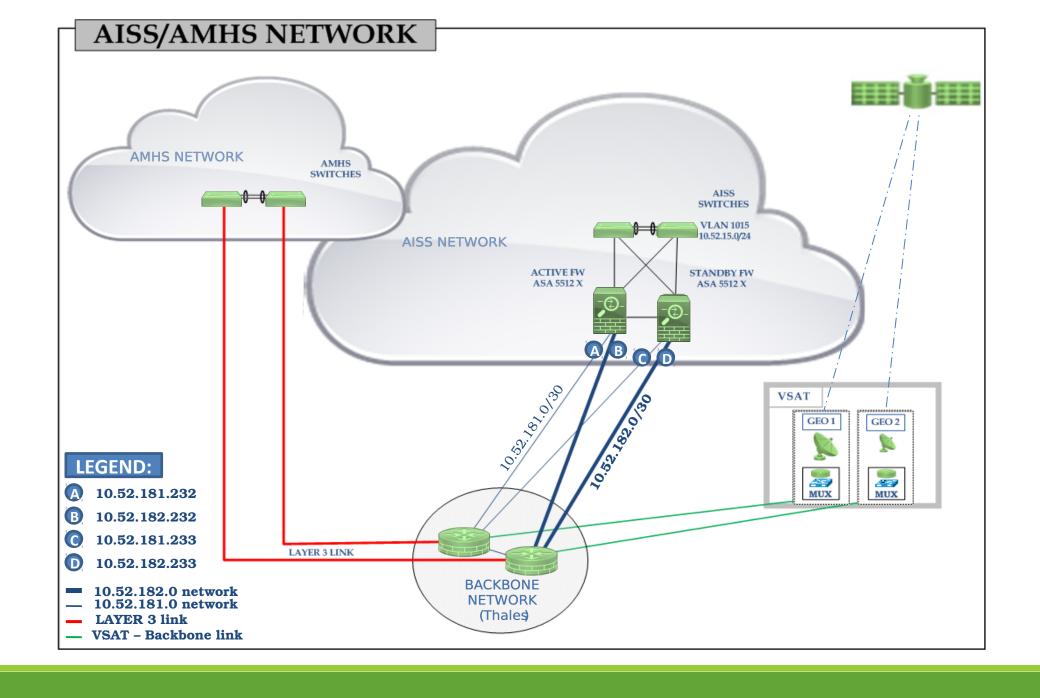
Introduction to AISS



ATMC AISS Servers

SE II Hub

Remote Facilities

SE II VSAT

Remote AISS Client

Disaster Recovery

Mactan AISS Servers

Mactan SE II VSAT

ATMC SE II Hub

Remote Facility AISS Client

AISS Overview

AISS (Aeronautical Information Service System)

- > Static Data Operations
- ➤ International NOTAM Management
- > Flight Plan Management
- Message Handling System
- ➤ AIP / Charting Production

> AISS Operational System (Manila):

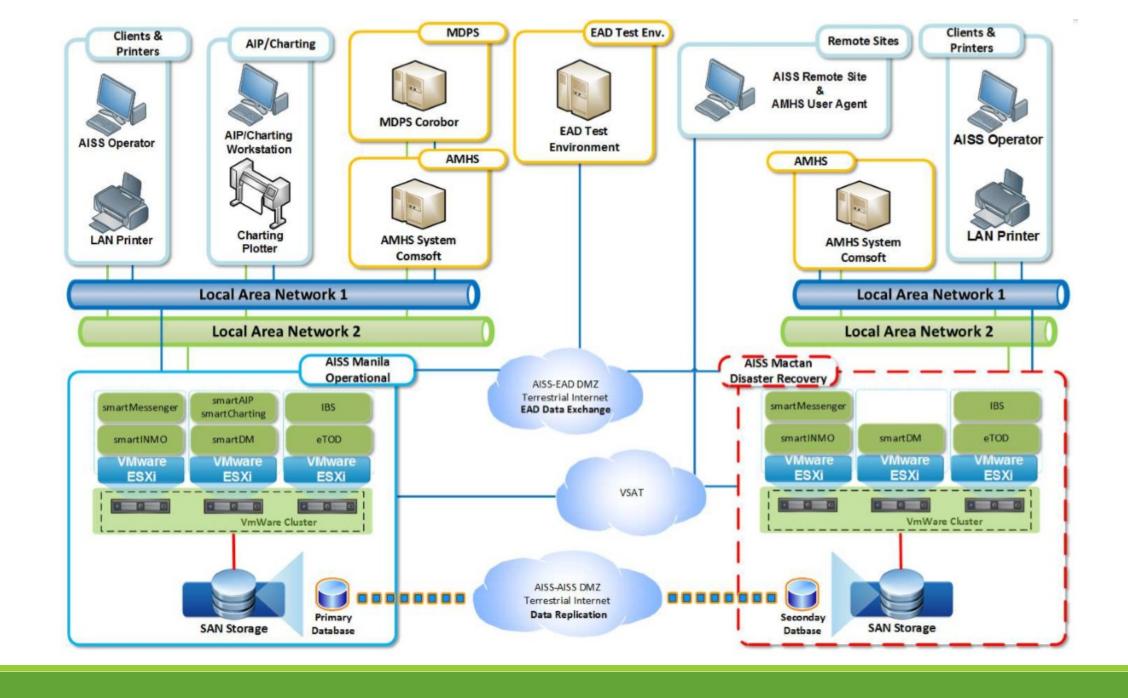
Operational environment for static and dynamic data management, provided by the applications

