

Tactical Automated Mission Planning System



PMA-233

HARDWARE

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Overview

- Prior OAG H/W Issues
- TAMPS H/W Approach
- FY97/98/99 Quantities
- Data Loaders



OAG Issues

We heard you !

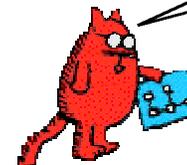


- Reliability
- Speed
- Quantities



Reliability

- CVIC Server
 - Internally redundant
 - Backup server
- Unix Workstations
 - No observed failures in 6.1.1 OT
 - Industry standard packaging
 - Minimum 4X faster than fielded hardware
- Laptops
 - Demonstrated 1% failure rate (1st year)
 - Semi Rugged
 - Carbon Fiber case
 - Metal plate behind the screen
 - 3 year warranty
 - Award winner



What a set of specs on these units!



Hardware Buys

- COTS Driven
 - No more military hardware unique H/W
 - Take advantage of continuously improving prices and performance
 - Better-Faster-Cheaper

Item	FY97	FY98	FY99	FY00
Processor	1200	1300	1300	TBD
Disc Configuration	9+9	18+18	18+18	TBD
I/O Chassis	8 bay	9 bay	9 bay	9 bay



Fleet Impacts

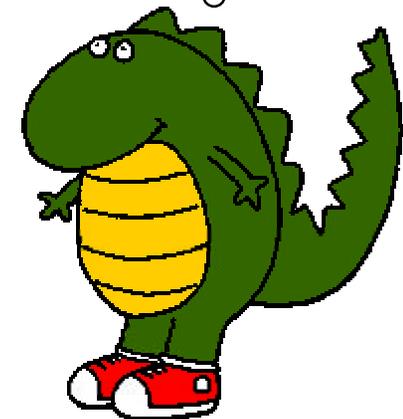
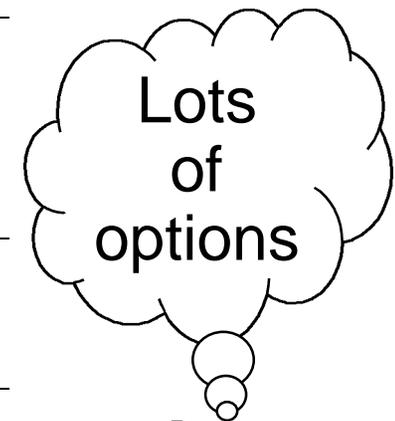
- Better performance every year
- More hardware
- Stations will look “different” from year to year





Supported Configurations

ITEM	CONFIGURATIONS
Processors	Ultra SPARC 1200 Ultra SPARC 1300 Ultra SPARC 2300
Disk	9 GB + 9 GB 18 GB + 9 GB 18 GB + 18 GB
I/O Chassis	8 bay 9 bay (includes PCMCIA)
Loaders	None (TSCM) DSUR (Only) MDLR (Only) DSUR & MDLR





Procurement Profile

- Focused on planning seats for the war fighter
- Major plus up in PFPS seats

	FY97	FY98	FY99	FY00
CVIC Servers	4	8	10	12
Workstations	39	40	80	44
PFPS	0	175	475	850
TSCM	0	4	20	81
TRUSTED	0	15	30	15



Data Loaders

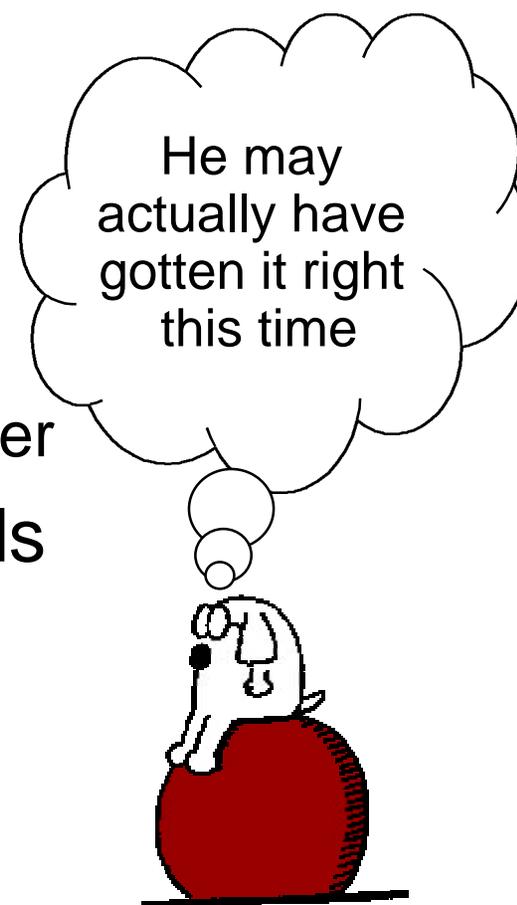
TYPE	PURCHASED	FY98	FY99
DSUR	30 General Use 67 On Order 70 Trusted	130	0
MDLR	33 General Use 70 Trusted	170	TBD

