

**Flight Information Display System**

**SYSTEM OPERATION DOCUMENT**

**MAB/GROUP IT/SOD/FIDS/V1.4**

**Prepared by:**

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1. - MANUAL ADMINISTRATION

# RECORD OF REVISION

| **No.** | **Description Of Changes** | **Issue No.** | **Rev. No.** | **Author** | **Effective Date** |
| --- | --- | --- | --- | --- | --- |
| 1 | Original – Initial document | 1 | 0 | Ranjith T | 19-Sep-2018 |
| 2 | Adding Movement and Layover Screens | 1 | 1 | Anusha | 28-May-2019 |
| 3 | Adding Arrival and Departure Screens for KLIA | 1 | 2 | Deepti Jain | 29-Aug-2019 |
| 4 | Updated Contract Management | 1 | 3 | Krishnakant Bairagi | 26-June-20 |
| 5 | Added MTB and Satellite screen URLS for Change request | 1 | 4 | Krishnakant Bairagi | 13-AUG-20 |

# LIST OF EFFECTIVE PAGES

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Part** | **Page** | **Issue No.** | **Revision No.** | **Effective Date** |  | **Part** | **Page** | **Issue No.** | **Revision No.** | **Effective Date** |
| 1 | 1-1 | 1 | 0 | 19-09-18 |  |  | 4-17 | 1 | 0 | 19-09-18 |
|  | 1-2 | 1 | 1 | 25-05-19 |  |  | 4-18 | 1 | 0 | 19-09-18 |
|  | 1-2 | 1 | 3 | 26-06-20 |  |  |  |  |  |  |
|  | 1-3 | 1 | 1 | 25-05-19 |  |  | 4-19 | 1 | 0 | 19-09-18 |
|  | 1-4 | 1 | 0 | 19-09-18 |  |  | 4-20 | 1 | 0 | 19-09-18 |
|  | 1-5 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 1-6 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
| 2 | 2-1 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 2-2 | 1 | 1 | 28-05-19 |  |  |  |  |  |  |
|  | 2-3 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
| 3 | 3-1 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 3-2 | 1 | 1 | 29-08-19 |  |  |  |  |  |  |
| 4 | 4-1 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-2 | 1 | 1 | 25-05-19 |  |  |  |  |  |  |
|  | 4-3 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-4 | 1 | 1 | 05-08-20 |  |  |  |  |  |  |
|  | 4-5 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-6 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-6 | 1 | 2 | 29-08-19 |  |  |  |  |  |  |
|  | 4-7 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-8 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-9 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-10 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-11 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-12 | 1 | 2 | 13-08-20 |  |  |  |  |  |  |
|  | 4-13 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-14 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-14 | 1 | 3 | 26-06-20 |  |  |  |  |  |  |
|  | 4-15 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |
|  | 4-16 | 1 | 0 | 19-09-18 |  |  |  |  |  |  |

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Table 1: Distribution List

# LIST OF ABBREVIATIONS

The following are the abbreviations used for the purpose of simplification.

|  |  |
| --- | --- |
| **Abbreviation** | **Denote** |
| FIDS | Flight Information Display System |
| AMS | Application Maintenance & Support |
| MD | Managing Director |
| CFO | Chief Financial Officer |
| NRM | Network and Revenue Management |
| SOD | System Operating Document |
| DCT | Data Centre Transformation |
| FOCA | Foreign Carrier |

Table 2: List of Abbreviations

# CONDITION OF USE

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1. - MANUAL BACKGROUND

# INTRODUCTION

This is the FIDS SOD, hereinafter referred to as “the Policy” provides comprehensive operating procedures within the scope and application herein defined in Part 2 Section 3.0 for Malaysia Airlines Berhad (MAB).

# PURPOSE

The objective of this document is to provide a coherent description of the overall design of the Flight Information Display System, to enable and assist the technical and development team in the development and implementation of the system.

Hereafter in this document, Flight Information DisplaySystemwill be referred to as FIDS.

