acceptance Testing.

Document Acceptance Form

IS Ikhlas Suci Sdn Bhd

User Requirement Study (URS) for CMMS

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03/09/2026

1. Executive Summary

For the implementation of the Computerized Maintenance Management System (CMMS) of IS Ikhlas, understanding the exact requirements and expectations is one of the critical factors for a successful implementation. The implementation will take about three (3) months to complete and system to go live on October 2026.

As such, Evantage Solutions Sdn Bhd (EVANTAGE) has embarked on the Requirement Study process for the following modules:

- i. Asset Management on 19th August 2026
- ii. Work Order Management on 19th August 2026
- iii. Preventive Maintenance (PM) on 19th August 2026
- iv. Employee Management on 19th August 2026
- v. CMMS Mobility on 19th August 2026
- vi. Report on 19th August 2026

The Requirement Study findings documented in Requirement Study report (Implementation Paper) shall serve as a source of reference for all parties associated with the project. The acceptance and signoff of this report will trigger the development and configuration process of the CMMS solution. Based on the findings, EVANTAGE will be tailored towards the needs and requirements of users from IS Ikhlas.

This report shall address the scope of coverage and approach in which the study was conducted. We have adopted the consultative process (interviews, meetings, workshops) in gathering the information during the Requirement Study phase with the selected “Super Users” representing the units within the Maintenance, Procurement and Store Department.

The next section addresses the application architecture of the CMMS solution to be implemented for IS Ikhlas. The system requirements and specifications for the application are provided.

The Data Migration section addresses the data migration process which will be performed for IS Ikhlas.

The training chapter addresses the formal training sessions offered within the scope of this project. It shall describe the methodology and schedule. The course details (description, objectives, pre-requisites, etc) will be provided in the Training Plan Document.

The next chapter is Acceptance Testing. Based on the complete system as planned and defined during the system build phase, the solution will then be presented for testing and acceptance following which a

formal training will be conducted prior to the live usage of the system. Areas to be tested and accepted are highlighted in the chapter for reference.

Revisions in the timeline will be agreed upon with the users and will be reflected in the actual date of the project schedule.

2. Acronyms and Abbreviations

Throughout this document, the acronyms or abbreviations used are as follows:

Acronym	Description
BOM	Bill of Material
CMMS	Computerized Maintenance Management System
CM	Corrective Maintenance
COA	Chart Of Accounts
EAM	Enterprise Asset Management
EQ	Equipment
EVANTAGE	Evantage Solutions Sdn Bhd
GRN	Goods Receive Note
HOD	Head Of Department
IS Ikhlas	IS Ikhlas Suci Sdn Bhd
KPI	Key Performance Indicator
ME	Maintenance Executive
MR	Material Request
NC	Non-Conformance
PIC	Person In Charge
PM	Preventive Maintenance
PO	Purchase Order
PR	Purchase Requisition
SR	Service Request
QFA	Quotation for Approval
QOH	Quantity on Hand
QTY	Quantity
RTS	Return to Supplier
TBC	To be Confirm
WO	Work Order
WR	Work Request
YTD	Year-to-date

3. Introduction

For the implementation of a comprehensive Computerized Maintenance Management System (CMMS) solution for IS Ikhlas the EVANTAGE CMMS solution has been chosen. This solution is used by companies both large and small to minimize maintenance operation costs and maximize productivity. The system is designed to IS Ikhlas time and money by providing critical information which is obtained from the data captured in EVANTAGE CMMS. It provides information that is needed to resolve issues that confront maintenance. From work management, inventory management to monthly reports, our system provides every level of users with detailed, easy to use and easy to understand information needed to identify and control maintenance issues which means able to control maintenance costs.

3.1. Purpose of this document

This document describes the objectives, scope, conduct, controls and schedule for the Computerized Maintenance Management System implementation.

The purpose of doing so is:

- i. To provide a source of reference for all parties associated with the project.
- ii. To ensure that resource providers and relevant areas of management are aware of what the project involves and how it will be conducted.
- iii. To obtain formal authorization for the project as described in this document.
- iv. Clarification of the Scope of the Implementation.

3.2. Scope of Implementation

The project shall supply, install, localize, commission, test and deploy EVANTAGE CMMS for IS Ikhlas at the designated sites. The Phases and modules offered under this implementation as below:

i. 2 Core Software License + 3 Mobile License

- ✓ Asset Management
- ✓ Work Order Management
- ✓ Preventive Maintenance (PM) Management
- ✓ Personnel Management
- ✓ Mobility
- ✓ CMMS Reports

3.3. Approach

The approach taken by EVANTAGE for the Requirement Study is a consultative one incorporating interviews, meetings and workshops with representatives from Maintenance Department.

During the study the following people participated in the workshops conduct on IS Ikhlas, Damansara, Meeting Room : -

i. IS Ikhlas

- (i) Siti Safwa, Operation
- (ii) Arnidiya Amran, BD
- (iii) Kalaiwani, Operation
- (iv) Iman, BD

ii. Evantage Solutions Sdn Bhd

- (i) Wu Yuet Sen, Project Manager
- (ii) Zakaria Bin Zainuddin, Project Lead
- (iii) Izzat Rahman, Solutions Specialist

4. Application Architecture and Design

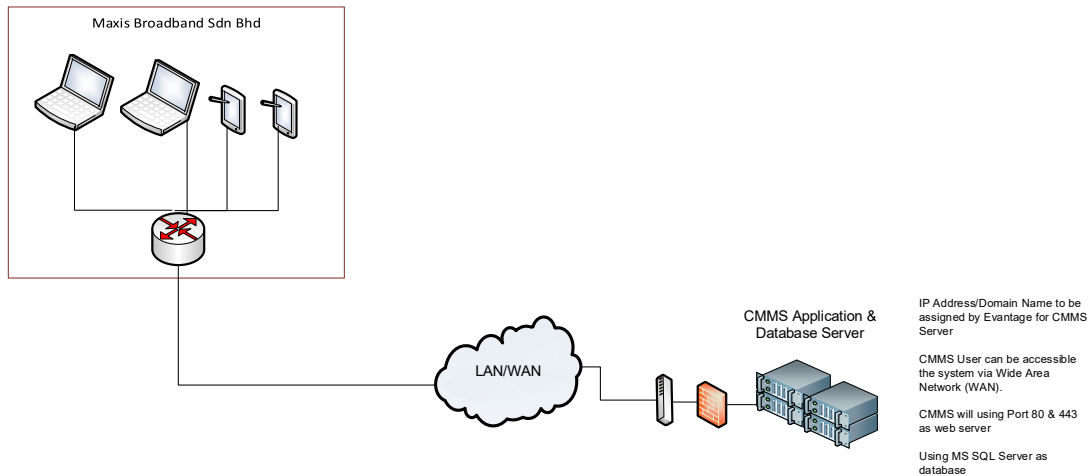
The EVANTAGE CMMS solution installed will be using client-server or thin client web technology. EVANTAGE CMMS will be running on MS SQL Standard 2019 database and above.

The following diagram depicts the overall architecture installed for IS Ikhlas. The EVANTAGE CMMS application version to be installed is Version v10.2.1

4.1. Propose URL

- | | | |
|--------|------------------------------|---------------------|
| 4.1.1. | CMMS Web Application | : – To be Confirm – |
| 4.1.2. | Web Work Request Application | : – To be Confirm – |
| 4.1.3. | CMMS Mobile Application | : – To be Confirm – |

4.2. Network Diagram



5. System Specifications and Requirement

Below are the recommend specifications for running CMMS. Actual specification of the application & database server will depend on the latest model to be supplied and mentioned in the Installation Document.

5.1. Helpdesk Workstation & Client's PC

i. Recommend Hardware Requirements

- (i) Intel Processor Core i5
- (ii) 4 GB RAM
- (iii) 300 GB Hard Drive
- (iv) Windows 10 Professional
- (v) MS Office Standard 2019
- (vi) Anti-Virus
- (vii) Network
- (viii) Ethernet or token-ring running TCP/IP, IPX/SPX or NetBIOS- compatible protocol

5.2. Mobile Device

i. Recommend Hardware Requirements

- (i) Android & iOS Operating System Version 8.0 or Higher
- (ii) CPU Speed: 2GHz and above
- (iii) CPU Type: Quad-Core and above
- (iv) RAM Size (GB): 2
- (v) ROM Size (GB): 8
- (vi) with Camera for QR Code Scanning & Picture Attachment
- (vii) LTE Enabled
- (viii) WIFI Enabled

6. Requirement Study Findings

6.1. Objective

Understand the Maintenance Related Operation in IS Ikhlas and incorporate EVANTAGE (CMMS) into the operations. EVANTAGE should enhance the current operation and address the critical factors for IS Ikhlas to reap its benefits from utilizing CMMS.