- DSUR: Used for F-18, some F-14s, AV-8
- MDL: Used for GPS, helos, some F-14s



Hardware Summary

- TAMPS is transitioning from ACE-VME & DTC-2 to Ultras
 - Faster, More reliable, more of them
- More PFPS hardware
 - High reliability, semi rugged laptop
 - High resolution, high speed inkjet printer
- Workstations will be a mix of speeds
 - Taking advantage of COTS
- Data Loaders being worked
 - Still need to do better



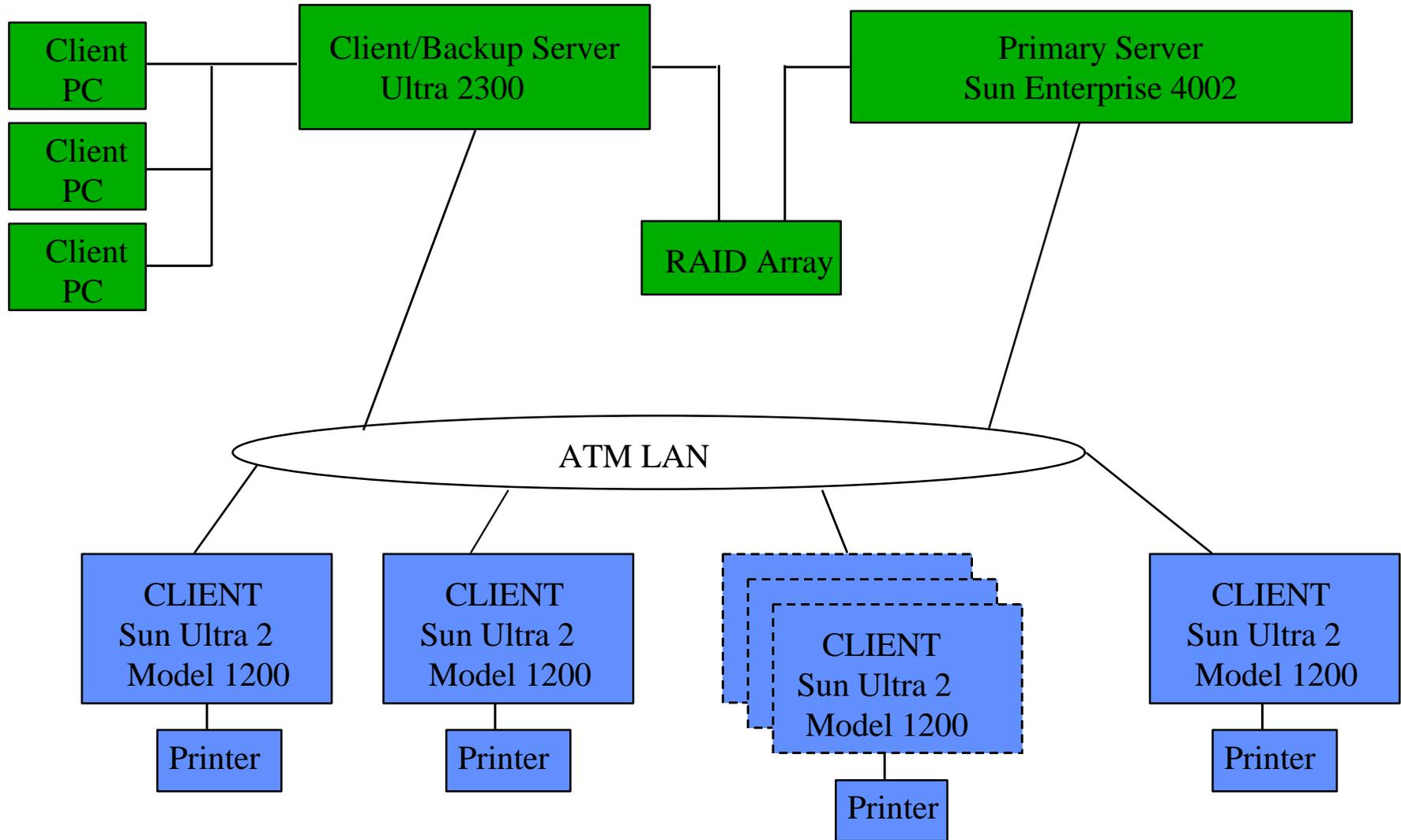
Questions ?



