# *Introduction & Overview*

- **New NASA standards for computer interoperability**

- **Short- and long-term goals for MODIS information management**

- **Recent MODARCH security issues**

# New NASA Software Standards

- **All NASA Center CIOs will soon be directed to ensure that all NASA employees have access to an interoperable workstation equipped with standard software for the following functions:**
  - Word Processing
  - Spreadsheet
  - Presentations
  - Electronic Mail
  - Calendar/Scheduling
  - Basic Internet Client Suite (e.g., FTP, browser)
- **Facilitates platform-independent interactions**

# *Minimum Office Automation Suite*

| Component | Interface Standard | Product Standard |
|---|---|---|
| Word Processing | WIN Word 2.0 File | MS Word, WordPerfect |
| Spreadsheet | Excel 4.0 File | MS Excel, Lotus 123 |
| Presentation | PowerPoint 3.0 File | MS PowerPoint |
| Electronic Mail | TBD | TBD |
| Calendar/Scheduling | TBD | TBD |
| Basic Internet Client Suite | *See tables | *See tables |

# Target Standards

| Component | Interface Standard | Product Standard |
|---|---|---|
| Word Processing | WIN Word 6.0 File | Word, Word Perfect |
| Spreadsheet | Excel 5.0 File | Excel, Lotus 123 |
| Presentation | PowerPoint 4.0 File | PowerPoint |
| Electronic Mail | TBD | TBD |
| Calendar/Scheduling | TBD | TBD |
| Basic Internet Client Suite | *See table | *See table |

# *Internet Software for PC Platform*

- ## Mandatory:
  - ### Netscape v1.2 (commercial WWW viewer)
  - ### Adobe Acrobat Reader v2.1 (freeware for viewing/ printing)

- ## Recommended:
  - ### Chameleon v4.5 (commercial TCP/IP & telnet s/w)
  - ### QuickTime v2.0.3 (shareware for playing movies)
  - ### VMPEG v1.6a Lite (freeware for playing movies)
  - ### WDUA v2.1b (freeware for conducting x.500 searches)

- ## Optional:
  - ### WinZip v6.0/with PK Ware (compression/decompression shareware)

# *Internet Software for Mac Platform*

- ## Mandatory:
  - **Netscape v1.12 (commercial WWW viewer)**
  - **Adobe Acrobat Reader v2.1 (freeware for viewing/ printing)**

- ## Recommended:
  - **MacTCP v2.0.6 (commercial TCP/IP software)**
  - **Fetch v2.1.2 (shareware for FTP)**
  - **Sparkle v2.4.5 (freeware for playing movies)**
  - **maX.500 v2.0.2 (freeware for x.500 searches)**

- ## Optional:
  - **Stuffit Expander v3.5.2 (compression/decompression freeware)**

# *What About UNIX Platforms?!*

- **UNIX to be addressed in later CIO notice**

- **Meanwhile, I recommend:**

| Component | Interface Standard | Product Standard |
|---|---|---|
| Word Processing | ASCII, PostScript, PDF, RTF, and WordPerfect | WordPerfect |
| Spreadsheet | Same as above | ? |
| Presentation | Same as above | WordPerfect |
| Internet Client Suite | | x-windows, Netscape |

# Adobe Acrobat Products & Their Capabilities

- **Acrobat Reader (freeware)**
  - can view/print Portable Document Format (PDF) files
  - Weblink Plug-in is Netscape compatible

- **Acrobat Exchange (commercial software)**
  - generates PDF files
  - can view/print PDF files
  - contains features for adding value to PDF files

- **Acrobat Distiller (commercial)**
  - "distills" PDF files from PostScript

- **Acrobat Capture (commercial)**
  - converts hardcopy to PDF

# *Freebies*

- **Free software from Adobe, at:**

    **http://www.adobe.com/Software.html#acrordr**


- **Also, Mac freeware and shareware available from "Goodies" folder in "!Goddard Backbone" AppleTalk Zone**

# *Short-term Solutions*

- **Recommend using common doc development tools:**
  - **MS Word or WordPerfect --> Mac, PC, or UNIX**
  - **MS PowerPoint**

- **And/Or, save docs in one of following formats:**
  - **RTF**
  - **PDF**
  - **PostScript**

- **Save graphics as:**
  - **EPS for inclusion in documents**
  - **GIF or JPEG for placement on WWW**

# Short-term Solutions (cont.)

- **Recent & Planned Upgrades to EFS**
  - Use "Launch Association ..." to view in 3rd-party application, including:
    - » MS Word & WordPerfect
    - » PostScript
    - » Excel
    - » MS PowerPoint
    - » PDF filter forthcoming
  - May use Client Print.API to print hardcopy locally
    - » UNIX Client forthcoming

- **MODARCH FTP site established**

# *Short-term Solutions* (cont.)

- **Adobe Acrobat Procured**
  - **Acrobat converts any document to PDF**
  - **Exchange allows viewing, navigating through, and printing**
  - **Exchange allows insertion of annotations, building hyperlinks, and addition of security controls**
  - **Exchange allows Copy & Paste of text & graphics from PDF to MS Word and/or WordPerfect**
  - **Exchange Weblink allows WWW links; free software from http://www.adobe.com/Acrobat/Weblink.html**

- **MAST procures/distributes Acrobat Exchange to entire Science Team as needed**
  - **available for Mac, PC, & UNIX (Sun OS & Solaris) users**

# *Short-term Solutions* (cont.)

- **MODIS WWW test review pages already in place**
  - Marked up docs placed immediately on "stealth Web" for review; or
  - placed on ftp site, Web-accessible, in either PDF or PostScript format--compatible viewers include:
    - » Acrobat Distiller
    - » Acrobat Exchange
    - » GhostScript View (Mac/UNIX)
    - » Drop•PS (Mac)
    - » others?

# Short-term Solutions (cont.)

- **The aforementioned solutions provide options (that will be mixed & matched) for:**
  - Joint authoring of documents
  - electronic distribution for review & edit
  - electronic distribution for printing

# *Possible Long-term Solutions*

- **PixTex/EFS v4.0 release, in 12 - 22 months, will include:**
  - **New TRS search engine**
  - **Optional addition of new XRS search engine**
  - **New "roll-your-own", modularized fileroom viewer**
    - » **WWW-compatible**
    - » **Acrobat compatible**

- **Acrobat Catalog (??)**
  - **MAST creates alternate full-text archive index system for searching among PDF files**
  - **Perhaps best to wait for future version**

*David Herring, SSAI*

# *Long-term Solutions* *(cont.)*

- **Acrobat Capture**
  - **All incoming hardcopy will be converted to PDF**
  - **All previously scanned copy w/ be re-OCRed and converted to PDF**

- **MODARCH docs increasingly hyperlinked according to relational information threads**
  - **This input comes from Team member submissions, original authors only**

# MODARCH Security Issues

- **Questions as to types of data on MODIS that should be rendered internationally available**
  - MODIS Team Member reports and correspondence - OK
  - MODIS Specifications - OK
  - SBRC CDRL documents - about 80% of archive restricted

- **MODARCH divides into two partitions**
  - public access (ATBDs, minutes, reports, specs, etc.)
  - password protected (technical data on MODIS instrument)
    - » acceptable level of security and procedures for distributing password become issues

# *Who Has Access to Restricted Partition?*

- **MODIS Team Members who are:**
  - **U.S. Citizens**
  - **U.S. Greencard Holders**

- **Anyone else must submit a request in writing to be approved by EOS Project Manager**

- **MAST plans to seek reversal of decision to render entire archive public domain once again**