6.2. Asset (Machine/Equipment) Findings

6.2.1. IS Ikhlas currently manages multiple Maxis Malaysia sites across different regions. The sites are organized geographically according to the following structure:

- i. Work Area: Maxis Malaysia
- ii. Asset Level: Central, East, West, South, North
- iii. Asset Location: KL, Selangor

6.2.2. The asset is categorize by two type

- i. Location
- ii. Facility

6.2.3. There are four types of buildings within the maxis branches which are:

- i. Building
- ii. Shopping Mall
- iii. Shop Lot
- iv. HQ

- 6.2.4. The Operations Team normally separates the branches into four categories based on the different cleaning requirements and cleaner assignments:
- i. Corporate
 - ii. Retail
 - iii. Landscape
 - iv. Network
- 6.2.5. Each building has an assigned person responsible for its management and operational activities. This person is identified through the cost center assignment within the system. The current building responsibility assignments are :
- i. Alamgir
 - ii. Betty
 - iii. Prava
 - iv. Rafiq
 - v. Rupen
 - vi. Serene
- 6.2.6. The existing asset/location identification structure requires standardization within the CMMS to ensure consistent classification, identification, reporting and maintenance management across Maxis Malaysia Sites
- 6.2.7. The CMMS shall provide a standardized hierarchy to associate each location with its respective region, state/site, asset type, asset code, asset group, work group, and cost center.
- 6.2.8. The standardized structure is intended to address inconsistencies between existing site/location records and CMMS data, while providing a common structure for asset identification, maintenance planning, work order assignment, and reporting.

6.3. Propose Asset Implementation Plan

6.3.1. All equipment and machines will be registered as individual assets in the CMMS.

6.3.2. Each asset will be assigned a system-generated asset number using a standardized nomenclature to be applied consistently.

Asset Number Format:**Prefix + Running Number**

i. AST: Prefix

ii. 100001: Running No (System Running Number)

6.3.3. In Asset, Child Asset is tied up with Parent Asset and form the Asset hierarchy, the hierarchy for asset are as example below: -

(e.g. by Work Area – Asset Level – Asset Location – Asset No)

- (1) Work Area (e.g., MAXIS MALAYSIA: MAXIS BROADBAND SDN BHD)

- (2) Asset Level (e.g., CENTRAL)

- ❖ (3) Asset Location (e.g., KL)

- ✓ (4) Asset No (e.g., AST100015)

6.3.4. The Asset QR Code will be using standard format from CMMS.

6.3.5. In CMMS Mobile Apps, user to view the asset information by scanning QR code tag or search by asset parameter and updating the asset information.

6.4. Existing Maintenance Findings

- 6.4.1. Maintenance requests are currently initiated using an email submitted by the requester to report issues identified within the site.
- 6.4.2. Upon receipt of the email, the operation team manually records job details. The completed work order is subsequently verified by the requestor and be closed by the operation team
- 6.4.3. Maintenance activities are currently classified into:
 - i. Corrective Maintenance
 - ii. Preventive Maintenance
- 6.4.4. Current Breakdown/Corrective Maintenance (CM) Work Process: -
 - i. When a breakdown occurs, the requester send an email to operation team.
 - ii. Operation team review and approve it will converted into work order with assigned PIC.
 - iii. PIC will investigate then perform the execution with the team and will record it through image. Upon completion will attached together with the image that has been gather.
 - iv. After PIC update to complete status the requestor will acknowledge it
 - v. Finally operation team will verify and update to close status

6.5. Propose Maintenance Implementation Plan

- 6.5.1. Work Request (WKR) / Job Sheet numbers will follow the EVANTAGE CMMS standard running number format:

(<prefix><6-digit running number>)

i. Running numbers will be auto-generated by the system

ii. Work Request Number: **WKR100001**

- 6.5.2. Work Order numbers will follow the EVANTAGE CMMS standard running number format:

(<prefix><6 digit running number>)

i. **CWO** – Corrective Work Order (e.g., **CWO100001**)

ii. **PWO** – Preventive Work Order (e.g., **PWO100001**)

- 6.5.3. Currently the IS Ikhlas Maintenance currently will get email requesting to perform work on certain area. The new CMMS Work Order will replace the existing manual/previous procedure without any loss of information. No additional customized forms or reports are required at this stage.

- 6.5.4. Work Orders will be categorized into the following types:

i. Corrective

ii. Preventive

iii. ERT (Emergency Response Team)

iv. AD HOC

v. Spare Part

- 6.5.5. In the event of requester create a Work Request through the Web Work application, which is accessible via mobile devices or personal computers. Upon submission of the Work Request, the system will automatically generate email and/or in-application notifications to the PIC to initiate response and corrective action.

- 6.5.6. Operation team shall assign PIC to handle the work and update the Work Order in the CMMS, including work activities performed and captured image and attached it together.
- 6.5.7. Operation Team shall access the CMMS to acknowledge and verify the completed work once the Work Order has been updated by the PIC.
- 6.5.8. The Work Order shall be closed by operation team, who shall verify the completed work based on the PIC and supporting evidence (e.g. images or attachments).
- 6.5.9. The CMMS Mobile Application for the Maintenance module shall support the following functions: -
- i. **Create Work Request**

Requestors can create Work Requests, which are subject to review and conversion into Work Orders by the operation team.
 - ii. **Update Work Order**

Operation team can update Work Order details, including task progress and completion status and add attachment.
 - iii. **Complete Work Order**

Operation team can mark the Work Order as completed.
 - iv. **Acknowledge Work Order**

Operation team can review the work through acknowledge for verification.
 - v. **Close Work Order**

Operation team can mark the Work Order as close.

6.6. Existing Preventive Maintenance Findings

- 6.6.1. Preventive Maintenance (PM) planning and tasks are currently recorded manually using softcopy forms.
- 6.6.2. PM is planned per individual asset/location.
- 6.6.3. PM is time-based, using calendar days rather than usage-based scheduling.
- 6.6.4. PM checklists are required at various intervals:
 - i. Yearly - Tile scrubbing (Retail)
 - ii. Yearly - Periodic cleaning at maxis (Retail)
- 6.6.5. Once the PM tasks are completed, the PIC will collect the images from cleaner and send them to the operation team for review, verification, and sign-off of the PM work order before it is considered closed.

Propose Preventive Maintenance Implementation Plan

- 6.6.6. The Preventive Master Schedule will adopt the CMMS standard running number format:

(<6-digit running number>)

- i. Preventive Numbering: **PRM100001**

- 6.6.7. Preventive Work Order (PM Work Order) numbers will adopt the CMMS standard running number format:

(<prefix><6 digit running number>)

- i. **PWO** – Preventive Work Order (e.g., **PWO100001**)
- ii. Numbering will be standardized across all sites/entities

- 6.6.8. The preventive maintenance planning will be based on factor below: -

- i. Asset/Equipment (What)
- ii. Frequency (When)
- iii. Checklist/Maintenance Activity (How)

- 6.6.9. The preventive master will be configured as 'PM Schedule Date' loop, where the scheduled date for each PM is fixed according to the plan. The user only able to generate the next PM work order once the previous PM work order has been closed, even if the scheduled date has passed.

- 6.6.10. There will be checklist associate with preventive master and checklist to be defining by user based on the preventive activity to be carrying out, the result of the checklist could be check-box, text, number, date time and selection list.

- 6.6.11. PM Work Orders will be generated from the PM Master by Operation Team through the CMMS.

- 6.6.12. PM Work Orders will be completed and updated by the assigned PIC, including checklist results and actual work details.