# SCOPE AND APPLICATION

This document covers relevant information required to operate and support the FIDS system in production environment. This covers the maintenance operation of the system, database and interfaces.

This SOD does not include the following:

* Application maintenance for the sub-systems interfaced by the core system.

# TERMINOLOGY

The following are the terminologies used for simplification.

|  |  |  |
| --- | --- | --- |
| **No.** | **Term** | **Description** |
| 1. | App | Application |
| 2. | DB | Database |
| 3. | DSL | Domain Specific Language |
| 4. | AD | Active Directory |
| 5. | OS | Operating System |
| 6. | SOD | System Operational Document |

Table 3: Terminology

# REFERENCES

The following are references used for preparing the document.

| **No.** | **Document** | **Description** |
| --- | --- | --- |
| 1 | SOW | Statement of Work as supplied as agreed upon between ATOS and MAB |
| 2 | Test Plan Document | Document highlighting the Test plan for the collaboration platform. This is supplied by TCS |

Table 4: References

1. – OVERVIEW OF BUSINESS PROCESS

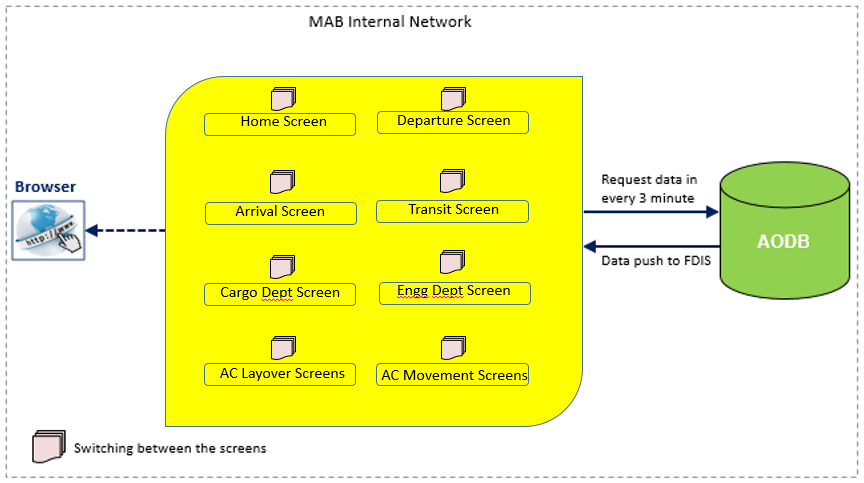
# OVERVIEW OF BUSINESS PROCESS

FIDS (Flight Information DisplaySystem) application is used to effectively display the flight details for a range of C-6 hours to C+1 hour where C represents current time in MYT. Flight Information Display System will extract required information from AODB system and displayed on the portal. The data on the portal will be displayed on TV or screen for better tracking of Departure and Arrival flights.

As part of Phase 2, FOCA flights included in the AODB data to display in the screen.

As part of Phase 3, AC layover and AC movement screens included in the system.

As part of Phase 4, customized Arrival and Departure screens included in the system for use at KLIA.



*Figure 1: Overview of Business Process*

1. - MANUAL CONTENT TITLE

# SYSTEM OVERVIEW

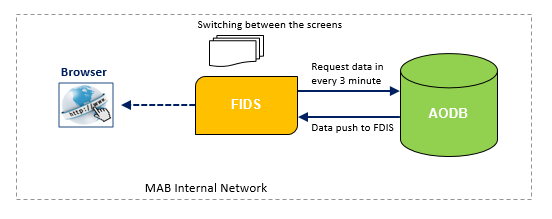
Flight Information Display System is designed to extract required information from AODB system and displayed on the portal. The data on the portal will be displayed on TV or screen for better tracking of Departure and Arrival flights.

