



LOC Designing Storage Architectures 2017

Tom Creighton, CTO
tc@familysearch.org



Who We Are

- Family Search (familysearch.org)
- World's largest genealogy organization
- In operation more than 100 years
- Non-profit
- Owned and funded by the Church of Jesus Christ of Latter-day Saints

What We Do

- Promote family history research
- Provide online tools to support research
- Engage non-researchers
- Publish digitized genealogical records
- Preserve both digital and physical records

User Uploaded Artifacts

My Memories 11

My Archive 0


My Favorites 0

Recently Delet... 0


Albums

New Album

Wakefield 2




+ Add Title




Frances Bourne Marries Joseph Benjamin Wallace

Gold and Green Ball in San Bernardino, CA. 24...




Joseph Benjamin Wallace and Frances Bourne served as members

ces Bourne, and Ruth Ann Myera, small daughter of Mr. and Mrs. Irel H. Myers, will carry the crown. Attending the queen-elect will be LeRoy Saxton and six other members of the M. Men and Gleaner Girls' organizations of the church. Miss Wahlen will vie for Stake honors at the annual San Bernardino stakes prom, to be held at the Golden State club the evening of Jan. 31, at which time queens from Riverside, Pomona and Ontario will be presented on floats of fairy tales. Representing "Beauty," the San Bernardino's queen will appear on a float.



Ben Wallace and Frances Bourne members of the...




+ Add Title


The following members of the Gold and Green Ball in San Bernardino, CA. 24... were present: Joseph Benjamin Wallace, Frances Bourne, LeRoy Saxton, Miss Wahlen, Ruth Ann Myera, Irel H. Myers, LeRoy Saxton, and six other members of the M. Men and Gleaner Girls' organizations of the church. Miss Wahlen will vie for Stake honors at the annual San Bernardino stakes prom, to be held at the Golden State club the evening of Jan. 31, at which time queens from Riverside, Pomona and Ontario will be presented on floats of fairy tales. Representing "Beauty," the San Bernardino's queen will appear on a float.

Artist Name	Year of Birth
Joseph Benjamin Wallace	1905
Frances Bourne	1910
LeRoy Saxton	1915
Miss Wahlen	1920
Ruth Ann Myera	1925
Irel H. Myers	1930

+ Add Title



+ Add Title




+ Add Title

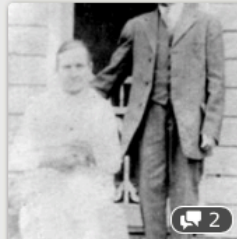
Lillian Morinda Wakefield (Aunt Dade)

Aunt Dade often spoke of the "olden days" pioneering in Arizona. They went there in the 18... 1


Lillian Morinda Wakefield (Aunt Dade) And Elizabe...



Aunt Dade



Old Cotton-top 2



User-managed Shared Pedigree

Messages Volunteer Get Help

FamilySearch Family Tree Search Memories Indexing Temple

Tom Creighton

TREE PERSON FIND LISTS WHAT'S NEW Help Others

Landscape Print Show

Ernest David Creighton
1861-1862 • LQR4-747
Add Wife

Charles Henry Creighton
1862-1931 • LHKH-GWZ

Florria Ellen McCravey
1868-1954 • LHKH-GDX

William Robert Creighton
1865-1945 • LZV6-JZC

A J Herring
1874-1938 • LZV6-J6V

John T Creighton
1867-1929 • K8RD-KQC

Emma Scarborough
1870-1960 • KH6T-8MT

Marion Burr Ulmer
1863-1918 • LTQ5-ZHW

Mary E Creighton
1868-1886 • 2X2R-7R9

Hiram Creighton
1797-1859 • MPC4-ZYX

Mary Thomas
1803-1882 • LHR4-M75
Children

John R Creighton
1832-1873 • LQR4-Q5W
Amanda Allen
1838-1887 • 21JV-X3D
Children

Drury Allen II
1806-1908 • 93VH-JSH
Elizabeth Buckelew
1807-1840 • LTQ2-97V
Children