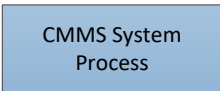
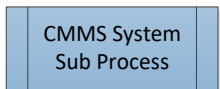
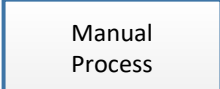
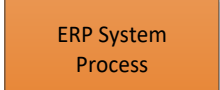
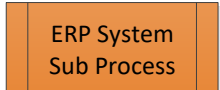
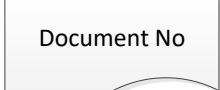
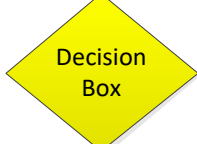
- 6.6.13. PM Work Orders will be reviewed and closed by the operation team. The operation team will verify completion based on checklist updates, technician remarks and recorded work details.

6.6.14. The CMMS mobile application for maintenance shall support the following Preventive Maintenance functions:

- i. Update Preventive Maintenance Work Order.
- ii. Update PM Work Orders with checklist input with the image attached
- iii. Complete Preventive Maintenance Work Orders
- iv. Print the report with image attached in the checklist

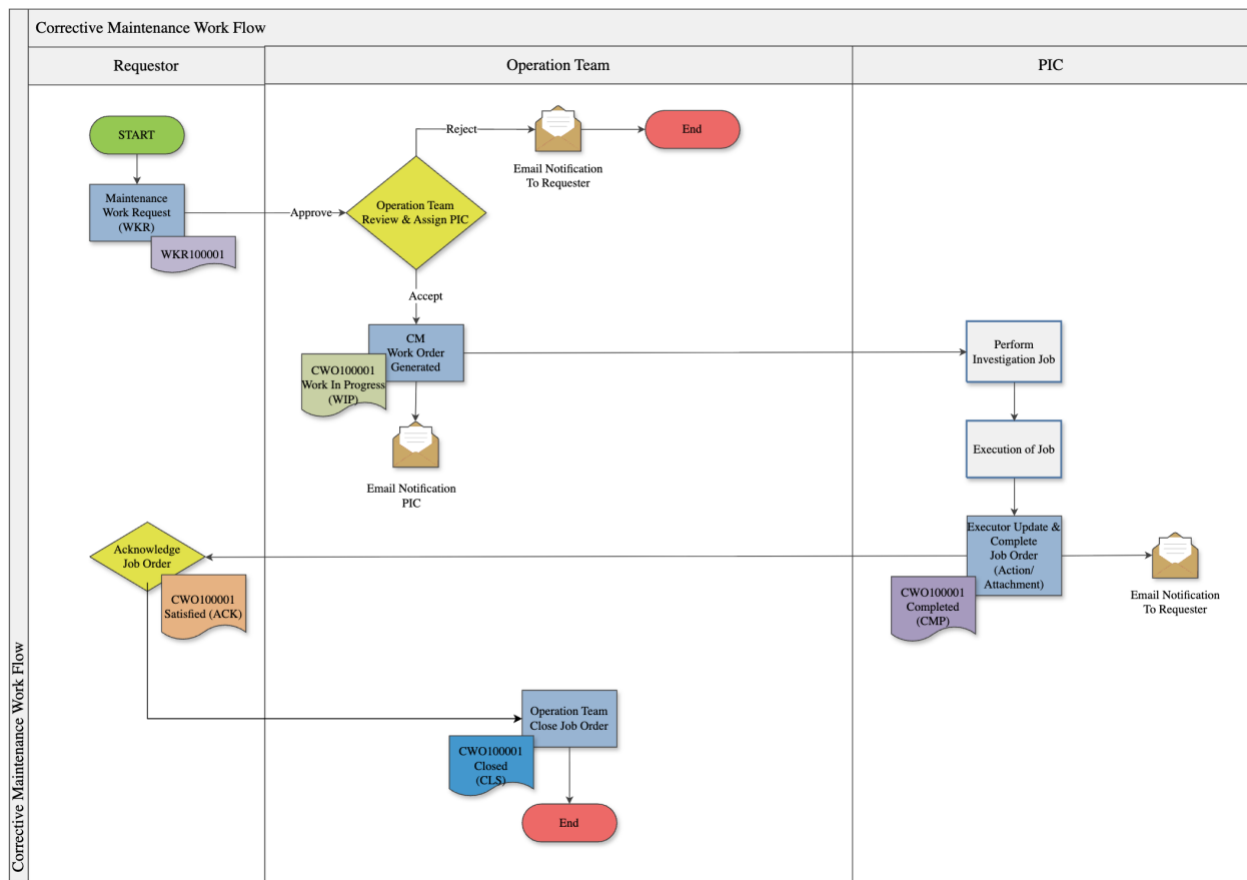
7. Recommended Workflow

7.1. Labelling Standard of Business Process Flow Chart

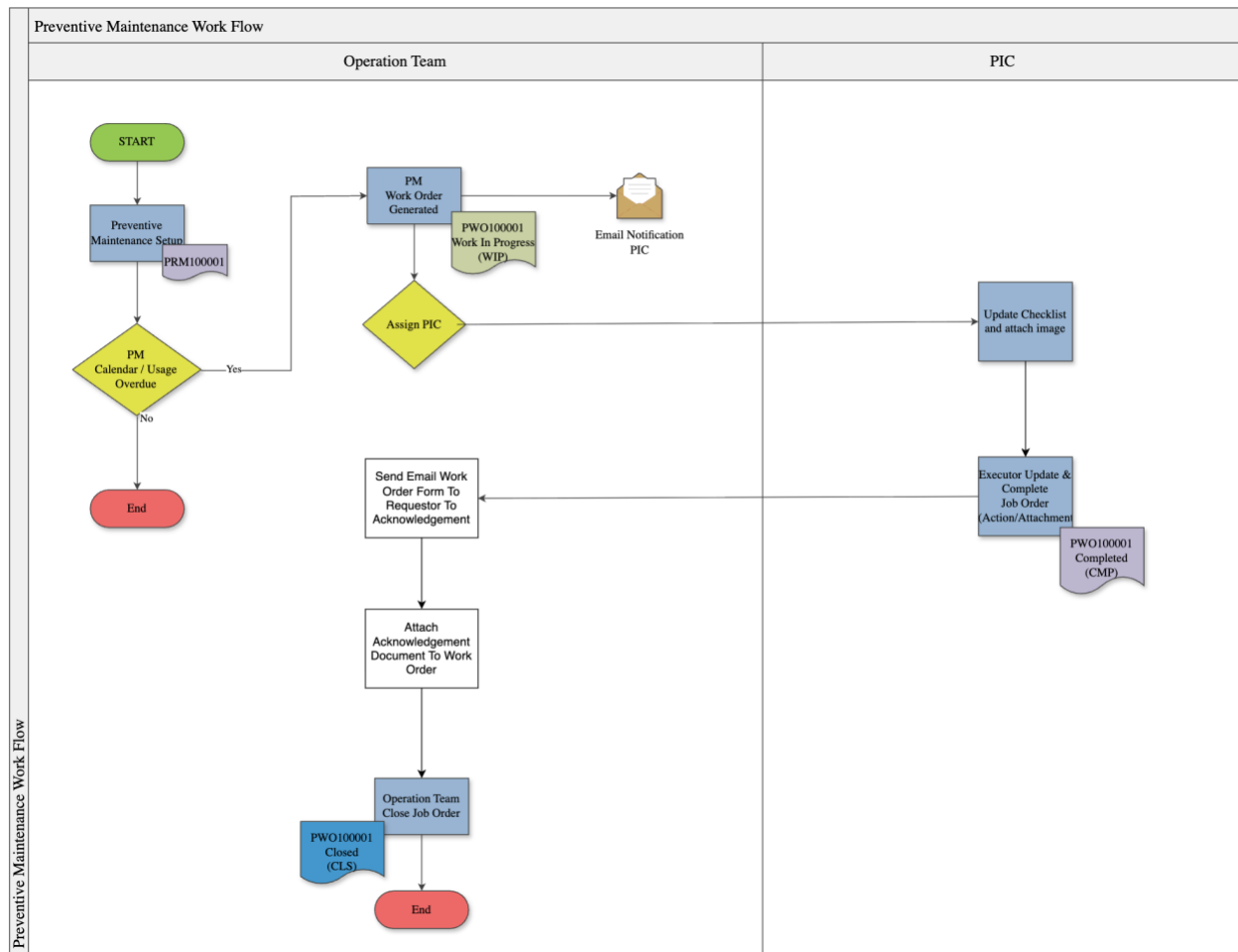
Diagram	Description
	This object is representing a start event that indicates where a particular process will start.
	This object is representing a CMMS system process using by Evantage CMMS application.
	This object is representing a CMMS System sub process by using Evantage CMMS applications in another module or another business process flow such as integration.
	This object is representing a manual process; it can be a task or activities that perform outside a system.
	This object is representing an ERP system process by PRONTO Software Application.
	This object is representing an ERP System sub process by using PRONTO Software applications in another module or another business process flow.
	This object is representing a printing document such as form or any document.
	This object is representing a decision-making box with remarks within a business process where the next action can take two or more alternative paths.
 Notification	This object represents a notification process in the system and the notification can be an email or a mobile notification.