FIDS Portal has the following features:

* The application will extract the Departure Flight List from AODB for a range of C-6 hours to C+1 hour where C represents current time in MYT and will be shown under Departure Flight list.
* The application will extract the Arrival Flight List from AODB for a range of C-6 hours to C+1 hour where C represents current time in MYT and will be shown under Arrival Flight list.
* The application has a transit page that contains both the arrival and departure details of the flight.
* The changes must be fetched from AODB in every 3 minute. This will be pushed to the view without reloading the application.
* Data changes identified should be marked in different colour comparing with the normal data font colour.
* Station code will be passed in application URL as a parameter and same will be used for filtering the data list.
* Departure Flight List and Arrival Flight List must be divided into multiple screens to show all entries in the screen.
* The application should automatically switch the different pages (in sequence and in infinite loop) of the application for the pre-defined period that is configured in the database.
* Department specific screens are introduced in FIDS-Phase2. The department specific URL can be accessed via web-browser by passing the department name as a parameter in the URL.
* The application will include the FOCA flight info in Departure, Arrival, Transit and Department Specific Transit Screens.
* New separate screens for Departure, Arrival and Transit with different URL.
* New screen for cargo available over new URL with station parameter configurable for different stations
* New static screens have been added for Aircraft Movement monitoring as a part of FIDS phase 3. Two static screens are added in Satellite terminal and three static screens are added in MTB terminal
* New screens have also been added for Aircraft Layover monitoring as a part of FIDS phase 3. One screen is for Satellite terminal and one for MTB terminal.
* New separate screens one each for Departure and Arrival from KL introduced for use at KLIA to overcome the network crisis.

# SYSTEM CONCEPT DIAGRAM

The below diagram shows the concept diagram for FIDS application.

 *Figure 2: FIDS Concept Diagram*

# INTERFACES

## 4.3.1 User Interfaces

The business users shall access the FIDS via a web browser available in their computer and accesses to the system allowed through Intranet. Station code will be passed from application in the URL to filter data while fetching from view/procedure.

The FIDS will be accessible through the following link via intranet.

1. Operations Screen : [http://fids.mas.net/fids/#/home?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)
2. Arrival page :  [http://fids.mas.net/fids/#/arrival?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)
3. Departure page :  [http://fids.mas.net/fids/#/departure?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)
4. Transit page :   [http://fids.mas.net/fids/#/transit?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)
5. Cargo home page :  [http://fids.mas.net/fids/#/cargo?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)
6. Engineering department page: [http://fids.mas.net/fids/#/flightInfo?station=KUL&department=Engineering](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)
7. Satellite Layover page: <http://fids.mas.net/fids/#/SatLayover>1
8. MTB Layover page: <http://fids.mas.net/fids/#/MTBLayover>1
9. Satellite Aircraft Movement Screen 1: <http://fids.mas.net/fids/#/MvmtSat1>
10. Satellite Aircraft Movement Screen 2: <http://fids.mas.net/fids/#/MvmtSat2>
11. Satellite Aircraft Movement Screen 3: <http://fids.mas.net/fids/#/MvmtSat3>
12. MTB Aircraft Movement Screen 1: <http://fids.mas.net/fids/#/MvmtMtb1>
13. MTB Aircraft Movement Screen 2: <http://fids.mas.net/fids/#/MvmtMtb2>
14. MTB Aircraft Movement Screen 3: <http://fids.mas.net/fids/#/MvmtMtb3>
15. KLIA Arrival page :  <http://fids.mas.net/fids/#/kliaarrival?station=KUL>
16. KLIA Departure page :  <http://fids.mas.net/fids/#/kliadeparture?station=KUL>

Browser Support

|  |  |  |
| --- | --- | --- |
| **SI.NO** | **Browser** | **Support** |
| 1 | Google Chrome | Yes |
| 2 | IE | Yes |
| 3 | Firefox | Yes |

Table 5: List of supporting browsers

## 4.3.2 System Interfaces

**Interface with AODB**

FIDS Portal is integrated with AODB for fetching the Flight information for a range of C-6 hours to C+1 hour where C represents current time. The integration with AODB shall adopt the existing standards currently practiced by Group IT.

