The Electronic Records Challenge

Computer System Security and

Privacy Advisory Board

December 3, 2002

L. Reynolds Cahoon, CIO

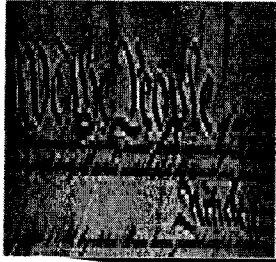National Archives and Records Administration

Overview

- ➢ NARA: Mission
- ➢ The Electronic Records Challenge
- ➢ NARA's Vision
- ➢ The Electronic Records Archives System

The National Archives &
Records Administration

ERA
Electronic Records Archives

"The National Archives .... is a public trust on which our democracy depends. It enables people to inspect for themselves the record of what government has done. It enables officials and agencies to review their actions and helps citizens hold them accountable. It ensures continuing access to essential evidence that documents:

- the rights of American citizens
- the actions of federal officials
- the national experience"
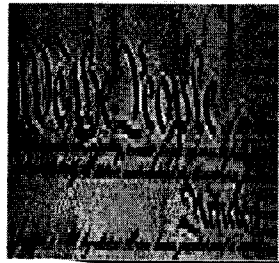
NARA Strategic Goals

1: Essential evidence will be created, identified, appropriately scheduled, and managed for as long as needed.

2: Essential evidence will be easy to access regardless of where it is or where users are for as long as needed.

3: All records will be preserved in an appropriate environment for use as long as needed.

4: NARA's capabilities for making changes necessary to realize our vision will continuously expand.
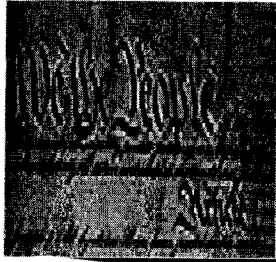
Record

Documentary material of any form

➢ Made or received in the course of business or under law, and

➢ Kept because it

◆ provides evidence of organization, functions, policies, decisions, procedures, operations, or other activities of their creators, or
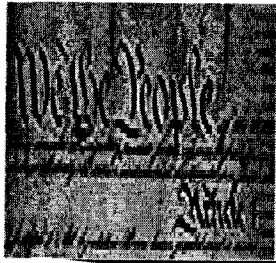
◆ contains valuable information

What's an Electronic Record?

A <u>record</u> in a form that requires the use of a computer for access.

What's an Electronic Record?
Digital Document?

In a recordkeeping context

What's an Electronic Record?

Process

ELECTRONIC RECORDS ARCHIVES
(ERA)

ERA VISION STATEMENT

for the

NATIONAL ARCHIVES AND
RECORDS ADMINISTRATION

ELECTRONIC RECORDS ARCHIVES
PROGRAM MANAGEMENT OFFICE
(NARA ERA PMO)