	This object represents a connector that indicates where a flowchart to be drawn without intersecting lines or without a reverse flow.
	This object is representing an end event that indicates where a particular process will end.

7.2. Recommend Corrective Maintenance Workflow



7.3. Recommend Preventive Maintenance Workflow



8. Critical Requirement

From the scoping interviews and discussion, the key critical challenges and requirements for asset, maintenance and inventory management can be summarized into: -

No	Requirements	Recommendations
1	To allow users to attach image files to Work Orders as supporting documentation of the maintenance activity.	We recommend customizing the CMMS Work Order module to allow users to upload and store image attachments directly within the Work Order record for reference and documentation purposes.
2	To generate Work Order reports that include the images attached to the respective Work Order.	We recommend customizing the CMMS reporting function to include attached images in the generated Work Order report, ensuring that visual evidence and supporting documentation are available in the report.
3	To record Waste History data through the Work Order Checklist.	We recommend customizing the Work Order Checklist to allow users to key in and record Waste History data directly within the checklist, ensuring that waste records are captured together with the related maintenance activity.

9. Functionality Gap Analysis

Functionality gaps refer to the users' key challenges and requirements of which are not addressed by CMMS standard functionality.

There gaps are essentially based on the users input on the importance of the requirements or Evantage CMMS consultant's perception of the need.

No	Requirements	Gap Analysis	Potential Risk	Recommendations
1	The user requires General Waste information to be displayed consistently with the dashboard. The system should also provide a function to update the total input for General Waste Tracking records and generate the corresponding report.	CMMS currently does not have a dedicated Waste Management module for General Waste records.	General Waste quantities are not automatically aggregated and displayed on the dashboard.	Utilize the existing Checklist module to capture and upload General Waste Tracking records. Enhance the system to aggregate recorded waste quantities, display the total on the report, allow authorized users to update the total input when required, and generate a standardized General Waste report.
2	The user requires a customized report template for the PWO to submit to Maxis, including images attached to the checklist.	CMMS currently provides standard report formats but does not support the inclusion of images attached to the checklist in the generated report.	PWO may need to manually retrieve and attach the checklist images to the report, increasing report preparation time and the possibility of missing images or reporting errors.	Develop a customized report template based on the required Maxis format. The report should retrieve relevant data directly from CMMS and automatically include the images attached to the checklist. The report should also support print and export functionality for submission to Maxis.

No	Requirements	Gap Analysis	Potential Risk	Recommendations
3	The user requires the “Rework” option to be removed, leaving “Acknowledge” as the applicable option after completion.	CMMS currently provides a Rework option. The system can be configured or enhanced to remove/disable the Rework option based on the client's workflow requirement.	Users may select an incorrect workflow status, resulting in unnecessary status changes and inconsistency with the client's required approval process.	Remove or disable the Rework option from the applicable workflow. Once the Work Order reaches Completed status, the system should prevent further rework actions and allow the Work Order to proceed only through the required Acknowledgement process.
4	The user requires the Preventive Work Order (PWO) to be manually printable as an Acknowledgement Report. The printed report will be signed by Maxis and subsequently attached to the corresponding PWO record in CMMS.	CMMS currently does not fully support the required manual acknowledgement report workflow, including generating the required printable report, obtaining a physical signature, and attaching the signed document back to the PWO record.	A manual process may result in inconsistent documentation, difficulty in tracking signed acknowledgment, missing attachments, and reduced traceability of PWO completion and approval.	Enhance the PWO module to generate a printable Acknowledgement Report containing the relevant PWO details. The PWO user can print the report, obtain the Maxis representative's signature, scan/upload the signed document, and attach it to the corresponding PWO record for audit trail and future reference.

10. Implementation Recommendation

10.1. Key Benefits of CMMS Implementation:

- 10.1.1. Assets can be utilized more effectively
- 10.1.2. Planned Maintenance can be scheduled and executed efficiently
- 10.1.3. Preventive Maintenance programs can be designed and implemented effectively
- 10.1.4. Mobile tools can be leveraged for operational efficiency
- 10.1.5. Regular equipment assessments for safety and compliance can be performed

10.2. Suggested Implementation Path:

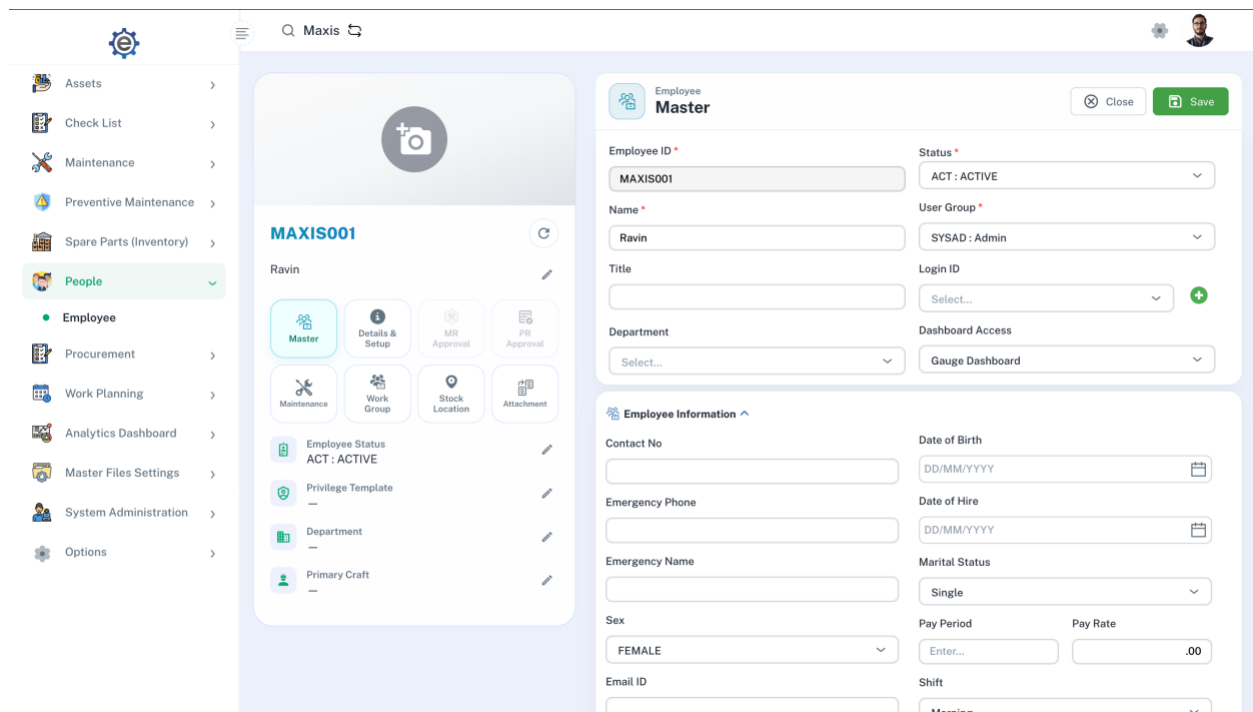
Based on the findings from the functional gap analysis, a phased and structured CMMS deployment is recommended to ensure:

- 10.2.1. Standardized workflows, asset numbering, and system configuration across site
- 10.2.2. Accurate capture of work orders, asset downtime, and maintenance history
- 10.2.3. Integration of inventory, spare parts, and purchase order tracking
- 10.2.4. Enhanced mobile and web applications for operations and maintenance users
- 10.2.5. Continuous monitoring and improvement to achieve operational efficiency and data integrity
- 10.2.6. This approach ensures maximum benefit realization while minimizing disruption during deployment.