| **Sl** | **Interfaced system** | **Description** | **Transfer Mode** |
| --- | --- | --- | --- |
| 1. | AODB | The application is interfaced with AODB to extract required information and displayed on the portal. | HTTP protocol |

Table 6: Interfaces

# WARRANTY AND MAINTENANCE PERIOD

The following table shows the warranty and maintenance period as per contract.

|  |  |  |
| --- | --- | --- |
| **Warranted Items** | **Start Date** | **End Date** |
| Linux Servers Hardware maintenance by Hitachi. | Renewal from last maintenance contract | 31 May 2021 |
| FIDS application maintenance by AMS support team | June 2019 | 31 May 2019 |

Table 7: Warranty & Maintenance Period

# ROLES AND RESPONSIBILITIES

Below are the roles and responsibilities of SCV support persons,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Role** | **Responsibility** | **Name** | **Company / Department** | **Contact (Phone & Email)** |
| Application SME | Responsible for providing requirements. | FIDS Support Team | ATOS | GD\_AMS\_FIDS@malaysiaairlines.com |
| Database Admin | Responsible for Database configuration and monitoring system performance | Database Team | Tata Consultancy Services | GD\_TCSDatabase@malaysiaairlines.com |

Table 8: Roles and Responsibilities -1

MAB IT Helpdesk will provide the first level support for FIDS Portal after the system is in production. Users will call the MAB IT Helpdesk for the first-level problem determination. Based on the severity and findings, the problem is to be channeled to the respective support team.

The second level support team coverage and their role/responsibility are listed below:

| **Role** | **Responsible Party / Responsibility** |
| --- | --- |
| FIDS Portal Support | 1. AMS 2. 2nd level application support. 3. Coordinating application fixes and upgrade deployment 4. Perform UAT together with BU 5. Raise RFC for CAB 6. Coordinating with Infra to deploy fixes and upgrade 7. Verify fixes together with BU 8. Reports and Monitoring the application technical problem |
| FIDS AODB Database Administration | * Infra Database tower * Perform database maintenance and implement AODB upgrade or patch releases. * Perform database recovery. * Manage database security as per security policy. |
| Commvault Storage Management | * IT-Ops Infra Mid-Range tower * Monitor Linux, applications, MySQL DB are backup as per schedule backup via Commvault |
| FIDS Portal User’s PC administration | * Desktop Support |
| MAS Helpdesk | * Single point of contact to coordinate when the problems occurred. * Responsible to coordinate problem reporting to the respective parties. |

Table 9: Roles and Responsibilities - 2

\*Note: Proper handover must be performed if there is any change to the above roles and the matrix will be updated accordingly.

# TECHNICAL SPECIFICATIONS

## Hardware Specifications

The below table shows the hardware specification of FIDS servers.

| **Application(s)** | **Location** | **Hostname** | **IP Address** | **Environment** | **Server Function** |
| --- | --- | --- | --- | --- | --- |
| FIDS | MASG(Public Cloud-Singapore) | MASG-1SCVAPP2 | 10.221.4.57 | PROD | Application & Web |
| FIDS | MASG (Public Cloud-Singapore) | MASG-3SCVAPP2 | 10.221.12.25 | UAT | Application & Web |

Table 10: Server Specifications

## Hardware Specifications:

The below table shows the hardware specification of FIDS servers.

| **Hostname/Application(s)** | **Azure VM Size** | **OS Version** | **CPU** | **Memory (GB)** | **SWAP (GB)** |
| --- | --- | --- | --- | --- | --- |
| MASG-1SCVAPP2 / FIDS | Standard DS2 v2(2 cores, 7 GB memory) | RHEL 7.2 | 2 | 4 | 8 |
| MASG-3SCVAPP2 / FIDS | Standard A2\_v2 (2 cores, 4 GB memory) | RHEL 7.2 | 2 | 4 | 8 |