Final
April 18, 2002

The result of correctly processing digital data maintained in a recordkeeping context
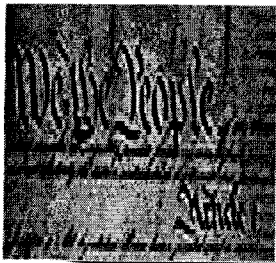
An electronic record requires computer processing
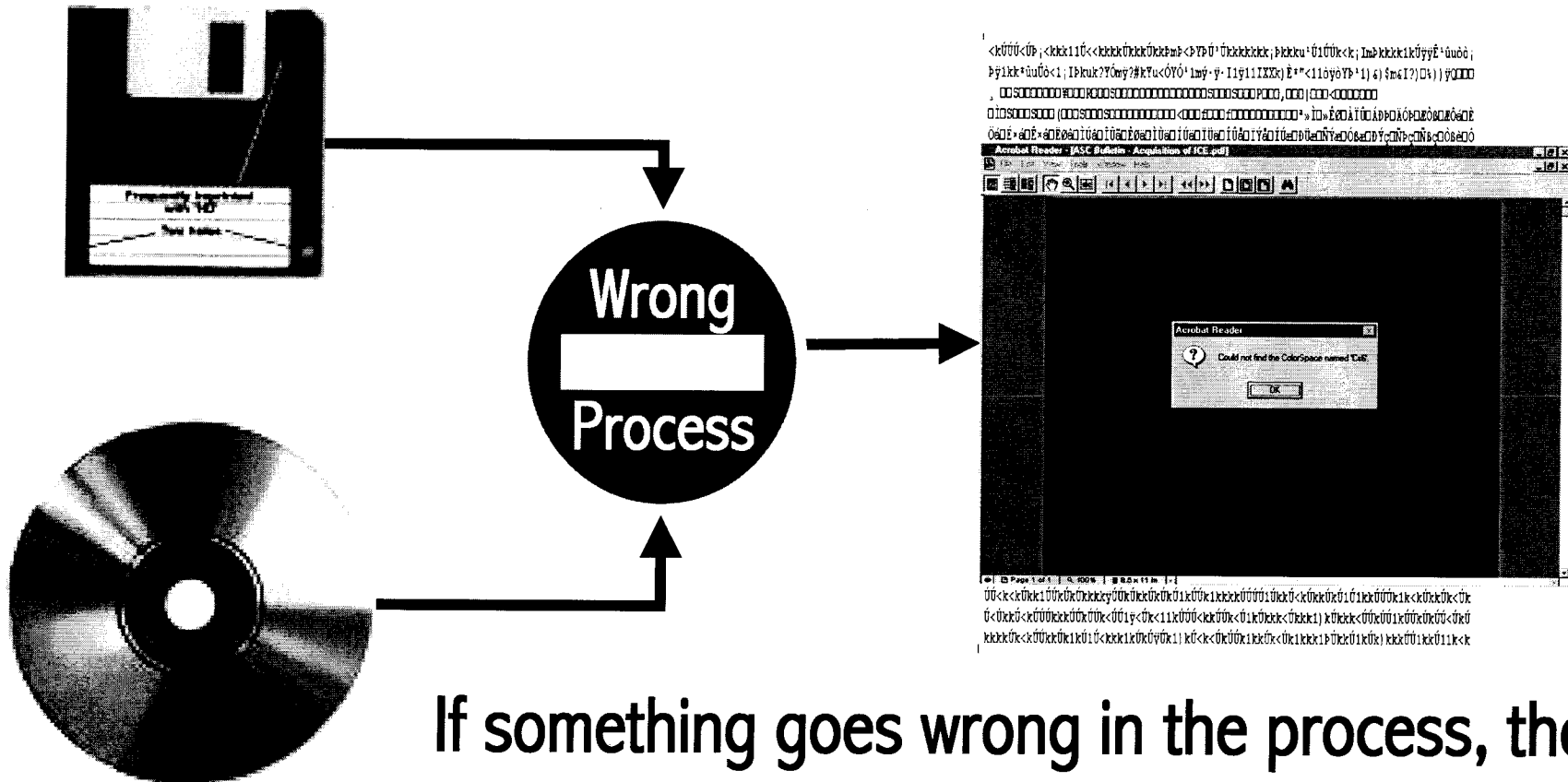
Wrong Process

If something goes wrong in the process, the authentic record is not retrieved.
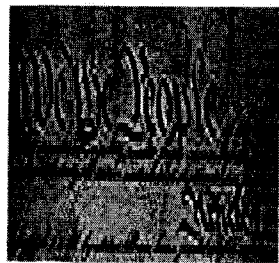
The Challenge:
Preserving an Electronic Record