10.3. Personnel Module

The Personnel module lets you create a record for every employee to efficiently track time spent on work orders.

Employee tab - The Employee tab is for general information. It includes the employee's status, work group, working shift, Material Request (MR) & Purchase Request (PR) approval level or authority, and so on.



The screenshot displays the 'Employee Master' form in the CMMS. The interface includes a sidebar menu on the left with options like Assets, Check List, Maintenance, Preventive Maintenance, Spare Parts (Inventory), People, Employee, Procurement, Work Planning, Analytics Dashboard, Master Files Settings, System Administration, and Options. The main content area is divided into two panels. The left panel, titled 'MAXIS001', shows a summary of the employee's status as 'ACT : ACTIVE' and lists various attributes such as Privilege Template, Department, and Primary Craft. The right panel, titled 'Employee Master', contains a detailed form for entering employee information. This form includes fields for Employee ID (MAXIS001), Status (ACT : ACTIVE), Name (Ravin), User Group (SYSAD : Admin), Title, Login ID, Department, and Dashboard Access (Gauge Dashboard). Below these, there is an 'Employee Information' section with fields for Contact No, Date of Birth, Emergency Phone, Date of Hire, Emergency Name, Marital Status (Single), Sex (FEMALE), Pay Period, Pay Rate (.00), Email ID, and Shift (Morning). The form has 'Close' and 'Save' buttons at the top right.



Assets >

Check List >

Maintenance >

Preventive Maintenance >

Spare Parts (Inventory) >

People >

Employee

Procurement >

Work Planning >

Analytics Dashboard >

Master Files Settings >

System Administration >

Options >

+

MAXIS001

Ravin

Master

Details & Setup

MR Approval

PR Approval

Maintenance

Work Group

Stack Location

Attachment

Employee Status
ACT : ACTIVE

Privilege Template
—

Department
—

Primary Craft
—

Employee

Details & Setup

Close Save

MR Approver / Limit

0.00

PR Approver / Global Limit

0.00

WO Budget Approver / Limit

0.00

WR Approver

Planner

Request Parts & Services

PM Generator

Enter Time Card

Void Time Card

Schedule Work Order

PO Buyer

Supervisor

Technician

Add/Delete Check List

Core Access

Mobile Access

Webwork Access

Employee Work Details ^

Primary Craft

Select...

Work Area

Select...

Remarks

Work Group

Select...

Supervisor ID

Select...

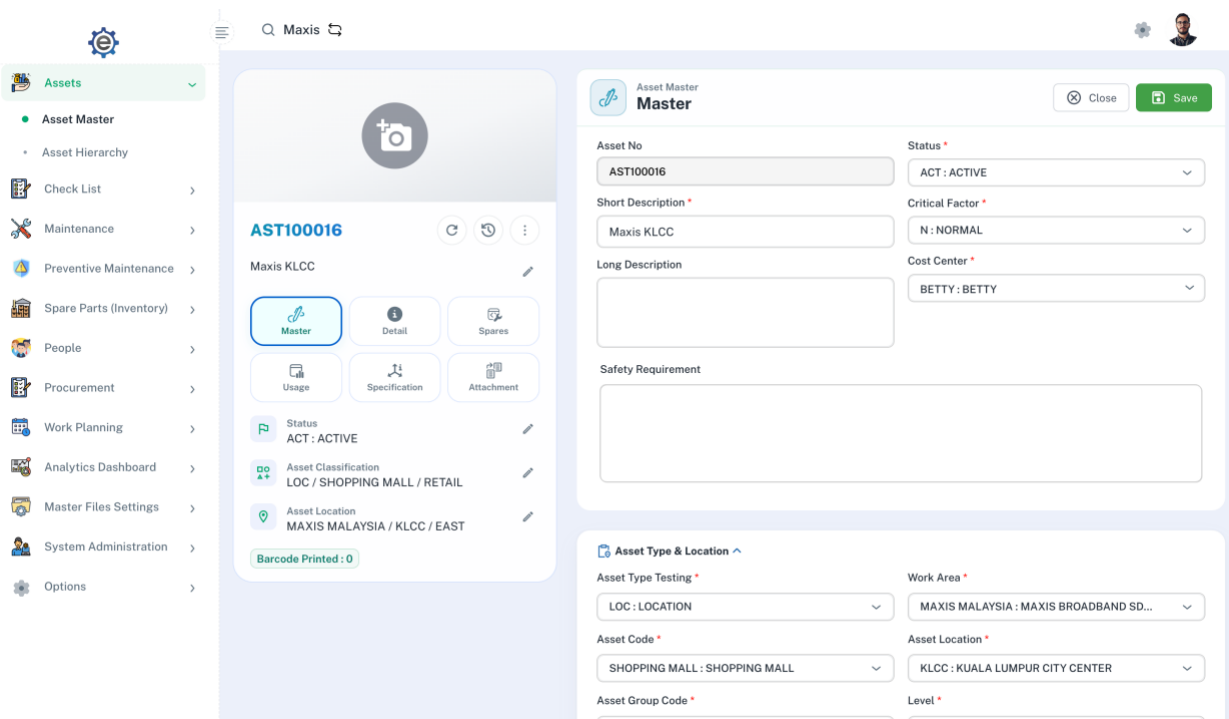
Note1

10.4. Asset Module

The Master Asset Record is the main source of information about every physical asset and piece of equipment/machine in the company with multiple images for single asset, it will showing the hierarchy of the asset based on production line/plants/system. Every work order, Preventive Maintenance, budget management, outsource services and material/parts request refers to this Master Record.

In CMMS, there is mapping for CMMS asset number with finance system asset number where this can be reconciled both mapping. E.g. for same asset in CMMS, there will be mapping as below:-

10.4.1. CMMS Number: AST100016



The screenshot displays the 'Asset Master' form in the CMMS interface. The left sidebar shows the navigation menu with 'Assets' selected. The main form area is titled 'Asset Master' and contains the following fields:

- Asset No:** AST100016
- Status:** ACT: ACTIVE
- Short Description:** Maxis KLCC
- Long Description:** (Empty text area)
- Safety Requirement:** (Empty text area)
- Asset Type Testing:** LOC: LOCATION
- Work Area:** MAXIS MALAYSIA: MAXIS BROADBAND SD...
- Asset Code:** SHOPPING MALL: SHOPPING MALL
- Asset Location:** KLCC: KUALA LUMPUR CITY CENTER
- Asset Group Code:** (Empty field)
- Level:** (Empty field)

Additional information visible in the form includes:

- Asset Classification:** LOC / SHOPPING MALL / RETAIL
- Asset Location:** MAXIS MALAYSIA / KLCC / EAST
- Barcode Printed:** 0




Maxis






Assets

- Asset Master
- Asset Hierarchy**
- Check List
- Maintenance
- Preventive Maintenance
- Spare Parts (Inventory)
- People
- Procurement
- Work Planning
- Analytics Dashboard
- Master Files Settings
- System Administration
- Options

Asset Hierarchy

Asset Description
Asset Location
Asset System

Order:
Work Area
Level
Asset Location
Assets

Asset Hierarchy By Location

Work Area
MAXIS MALAYSIA : MAXIS BROADBAND SDN BHD

Level
CENTRAL : CENTRAL

Level
EAST : EAST

Asset Location
KLCC : KUALA LUMPUR CITY CENTER

AST100016 : Maxis KLCC

URS – Evantage CMMS

Confidential

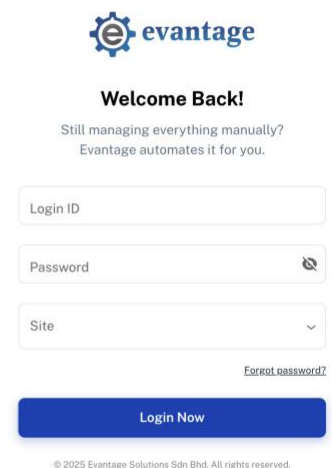
Page 36 of 54

10.5. Web Work Request

The work request/job sheet can be created via the web work. The web work request module will be provided to the users to log or submit their work request/job sheet. It also allows the user to check on the status of their request.