Table 11: Hardware Specifications

## Software Specifications

The below table shows the software specification of SCV servers.

|  |  |  |
| --- | --- | --- |
| **No** | **Software** | **Specification** |
|  | Application & Database Server Operating System | RHEL 7.2 |
|  | Programming Language – UI | Angular JS, Spring, Hibernate, Java |
|  | Programming Language – DB | DB2 |
|  | Front-end | IE 8+, Firefox 5+, Chrome 18+, Safari 5+, Opera 9+ |
|  | Database | DB2 |
|  | Operating System | Windows 7 and above |
|  | Application | Tomcat 8.5.9 |
|  | Webserver | Apache 2.4.23 |

Table 12: Software Specifications

## Communication / Network Specification

The below table shows the communication/network specification of SCV servers.

|  |  |  |
| --- | --- | --- |
| **No** | **Category** | **Configuration** |
|  | Protocol | Server: TCP/IP  Client: TCP/IP |
|  | Webservice | EAI - B2B |

Table 13: Lists of ports

The below image(Figure 3) shows the distribution of SCV Production, DR and development environment resources in MAB private and public cloud. The image also shows how the user to system interaction is occurring in MAB network.

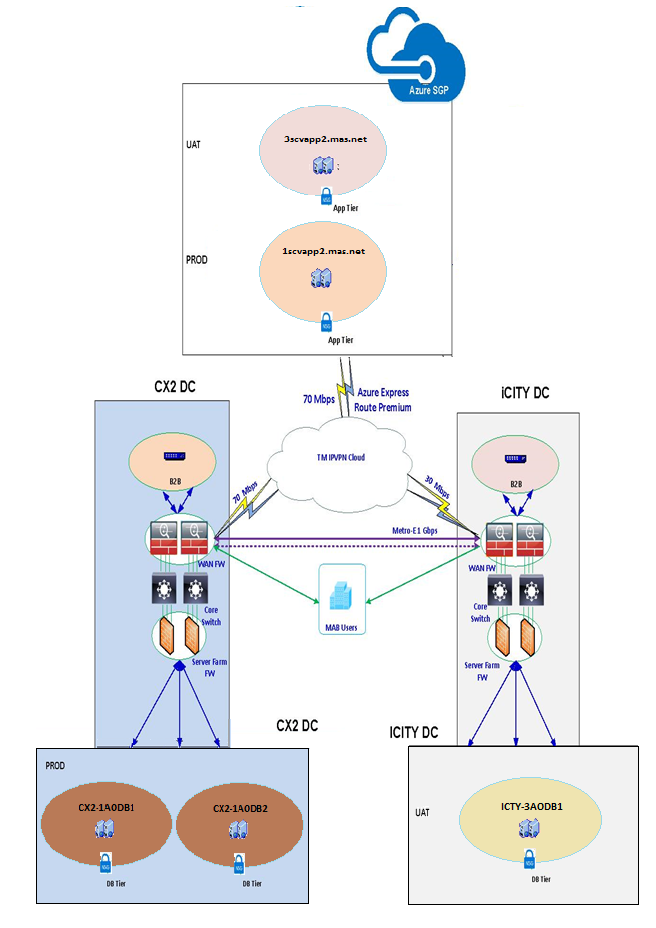


Figure 3: Communication Specifications

## User and Equipment Locations

The user’s PCs have been upgraded or replaced to meet the FIDS requirement as below:

|  |  |
| --- | --- |
| **CPU** | * Intel/AMD 2 GHz or Above |
| **RAM** | * 2GB RAM memory or Above |
| **Monitor** | * 800 x 600 resolution VGA color |
| **Operating System** | * Windows XP or Above |
| **Disk** | * 80 GB (less than 1GB is required) |
| **Software** | * Internet Explorer Web browser - IE 8.0/Google Chrome/Fire fox * Acrobat Reader 9.0 to read the Report |
| **Network** | * PC must be within MAS LAN/WAN network |
| **Specific Configuration** | * If Proxy server is set on in the IE browser, ensure that the \*mas.net.\* is exempted. The performance may be slower if it goes through proxy. To change go to -> IE->Tools->Internet Options->Connection->LAN Setting->Advances->Exceptions. |

Table 14: User and Equipment Locations

## File Management

NA

# TECHNICAL OPERATIONS GUIDE

## Backup and Recovery

Database backup will be taken daily. In case of any disruption, system can be recovered to older date.