ERA
Electronic Records Archives
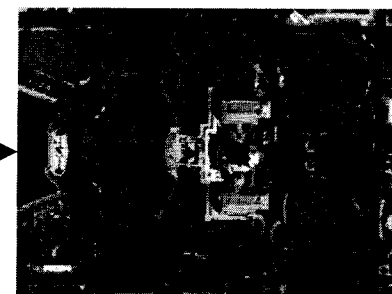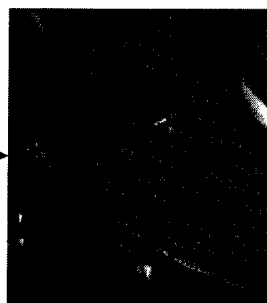
The process of preserving an electronic record is complete only when the record is reproduced

Goddard Space Flight Center
Scientific Visualization Studio
Image: zoomDCstill.tif
01/04/2001

NASA

NARA's Electronic Records Challenge

➢ Preserve any type of record,

➢ Created using any type of application,

➢ On any computing platform,

➢ From any entity in the Federal Government and any donor.

➢ Provide discovery and delivery to anyone with an interest and legal right of access,

➢ Now and for the life of the republic

A Tidal Wave is Coming

ERA
Electronic Records Archives

Clinton Administration

◆ 40 million email messages

State Department

◆ 25 million electronic diplomatic messages

Department of Defense

◆ 54 million images from electronic official military personnel files annually

Census Bureau

◆ 600 to 800 million image files (2000 census)
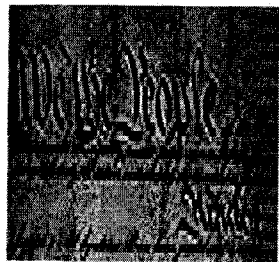
The Challenge: Variety
(examples from NARA's current holdings)

ERA
Electronic Records Archives

➢ White House e-mail from President's Reagan, Bush, and Clinton

➢ Casualty records from the wars in Korea and Vietnam

➢ The American Soldier in World War II

➢ National Collaborative Perinatal Project, 1959-1974

➢ Fishing, Hunting, & Wildlife Recreation

➢ Abstracts of testimony, interviews, diaries from the Watergate Special Prosecution Force

➢ • • • • •

The Challenge: Complexity

ERA
Electronic Records Archives

- Databases
- Geographic Information Systems
- Web sites
- Digital Photographs
- Computer Assisted Engineering Drawings
- Virtual Reality Models
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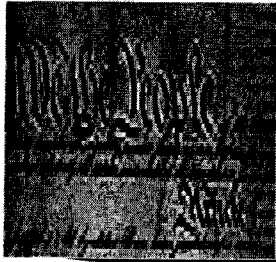
NARA's Vision

The Electronic Records Archives will authentically preserve and provide access to any kind of electronic record, free from dependency on any specific hardware or software, enabling NARA to carry out its mission into the future.

What is the ERA system?
An Open Archival Information System

ERA
Electronic Records Archives

Producer

OAIS

Archival
Information
Packages

Submission
Information
Packages

Query

Response

Order

Consumer

Dissemination
Information
Package
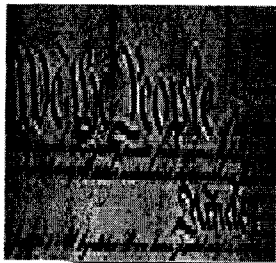
NARA's Strategic Response - ERA
ERA Requirements

ERA
Electronic Records Archives

➢ **Persistent**

◆ To <u>manage</u> and <u>access</u> the records over time.

➢ **Authentic**

◆ To ensure that these are the original records

◆ Records that are created with attached documentary information

➢ **Scalable**

◆ To grow and adapt to increasing volumes and evolving types of electronic records

◆ To serve a variety of user groups

What is the ERA system?
(Virtual Workspaces)

ERA
Electronic Records Archives

Tapes

Disks

Internet

Accessioning Workbench
- Accession
- Verify
- Wrap & Containerize
- Describe

Archival Repository
- Collection
- Collection
- Collection

Metadata

Reference Workbench
- Query
- Rebuild
- Present

Records Schedules

Archival Research Catalog

Order Fulfillment System