A web work is a request for a work to be carryout, work order will be created upon the operation users raise the web work, work order number will be the reference number for the work.

Fault code is necessary for equipment in order to get the root-cause analysis history. Work Type is required in order to classify the complaint.

evantage

Welcome Back!

Still managing everything manually?
Evantage automates it for you.

Login ID

Password

Site

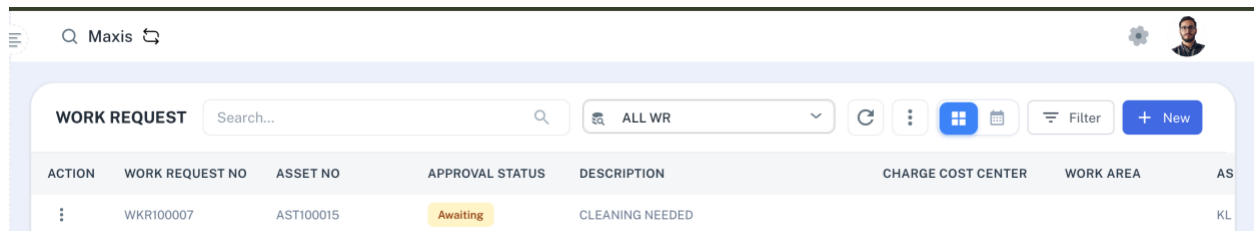
[Forgot Password?](#)

Login Now

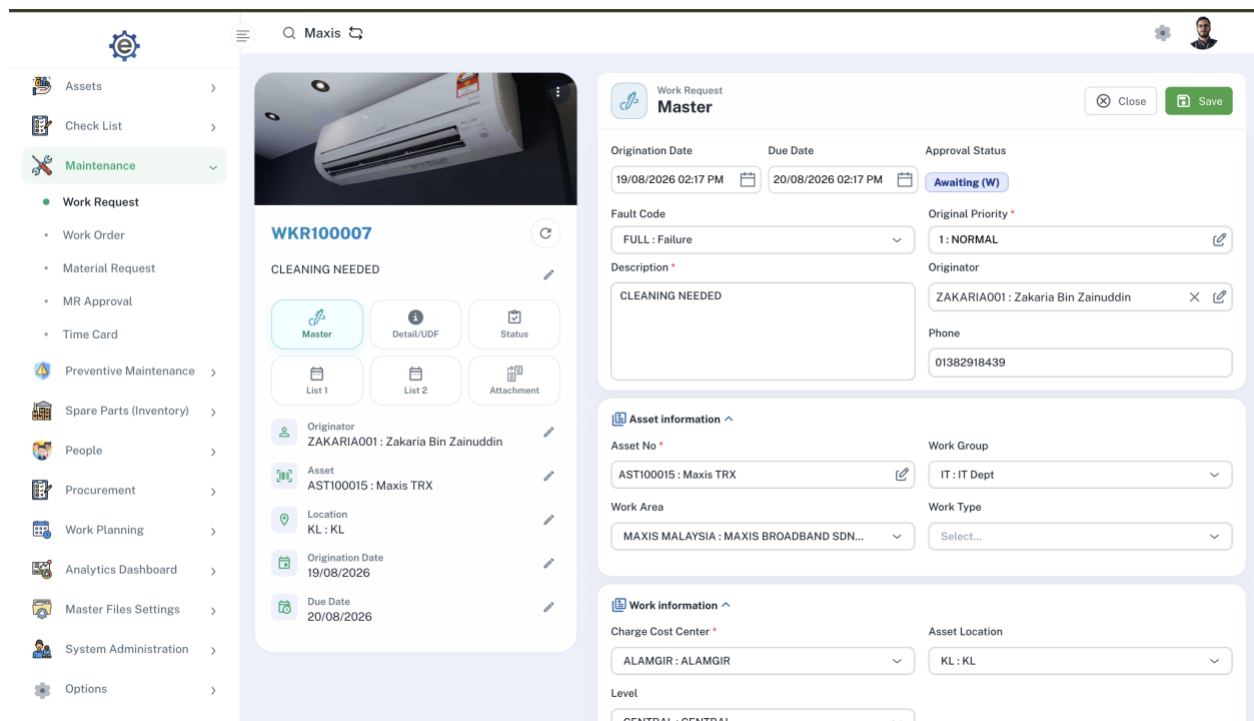
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10.6. Review Work Request

Once the asset number has been identified, the review work request screen allows maintenance user to review this request into a work order and route it to the designated maintenance personnel to investigate the request.



ACTION	WORK REQUEST NO	ASSET NO	APPROVAL STATUS	DESCRIPTION	CHARGE COST CENTER	WORK AREA	AS
	WKR100007	AST100015	Awaiting	CLEANING NEEDED			KL



Assets

Check List

Maintenance

Work Request

Work Order

Material Request

MR Approval

Time Card

Preventive Maintenance

Spare Parts (Inventory)

People

Procurement

Work Planning

Analytics Dashboard

Master Files Settings

System Administration

Options

WKR100007

CLEANING NEEDED

Master

Detail/UDF

Status

List 1

List 2

Attachment

Originator
ZAKARIA001 : Zakaria Bin Zainuddin

Asset
AST100015 : Maxis TRX

Location
KL : KL

Origination Date
19/08/2026

Due Date
20/08/2026

Work Request Master

Close

Save

Origination Date
19/08/2026 02:17 PM

Due Date
20/08/2026 02:17 PM

Approval Status
Awaiting (W)

Fault Code
FULL : Failure

Original Priority
1 : NORMAL

Description
CLEANING NEEDED

Originator
ZAKARIA001 : Zakaria Bin Zainuddin

Phone
01382918439

Asset information

Asset No
AST100015 : Maxis TRX

Work Group
IT : IT Dept

Work Area
MAXIS MALAYSIA : MAXIS BROADBAND SDN...

Work Type
Select...

Work information

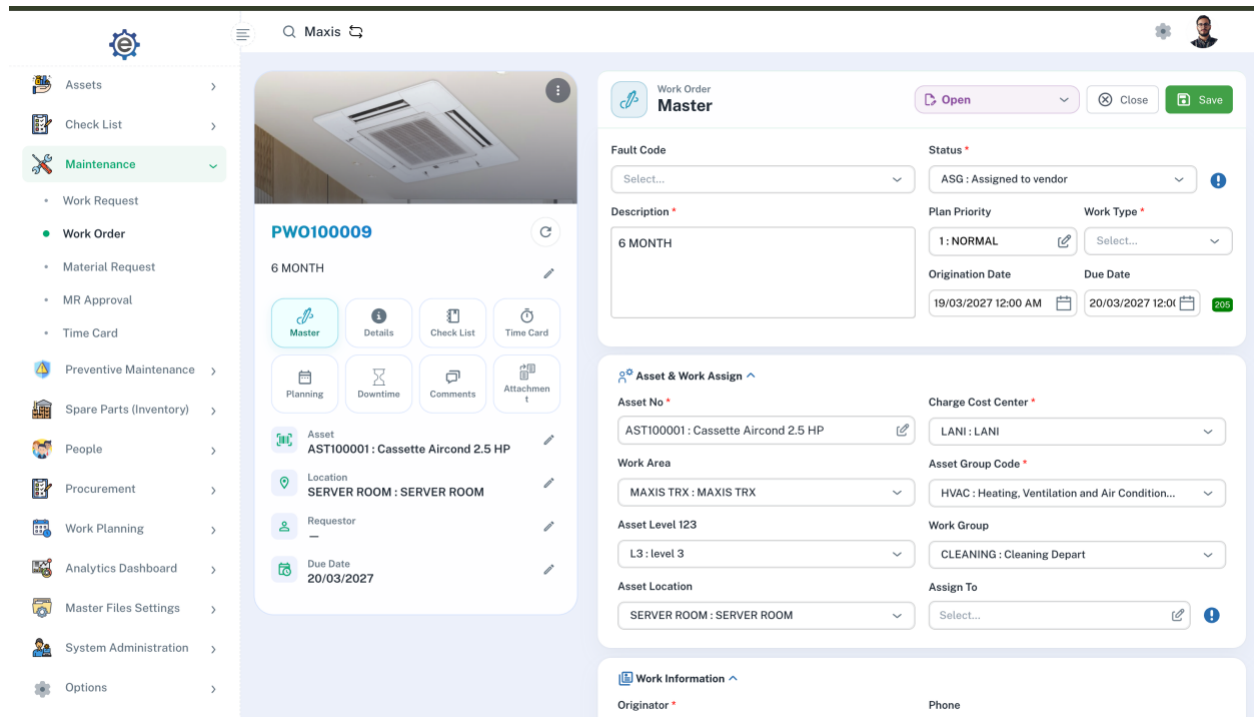
Charge Cost Center
ALAMGIR : ALAMGIR

Asset Location
KL : KL

Level
CENTRAL : CENTRAL

10.7. Work Order Module

Once Web Work Request created by the operation, maintenance will review the work request/job sheet and convert to Work Order with given number and status on the work order.