- smartINMO / INO (NOTAM, FPM)
- smartDM / SDO
- smartAIP/Charting
- > AISS Disaster Recovery System (Mactan):

Identical to the Operational System and serving as a Disaster Recovery system. Data from the AISS Operational System is replicated onto the AISS Disaster Recovery system.

> Test & Development System:

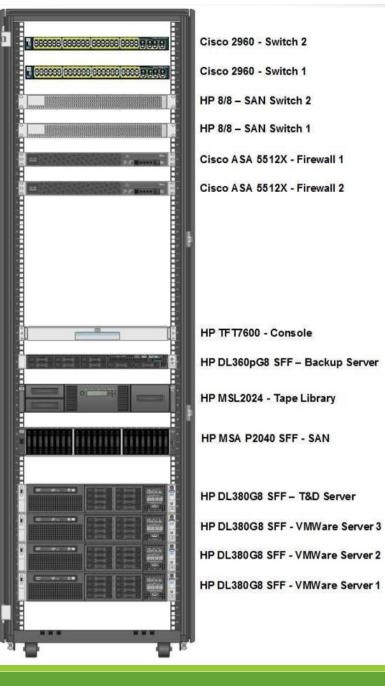
A separate VmWare Server with similar functionalities of the AISS Operational System, serving as a training facility and as a test bed for testing, evaluation and management of system modifications and software updates prior to operational release for smartINMO and smartDM





AISS Server Rack







Server	os					
esx-0X	VMware 5.5					

- > VMware is mainly used within the smartAIM system to virtualize servers to save physical space and resources.
- > smartAIM solution uses the following virtualization technologies:
 - ESXi as an operating system installed on the physical servers.
 - vCenter for managing the ESXi cluster.
 - vSphere Client for access and administration of the cluster.

AISS NETWORK MAN-APP-01 MAN-DBA-01 **AISS SWITCHES** (CISCO 2960) MAN-AIP-01 **VLAN1015** MAN-SME-CLU MAN-ADC-01 TO BACKBONE ETHEKNE MAN-ZAB-01 **NETWORK** MAN-SME-01 MAN-SME-02 MAN-TER-01

Microsoft DNS Server Overview

Manila is operational:

Alias	Target
prod.vead01.aiss.caap.gov.ph	man-dba-01.aiss.caap.gov.ph
prod.vead02.aiss.caap.gov.ph	man-app-01.aiss.caap.gov.ph
prod.vead03.aiss.caap.gov.ph	man-app-01.aiss.caap.gov.ph

Mactan is operational:

Alias	Target							
prod.vead01.aiss.caap.gov.ph	mac-dba-01.aiss.caap.gov.ph							
prod.vead02.aiss.caap.gov.ph	mac-app-01.aiss.caap.gov.ph							
prod.vead03.aiss.caap.gov.ph	mac-app-01.aiss.caap.gov.ph							

Application	Ports
smartAIM App.	8888, 7777
smartAIM DB	1521,2507
smartMessenger	102
smartAIP and Charting App.	80
smartAIP and Charting DB	7033

smartAIM Package Overview

- > The pocjp1 package contains the java applications (vead03:8888).
- ➤ The pfrmp1 package contains the forms and reports applications (vead02:7777).