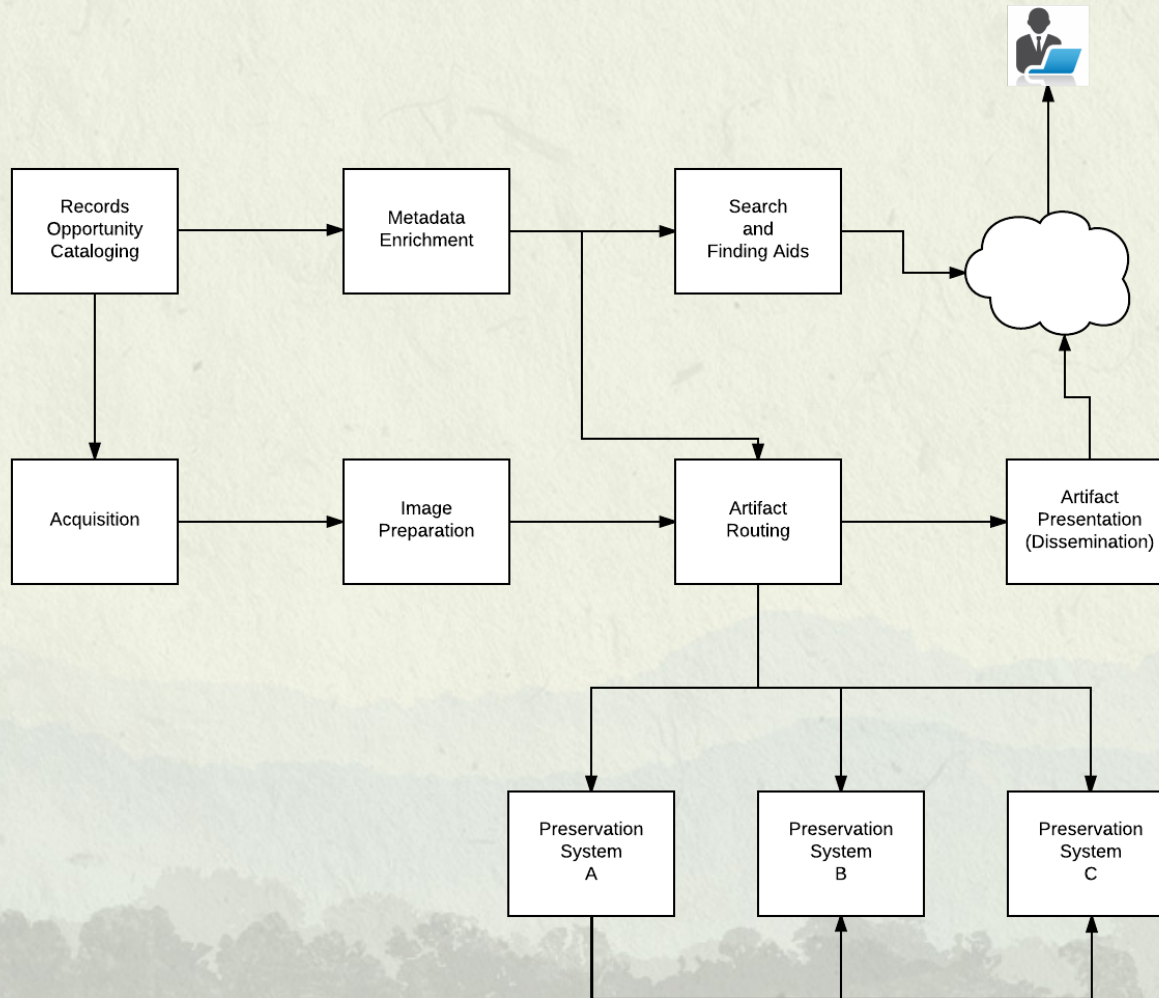
John Creighton
1743-1829 • 2MR6-Y7N
Margaret Mc Clure
1765-Deceased • LCVN-NXN
Children

Joshua Thomas
1770-1825 • LJRY-ND4
Rebecca Vicars
1770-1842 • LZ2T-CZV
Children

Drury Allen I
1777-1850 • 93VH-J3M
Margaret (Peggy) Waite
1772-1818 • 93VH-J3Z
Children