Azure Public Cloud: Recovery Services vault is an entity that stores all the backups and recovery points that have been created over time. The vault also contains the backup policies that will be applied to the virtual machines being backed up. When the Recovery services initiates a backup job at the scheduled time, it triggers the backup extension to take a point-in-time snapshot. The Azure Recovery service uses the VMSnapshot extension in Windows, and the VMSnapshotLinux extension in Linux. The extension is installed during the first VM backup.Once the Azure Backup service takes the snapshot, the data is transferred to the vault. To maximize efficiency, the service identifies and transfers only the blocks of data that have changed since the previous backup. When the data transfer is complete, the snapshot is removed and a recovery point is created.

Private Cloud Servers: Commvault Backup

1. **Application Back-up:**

The data backup on SCV applications are happens as given below,

| **Hostname / Application(s)** | **Backup Type** | **Frequency** | **Schedule Time (MYT)** | **Retention / No. of Versions** | **Remarks** |
| --- | --- | --- | --- | --- | --- |
| MASG-1SCVAPP2 / FIDS | Full | Every Saturday | 5:30 PM | 6 Versions | Monthly first Saturday backup retention is 2 months |
| MASG-3SCVAPP1 / FIDS | Full | Every Saturday | 5:30 PM | 6 Versions | Monthly first Saturday backup retention is 2 months |

Table 15:Application Back-up Details

1. **Database Back-up:**

N/A

## Monitoring Tools

N/A

## Batch Jobs

N/A

## Report Management

N/A

## Baseline Performance Information

The baseline performance Information for FIDS is given below,

|  |  |  |
| --- | --- | --- |
| **No.** | **Activity** | **Expected Response Time** |
| 1. | Average time to load page on URL hit | < 10 seconds |

Table 16: FIDS Baseline Performance

Acceptable down time during operation hours is based on BCD3 plan.

# USER GUIDE

The FIDS is a dashboard system without user any functionality to user. The system displays the data over TV or screens. Hence there is user manual for the system.

## Accessing the Application

The FIDS will be accessible through the following link via intranet.

|  |  |  |
| --- | --- | --- |
| **No** | **Interfaced System** | **Application URL(PROD)** |
| 1 | Web browser | 1. Operations Screen :   [http://fids.mas.net/fids/#/home?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)   1. Arrival page :   [http://fids.mas.net/fids/#/arrival?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)   1. Departure page :   [http://fids.mas.net/fids/#/departure?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)   1. Transit page :   [http://fids.mas.net/fids/#/transit?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)   1. Cargo home page :   [http://fids.mas.net/fids/#/cargo?station=KUL](http://3scvapp2.mas.net:8080/flightInfoDisplaySystem/)   1. Engineering department page :   <http://fids.mas.net/fids/#/flightInfo?station=KUL&department=Engineering>   1. Satellite Layover page:   [http://fids.mas.net/fids/#/SatLayover1](http://fids.mas.net/fids/" \l "/SatLayover1)  [http://fids.mas.net/fids/#/SatLayover2](http://fids.mas.net/fids/" \l "/SatLayover2)  [http://fids.mas.net/fids/#/SatLayover3](http://fids.mas.net/fids/" \l "/SatLayover3)   1. MTB Layover page:   [http://fids.mas.net/fids/#/MTBLayover1](http://fids.mas.net/fids/" \l "/MTBLayover1)  [http://fids.mas.net/fids/#/MTBLayover2](http://fids.mas.net/fids/" \l "/MTBLayover2)  [http://fids.mas.net/fids/#/MTBLayover3](http://fids.mas.net/fids/" \l "/MTBLayover3)   1. Satellite Aircraft Movement Screen 1: <http://fids.mas.net/fids/#/MvmtSat1> 2. Satellite Aircraft Movement Screen 2: <http://fids.mas.net/fids/#/MvmtSat2> 3. MTB Aircraft Movement Screen 1: <http://fids.mas.net/fids/#/MvmtMtb1> 4. MTB Aircraft Movement Screen 2: <http://fids.mas.net/fids/#/MvmtMtb2> 5. MTB Aircraft Movement Screen 3: <http://fids.mas.net/fids/#/MvmtMtb3> 6. KLIA Arrival page :   <http://fids.mas.net/fids/#/kliaarrival?station=KUL>   1. KLIA Departure page :  <http://fids.mas.net/fids/#/kliadeparture?station=KUL> |