The screenshot displays the 'Work Order Master' form in the CMMS. The left sidebar shows a navigation menu with categories like Assets, Check List, Maintenance, Preventive Maintenance, Spare Parts (Inventory), People, Procurement, Work Planning, Analytics Dashboard, Master Files Settings, System Administration, and Options. The main form area is titled 'Work Order Master' and includes a 'PWO100009' header with a '6 MONTH' duration. Below this, there are tabs for Master, Details, Check List, Time Card, Planning, Downtime, Comments, and Attachments. The form fields are organized into sections: 'Fault Code' (Select...), 'Status' (ASG: Assigned to vendor), 'Description' (6 MONTH), 'Plan Priority' (1: NORMAL), 'Work Type' (Select...), 'Origination Date' (19/03/2027 12:00 AM), and 'Due Date' (20/03/2027 12:00). The 'Asset & Work Assign' section includes 'Asset No' (AST100001: Cassette Aircond 2.5 HP), 'Charge Cost Center' (LANI: LANI), 'Work Area' (MAXIS TRX: MAXIS TRX), 'Asset Group Code' (HVAC: Heating, Ventilation and Air Condition...), 'Asset Level 123' (L3: level 3), 'Work Group' (CLEANING: Cleaning Depart), 'Asset Location' (SERVER ROOM: SERVER ROOM), and 'Assign To' (Select...). The 'Work Information' section at the bottom includes 'Originator' and 'Phone' fields. A 'Save' button is located at the top right of the form.

10.7.1. The Work Orders function lets you:

- i. Create and track work orders-
- ii. Maintain work order histories-
- iii. Plan activities for corrective work orders such as spare parts usages and outsource services.
- iv. Detailed tracking of actual maintenance costs per work order occurs automatically.
- v. Workforce tracking for the personnel who on the work.

11.Data Migration Plan

Data which will be populated in CMMS are migrated from standard data template which will be provided by EVANTAGE. Data collection and validation will be done by IS Ikhlas to ensure data accuracy and completeness.

The following are the data templates required for data migration.

11.1. Asset Records

No	Table Name	Description
1.	AST_MST	Asset/Machine Master Table with information such as asset number, description, asset type, group code and etc. of the asset.
2.	AST_DET	Asset/Machine Detail Table with information such as manufacturer, model, serial no, warranty date, purchase date and etc. of the asset.

11.2. Employee Records

No	Table Name	Description
3.	EMP_MST	Employee Master Table with information of the personnel such as employee ID, name, status, date of hirer, title and etc.
4.	EMP_DET	Employee Detail Table with information of the personnel such as permission settings, work area, shift, craft, work group and etc.

11.3. Preventive Maintenance Records

No	Table Name	Description
5.	PRM_MST	Preventive Master Table with information of the preventive schedule such as asset, frequency code, LPM Date, Next Due Date and etc.
6.	PRM_DET	Preventive Detail Table with information of the preventive schedule such work area, work group, action code, work planning and etc.

11.4. Checklist Records

No	Table Name	Description
7.	JOB_MST	Unique code to identify the asset and the corresponding Preventive Maintenance (PM) checklist to be used.
8.	SEC_MST	Divides the checklist into different sections for better organization and clarity. Each checklist can have multiple sections.
9.	STP_MST	Defines the individual steps within each section that the technician must follow during the maintenance task.

12. Training Plan

EVANTAGE training is structured to ensure all user roles are proficient in using the system. Training is categorized as follows:

12.1. Training Categories

12.1.1. Requestor Training

- i. Targeted for IS Ikhlas personnel.
- ii. Participants will learn how to:
 - (i) Raise a Work Request via the Web Work application
 - (ii) Monitor work status
 - (iii) Acknowledge completed Work Orders

12.1.2. Operation Team Training

- i. Conducted for Operation Team Participants will be introduced to the CMMS Mobile Application, which allows them to:
 - (i) Update Work Orders (Attachment Update)
 - (ii) Complete checklists and finalize Work Orders

12.1.3. System Admin Training

- i. Designed for Super Users.
- ii. Participants will gain comprehensive knowledge of EVANTAGE modules, including Asset Management, Work Order Management, Preventive Maintenance, and other supporting modules.
- iii. Super Users will act as trainers and also play a key role in the User Acceptance Training (UAT).

12.2. Training Methodology

All EVANTAGE training sessions will replicate a complete working environment with realistic scenarios to ensure participants gain hands-on experience with the system.

12.2.1. Responsibilities and Setup:

- i. Trainer (Evantage Team) will:
 - (i) Create a training database to allow practice without affecting live data.
 - (ii) Provide access to training environments and training support.
- ii. Client (IS Ikhlas) will:
 - (i) Provide network connectivity to access the system.
 - (ii) Provide participant devices, including computers or mobile devices.

12.2.2. Participant will have full opportunity to practice on the new system during training.

12.2.3. Training Approach:

- i. Microsoft PowerPoint slide presentations
- ii. Hands-on use of application
- iii. Question & Answer (Q&A) sessions

12.3. Training Schedule

Training will be conducted according to the current project plan. Schedule dates may be subject to change

Session	Duration	Date
Requestor (mostly Web Work)	1 Hour per session x 2	01 October 2026
PIC (mostly Mobile App)	2 Hour per session	01 October 2026
Operation Team (mostly Web Core)	1 day / 4 hours	01 October 2026

Table 1: Training Schedule EVANTAGE CMMS

13. Acceptance Testing

Acceptance testing of the system will be performed in conjunction with IS Ikhlas Acceptance testing is undertaken for the complete system as planned and defined during the build phase. Operational testing can also check against pre-defined scenarios to ensure that the system is acceptable in the specific environment.

EVANTAGE Project Manager will ensure that all documentation associated with testing is kept together. Documentation will include the test scripts, printouts, screen dumps, etc used in the testing process.

The testing should comprise of a number of scenarios that reflect the operations, scheduling and reporting.

The standard features that should be tested include:

- i. Asset Management.
- ii. Work Order Management workflow.
- iii. Preventive Maintenance (PM) Management
- iv. Employee Management.
- v. CMMS Mobile.
- vi. Reports.

These same features should be tested whenever a patch or upgrade has been loaded into the test environment before conversion into the live environment.

14. Appendices

The section provides some sample documents currently use in the manual/existing process/recommend process.

The submission documents from IS Ikhlas as below are intended for reference only. It is for EVANTAGE to study and consolidate the requirement into CMMS system.

14.1. Appendices A: Work Done Acknowledgement

IS IKHLAS SUCI (M) SDN BHD

WORK DONE ACKNOWLEDGEMENT

PROJECT : PERIODIC CLEANING

LOCATION : MAXIS IPC

DATE	DESCRIPTION	REMARKS
6 JULY 2026	1. Floor Scrubbing	
	2. Wet and Dry Floor Cleaning	
	3. Remove Cobwebs	
	4. Wipe Air Conditioner Grilles	

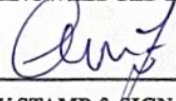
DONE BY:



NAME: Siti Aminah Sawfa

DATE: 6 July 2026
Senior Maintenance Officer
IS Ikhlas Suci (M) Sdn Bhd

ACKNOWLEDGED BY:



COMPANY STAMP & SIGNATURE

NAME: DEVI NADARAJA

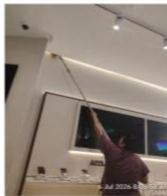
DATE: 6/7/2026

MAXIS CENTRE IPC
 L1.12A, & L1.12B
 Level 1 IPC Shopping Centre,
 No. 2 Jalan PJU 7/2, Mutiara Damansara
 47800 Petaling Jaya, Selangor.