URL Examples:

- http://prod.vead02.aiss.caap.gov.ph:7777
- http://prod.vead03.aiss.caap.gov.ph:8888

VLAN	IP Address Range Manila	IP Address Range Mactan
VLAN 1015 - Public	10.52.15.0/24	10.46.15.0/24
VLAN 1016 - Client	10.52.16.0/24	10.46.16.0/24
VLAN 1017 - Cluster	10.52.17.0/24	10.46.17.0/24
VLAN 1018 - Management	10.52.18.0/24	10.46.18.0/24
VLAN 1019 – Backup	10.52.19.0/24	10.46.19.0/24
VLAN 1184 - Client	10.52.184.0/24	10.46.184.0/24

MANILA ATMC AISS Servers

VLAN	Host Name	Component	Location	IP Address			Mask		у			
1015	MAN-APP-01	VM	Comms Equipment Room (ATMC)	10	52	15	21	/24	10	52	15	254
1015	MAN-DBA-01	VM	Comms Equipment Room (ATMC)	10	52	15	22	/24	10	52	15	254
1015	MAN-AIP-01	VM	Comms Equipment Room (ATMC)	10	52	15	23	/24	10	52	15	254
1015	MAN-SME-CLU	VM	Comms Equipment Room (ATMC)	10	52	15	24	/24	10	52	15	254
1015	MAN-ADC-01	VM	Comms Equipment Room (ATMC)	10	52	15	25	/24	10	52	15	254
1015	MAN-ZAB-01	VM	Comms Equipment Room (ATMC)	10	52	15	26	/24	10	52	15	254
1015	MAN-SME-01	VM	Comms Equipment Room (ATMC)	10	52	15	27	/24	10	52	15	254
1015	MAN-SME-02	VM	Comms Equipment Room (ATMC)	10	52	15	28	/24	10	52	15	254
1015	MAN-TER-01	VM	Comms Equipment Room (ATMC)	10	52	15	29	/24	10	52	15	254
			CLUSTER LA	AΝ								
VLAN	Host Name	Component	Location		IP Ad	dress		Mask		efault (Gatewa	У
1017	MAN-ESX-01-CLU	ESXi Physical Server	Comms Equipment Room (ATMC)	10	52	17	61	/24	10	52	17	254
1017	MAN-ESX-02-CLU	ESXi Physical Server	Comms Equipment Room (ATMC)	10	52	17	62	/24	10	52	17	254
1017	MAN-ESX-03-CLU	ESXi Physical Server	Comms Equipment Room (ATMC)	10	52	17	63	/24	10	52	17	254
			EXTERNAL I	BS								
Public		External IBS	Internet	122	53	177	136					

External IBS: http://122.53.177.136/fwf-caap

MACTAN AISS (Disaster Recovery) Servers

VLAN	Host Name	Component	Location		IP Ad	dress		Mask	Default Gateway				
1015	MAC-APP-01	VM	Mactan FSS Equipment Room	10	46	15	21	/24	10	46	15	254	
1015	MAC-DBA-01	VM	Mactan FSS Equipment Room	10	46	15	22	/24	10	46	15	254	
1015	MAC-AIP-01	VM	Mactan FSS Equipment Room	10	46	15	23	/24	10	46	15	254	
1015	MAC-SME-CLU	VM	Mactan FSS Equipment Room	10	10 46		24	/24	10	46	15	254	
1015	MAC-ADC-01	VM	Mactan FSS Equipment Room	10	46	15	25	/24	10	46	15	254	
1015	MAC-ZAB-01	VM	Mactan FSS Equipment Room	10	46	15	26	/24	10	46	15	254	
1015	MAC-SME-01	VM	Mactan FSS Equipment Room	10	46	15	27	/24	10	46	15	254	
1015	MAC-SME-02	VM	Mactan FSS Equipment Room	10	46	15	28	/24	10	46	15	254	
1015	MAC-TER-01	VM	Mactan FSS Equipment Room	10	46	15	29	/24	10	46	15	254	

	CLUSTER LAN												
VLAN	Host Name	Component	Location		IP Ad	dress		Mask	Default Gateway				
1017	MAC-ESX-01-CLU	ESXi Physical Server	Mactan FSS Equipment Room	10	46	17	61	/24	10	46	17	254	
1017	MAC-ESX-02-CLU	ESXi Physical Server	Mactan FSS Equipment Room	10	46	17	62	/24	10	46	17	254	
1017	MAC-ESX-03-CLU	ESXi Physical Server	Mactan FSS Equipment Room	10	46	17	63	/24	10	46	17	254	