Table 17: URLs to access the application

# MAINTANANCE & SUPPORT

This section provides information to Help Desk personnel who are expected to receive problem or error reports from the users.

## Problem Logging

The Help Desk personnel should ask the users:

* For a screenshot of the error/issue that they are facing
* For the steps that need to be performed to recreate the error/issue
* To check the same steps to recreate the error/issue on another machine
* To check if others are also facing the same error/issue

## Problem Categorization and Escalation Matrix

The tables below explain the problem categorization and escalation matrix for FIDS

|  |  |  |  |
| --- | --- | --- | --- |
| **Problem Category** | **Severity Level** | **Problem Description** | **Escalation** |
| System Completely Unusable | 1 | Page not loading | AMS - FIDS |
| Data Error | 2 | The screen displays wrong data/ not updated data | AMS – FIDS |

Table 18: Problem categorization

|  |  |  |
| --- | --- | --- |
| **No.** | **Type of support** | **Contact Details** |
| 1. | Level 1:  IT Helpdesk | +6 03 8777 2222  [helpdesk@malaysiaairlines.com](mailto:helpdesk@malaysiaairlines.com) |
| 2. | Level 2: Application  SITO-PSV | Primary: AMS Support 1  Phone: +6 0176430322  Email: GD\_TCS\_FIDSSUPPORT@malaysiaairlines.com  Secondary: AMS Support 2  Phone: +919977839491 , +6 01123464348  Email: [GD\_AMS\_FIDS@malaysiaairlines.com](mailto:GD_AMS_FIDS@malaysiaairlines.com) |
| 3. | Level 2: System & Network  SITO-Infra | [GD\_TCSMidrange@malaysiaairlines.com](mailto:GD_TCSMidrange@malaysiaairlines.com) |
| 4. | Level 3: Application  ATOS | [GD\_AMS\_FIDS@malaysiaairlines.com](mailto:GD_AMS_FIDS@malaysiaairlines.com%20%20) |

Table 19: Escalation Matrix

## Application / Technical Support

Application support team details are given below.

|  |  |  |
| --- | --- | --- |
| **Support Team** | **Team Members** | **Contact Numbers** |
| AMS – FIDS | Rajashekarreddy Kasireddy  Krishnakant Bairagi | HP: +6 01123464348  HP:+91 9977839491 |

Table 20: Technical support

# CONTARCT MANAGEMENT

The contracts signed between MAB and ATOS on FIDS are,

|  |  |  |
| --- | --- | --- |
| **Sl No** | **Contract** | **Parties** |
| 1. | Service contract from AMS support service | Signed between MAB and ATOS |

Table 21: Contract Management

*Copies of the contract / agreement are kept by (Name) and can be read at (directory).*

# HANDOVER ITEMS

The following documents/items will be handed over to Operations together with this System Operation Document during the Handover session:

1. Test Plan

# INFORMATION SECURITY

## 4.11.1 Audit and Compliance Requirements

The below table provide details on audit and compliance requirements

| **Activity** | **Frequency** | **Responsible Party** |
| --- | --- | --- |
| Perform ID review every quarter and submit result to IRS | Quarterly | ID Admin |
| Update user access matrix and submit to IRS | Yearly | System Owner |
| Install Critical Security Patches for the application and submit report to IRS | Quarterly | System Owner |
| Performed Backup restoration | Yearly | System Owner |

Table 22: Audit and Compliance Requirements

## 4.11.2 Password Policy Compliance

The SCV password policy compliance are added below,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Password Policy Requirements** | **Yes** | **No** | **Remarks** |
|  | Password length at least 8 characters (minimum) | Yes |  | Uses LDAP authentication for login |
|  | Alphanumeric | Yes |  |  |
|  | Change temporary password at first logon | Yes |  |  |
|  | Password expiry = 90 days (maximum) | Yes |  |  |
|  | Password reuse generation = 5 (minimum) | Yes |  |  |
|  | Account lock out after 5 failed login attempts | Yes |  |  |
|  | Application shall disconnect or suspend inactive sessions= 15 Minutes | Yes |  |  |
|  | Wrong password shall be recorded in an audit log | Yes |  |  |

Table 23: Password Policy Compliance

# DOCUMENTATION AND REFERENCES

The FIDS documentation details are added below,

| **No.** | **Document** | **Location and reference** |
| --- | --- | --- |
| 1. | System Operation Document Template | <https://mabitdept.sharepoint.com/sites/MyPulse/InformationTechnology/ServiceDeliveryManagement/> |
| 2 | Interface Control Document | <https://mabitdept.sharepoint.com/sites/MyPulse/InformationTechnology/ServiceDeliveryManagement/> |

Table 24: Documentation and References

# AppendiX

## 

**RELEASE MANAGEMENT REPORT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Change Request** | **Implementation Date** | **Change Description** | **Document Version** |
| 1 | CHG0014361 | 23 May 2019 | Implementation of AC Movement Screen and AC Layover Screen | V1.1 |
| 2 | CHG0015685 | 28 Aug 2019 | New Departure and Arrival Screens in FIDS | V1.3 |
| 3 | CHG0016355 | 13 Nov 2019 | Unable to access the FIDS link | V1.3 |
| 4 | CHG0016554 | 11 Dec 2019 | To have 3rd URL for SATELITE  on aircraft movement information | V1.3 |
| 5 | CHG0017057 | 24 Feb 2020 | Auto refresh Engineering FIDS URLs | V1.3 |
| 6 | CHG0017886 | 12 AUG 2020 | Increasing the rows or increasing layover pages | V1.4 |

Table 25 – Release Management Report

**PATCH MANAGEMENT REPORT**

Application : \_\_\_\_\_NIL\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Owner **: \_\_\_\_\_**NIL**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |
| --- | --- |
| **Date** | **Patch / Service Pack Applied** |
| NIL | NIL |
|  |  |
|  |  |
|  |  |

Table 25: Patch management report

**Prepared By: Approved By:**

**.................................................... ....................................................**

**System Admin System Owner**

**BACKUP RESTORATION REPORT**

Application : \_\_\_\_\_\_NIL\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Owner **: \_\_\_\_\_**\_NIL**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |
| --- | --- |
| **Date** | **Status of Restoration** |
| NIL | NIL |
|  |  |
|  |  |
|  |  |

Table 26: Backup Restoration report

**Prepared By: Approved By:**

**.................................................... ....................................................**

**Backup Admin System Owner**

**NON-COMPLIANCE REPORT**

Application : \_\_\_\_\_NIL\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Owner **: \_\_\_\_\_**NIL\_**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |
| --- | --- | --- |
| **Date** | **Reference Number** | **Description** |
| **NIL** | **NIL** | **NIL** |
|  |  |  |
|  |  |  |
|  |  |  |

Table 27: Non-Compliance report

**Prepared By: Approved By:**

**.................................................... ....................................................**

**System Admin System Owner**