Backups



6.2 Network Architecture





CVIC Server

- Serves as the Primary TAMPS Server
- Sun Enterprise 4002, consisting of:
 - 1GB RAM
 - Four 250 MHz CPUs
 - Creator 24 Bit Graphics, with 17" Monitor
 - SSA Model 114 Disk Array
 - Dual Fiber Interface
 - 126 GB Hard Drives Space, approx. 100GB storage at RAID level 5
 - One 8mm, 14GB Exabyte tape drive
 - Two Sbus ATM network interface cards





6.2 Client/Backup Server

- Serves as the CVIC Client Planning Station, acts as Backup Server, and Supports Planning PC Workstations
- Sun Ultra 2 Model 2300 consisting of:
 - Dual 300 MHz Processor
 - 512 MB RAM
 - 27 GB Total Disk Capacity
 - Connection to Server RAID array
 - 12X CD-ROM
 - 3.5" Floppy
 - 8mm Exabyte Tape Drive
 - Two ATM Network Cards
 - Creator 24-Bit Graphics, with 20" Color Monitor
 - Appropriate Data Load Devices (including new PCMCIA)





UNIX Workstation

- Serves as the Network Client and Standalone Workstation
- Sun Ultra 2 Model consisting of:
 - Single Processor
 - 256 MB RAM
 - 18-36GB Total Disk Capacity
 - CD-ROM
 - 3.5" Floppy
 - 8mm Tape Drive
 - ATM Network Card
 - Creator 24 Bit Graphics, with 20" Color Monitor
 - Xerox C55MP Color/BW Printer
 - Appropriate Data Load Devices (including new PCMCIA)



9 Bay SCSI Enclosure not available for photo



6.2 PC Client

- Desktop Model - Intergraph Model TD220 or TD225
 - 17" Color Monitor
 - 3.5GB HDD
 - 80 MB RAM
 - PCMCIA
 - 200 MHZ Pentium PRO-TD220
 - 233 MHZ Pentium II - TD225
 - 12X CD ROM
 - Ethernet Adapter
 - Windows NT





N-PFPS Hardware

CF-35 Notebook

- 200Mhz MMX
- 64 MB Memory
- 12.1 in SVGA
- 3.2 GB Disc
- 10X CD-ROM
- Ethernet/modem PCMCIA card
- Carrying case

Preloaded with:

- Windows NT Client
- MS Office 97 (basic)
- PFPS w/some maps

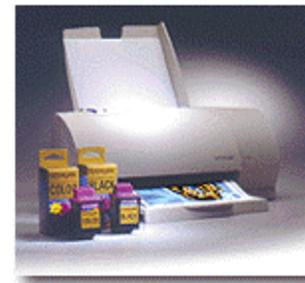


URL:

<http://www.panasonic.com/PCSC/PPCC/index.html>

Lexmark 5700

- High end color inkjet
- Up to 1200 DPI
- Up to 8 pages per minutes
- Waterproof black ink
- Handles card stock up to 110 lb



URL:

<http://www.lexmark.com/printers/5700/>



Micro MID

- Replacement/Alternative to the MDLR
 - Fully supports the MDL
 - About the size of a Jaz Drive
 - Uses PCMCIA SCSI adapter
 - Requires AC Power
 - Not yet on the market
- TAMPS Intention
 - Working with the vendor (Orbital)
 - Will test as soon as available
 - Will order in lieu of MLDR when possible
 - Notebook cases will be large enough to carry it



The PCMCIA Brick

- PDTM = MDL with PCMCIA card internally
 - Being fielded as a VECP to the existing MDL
 - Cards will be loadable without an MDLR
- TAMPS Position
 - Under the control of PMW-171 (GPS)
 - Implementation and data formats still being designed.
 - TAMPS already supports the H/W and standard data formats
 - TAMPS intends to support PC Card loading when the design issues stabilize