AISS NETWORK CISCO 2960 SWITCHES: Two Cisco 2960 switches were installed in full redundancy. MAN-SWI-01 MAN-SWI-02 VLAN 1015 was configured for the ports connecting the AISS Virtual Machines

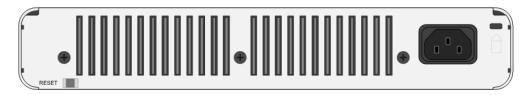
AISS NETWORK

CISCO 2960 SWITCHES:

FRONT VIEW



REAR VIEW



AISS NETWORK CISCO 5512-X FIREWALL: Two Firewalls are installed in between AISS switches and Backbone routers MAN-FWL-01 MAN-FWL-02 MAN-FWL-01 is active MAN-FWL-02 is standby

AISS NETWORK

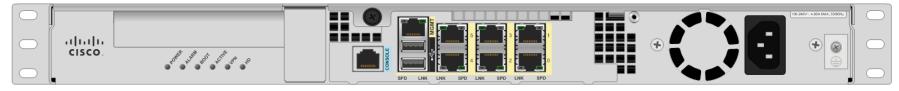
CISCO 5512-X FIREWALL:

FRONT VIEW



MAN-FWL-01 - active MAN-FWL-02 - standby

REAR VIEW

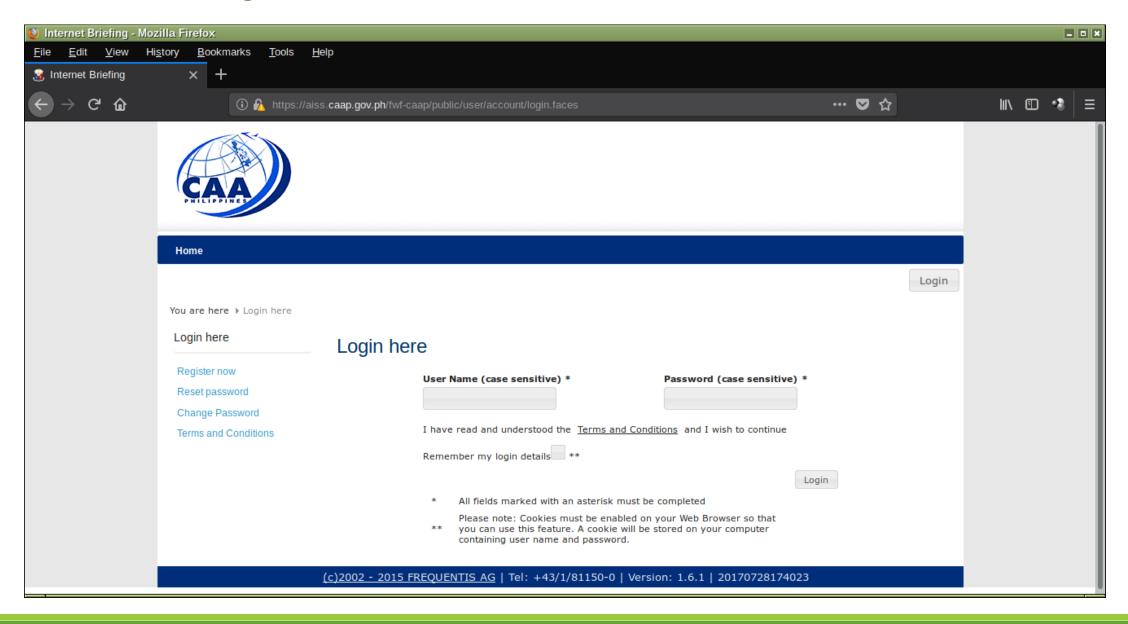


TACLOBAN AISS/AMHS Client

VI	LAN	Host Name	Component	Location	IP Address N		IP Address I		P Address		Mask Default Gateway			teway	'	Notes
10)16	TC-WKS-01	AISS Workstation w/ AMHS UA	Tacloban Tower	10	78	16	20	/24	10	78	16	1/5/1	Connected to Skyedge II VSAT IDU Port 3 (GEO1)		
10)16	TC-PRN-01	A3/A4 Color Printer	Tacloban Tower										Connected via USB		

- ☐ To access the *smatAIM package applications*, type in the following URL or web address on the browser of your choice:
 - https://prod.vead03.aiss.caap.gov.ph:8888
 - https://prod.vead02.aiss.caap.gov.ph:7777
- ☐ Or click the readily available shortcut link icon on the Desktop or browser.

IBS Login Window



Summary