14.2. Appendices B: Periodic Cleaning



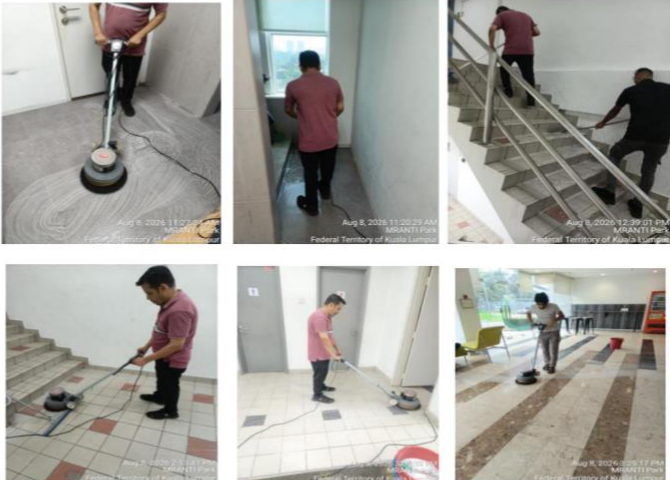
PERIODIC CLEANING MAXIS IPC

DESCRIPTION	PHOTO						
<table border="1"> <tr> <td>Date</td><td>6 June 2026</td></tr> <tr> <td>Location</td><td>Maxis IPC</td></tr> <tr> <td>Description</td><td>Periodic Cleaning</td></tr> </table>	Date	6 June 2026	Location	Maxis IPC	Description	Periodic Cleaning	     
Date	6 June 2026						
Location	Maxis IPC						
Description	Periodic Cleaning						

14.3. Appendices C: Preventive Work Order (PWO)



TILE SCRUBBING MAXIS SG BESI

DESCRIPTION	PHOTO						
<table border="1"> <tr> <td>Date</td><td>8 August 2026</td></tr> <tr> <td>Location</td><td>Maxis Sg Besi TOC</td></tr> <tr> <td>Description</td><td>Tile scrubbing staircase from GF to L3 and both Surau Ablution Areas L2</td></tr> </table>	Date	8 August 2026	Location	Maxis Sg Besi TOC	Description	Tile scrubbing staircase from GF to L3 and both Surau Ablution Areas L2	
Date	8 August 2026						
Location	Maxis Sg Besi TOC						
Description	Tile scrubbing staircase from GF to L3 and both Surau Ablution Areas L2						

14.4. Appendices D: Preventive Maintenance Schedule



PERIODIC CLEANING MAXIS NILAI TOC

DESCRIPTION	PHOTO						
<table border="1"> <tr> <td>Date</td><td>20 April 2026</td></tr> <tr> <td>Location</td><td>Maxis Nilai TOC</td></tr> <tr> <td>Description</td><td>Periodic Cleaning</td></tr> </table>	Date	20 April 2026	Location	Maxis Nilai TOC	Description	Periodic Cleaning	
Date	20 April 2026						
Location	Maxis Nilai TOC						
Description	Periodic Cleaning						

14.5. Appendices E: Daily Compressor Checklist

IS IKHLAS SUCI (M) SDN BHD

WORK DONE ACKNOWLEDGEMENT

PROJECT : PERIODIC CLEANING
LOCATION : NILAI TOC

DATE	DESCRIPTION	REMARKS
20 APRIL	sweeping, vacuuming, mopping floors,	
	wiping surfaces, clearing rubbish	

DONE BY:

NAME: 
DATE: Siti Aminah Sawfa
Senior Administrative Officer
IS Ikhlas Suci (M) Sdn Bhd

ACKNOWLEDGED BY:
MAXIS BROADBAND SDN BHD
PT 8100, Jalan BBM 5/1A, Desa Jasmin,
Sandar Baru Nilai, 71800 Nilai, N.Sembila

COMPANY STAMP & SIGNATURE

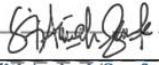
NAME: M. MANIVANAN
DATE: 5/5/2026

14.6. Appendices F: Daily Temperature Monitoring

IS IKHLAS SUCI (M) SDN BHD
WORK DONE ACKNOWLEDGEMENT

PROJECT : TILE SCRUBBING
LOCATION : MAXIS SG BES1 TOC

DATE	DESCRIPTION	REMARKS
8/8/2026	TILE SCRUBBING STAIRCASE GF TO	
	LVL 2 AND BOTH SURAU ABLUTION	
	ON LEVEL 2	

DONE BY: 
NAME: Sawfa
DATE: 8/8/2026
Senior Administrative Officer
IS Ikhlas Suci (M) Sdn Bhd

ACKNOWLEDGED BY: 
COMPANY STAMP & SIGNATURE
NAME: M. AIN
DATE: 03147 11/08/26
PMD FACILITIES

Maxis Broadband Sdn Bhd
199201002549 (234053-D)
Level 21, Menara Maxis
Kuala Lumpur City Center
50088 Kuala Lumpur

14.7. Appendices N: CMMS SUPPORT MAINTENANCE

Overview

Evantage superior software product quality guarantees long software development product life cycle. A continuous development of supporting software for Evantage CMMS, as well as a versatile support service concept, assures our customer investments. Furthermore, our after-sales support team offers our customers a broad and reliable service that guarantees quick and smooth deliverables.

With our Support and Maintenance Services you never have to do it alone. From small organizations to large global enterprises, our Support and Maintenance Services can provide the appropriate level of technical consultation; support and maintenance to meet you're demanding IT needs.

We keep training our staff both local and overseas to gain all the necessary knowledge and skills within our main core expertise.

Evantage after Sales Support

- Software Support for Evantage Solution.

Our helpdesk engineer will be responsible for providing on-going support and for ensuring that our professional software support service is being rendered to our customer. All requests can be channelled through this helpdesk engineer whose job is to ensure customer's problem is being attended quickly. Software support file sharing site will be setup to include all product knowledge, standard operating procedure, user guide and others to view by customers.

- Period Of Coverage

The services specified in this standard contract will be performed during our normal business support hours between 9.00 AM and 5.30 PM from Monday to Friday excluding all Malaysian Government gazette Public Holidays and our company's own holidays during the Chinese, Malay and Indian New Years.

- On-site Assistance

This contract shall include an unlimited Hotline support via telephone call in or via email. In addition, we will require permission to use internet based assistance to provide instant response for critical issues. Only if a critical issue cannot be resolved via remote assistance then we go onsite to resolve it for Free of Charge.

- Hotline Service

Evantage shall provide an unlimited hour of Hotline “you call us” telephone software support for user queries and assistance. This service is available during our normal working day as mentioned above. After working hours and Government gazette Public Holidays and our company’s own holidays during the Chinese, Malay and Indian New Year’s will be on standby basic by dedicated support engineer.

- Future Software Patches/ Update Release

New version/patches/upgrade software releases are provided free to customer in form of CD or DVD to IS Ikhlas with valid Annual Maintenance Support. The improved features and how the changes may affect the Customer’s particular circumstances. Usually, we will agree with customer the new software release implementation plan to minimise disruption caused by the upgrade process.

- Emergency On-site Assistance

In the event of any critical issue, priority efforts will be made to deploy an authorized software engineer to IS Ikhlas site within 24 hours.

- On Site engagement for Special Request

Any On Site engagement for Special Request such as Upgrade assistance, system assessment, skill sharing, workshop training, advanced troubleshooting & disaster recovery assistance will be agree with IS Ikhlas on how to carry out and it is subject to priority with earlier notice to Evantage for necessary arrangement.

- System Health Check - Evantage will perform health check bi-yearly to ensure:

- ✓ Continuous system tuning to ensure optimal performance for the CMMS system.
- ✓ Continuous monitoring to ensure system performance is always in excellent operational state.
- ✓ Meeting the uptime of 99% per month and the down of system that is by system and not external factor like network issue, user negligence, hardware failure and etc.

- System Downtime

Written Notice of scheduled system downtime to all users must made minimum one (1) calendar week before the downtime or any other appropriate time as required by IS Ikhlas.

15.Evantage CMMS Solutions Support Work Flow