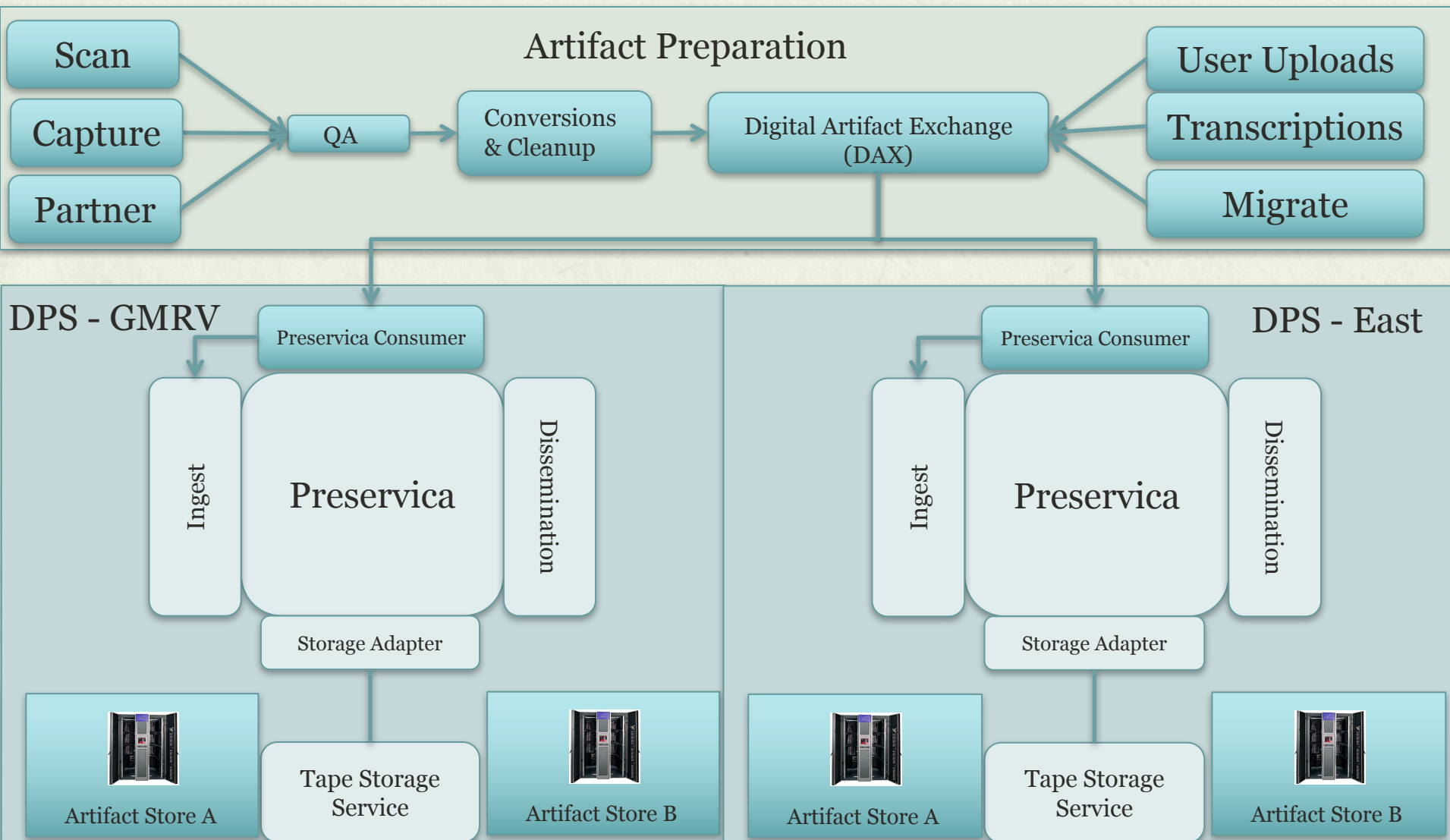
Add Husband
Add Wife

Simplified Records Pipeline



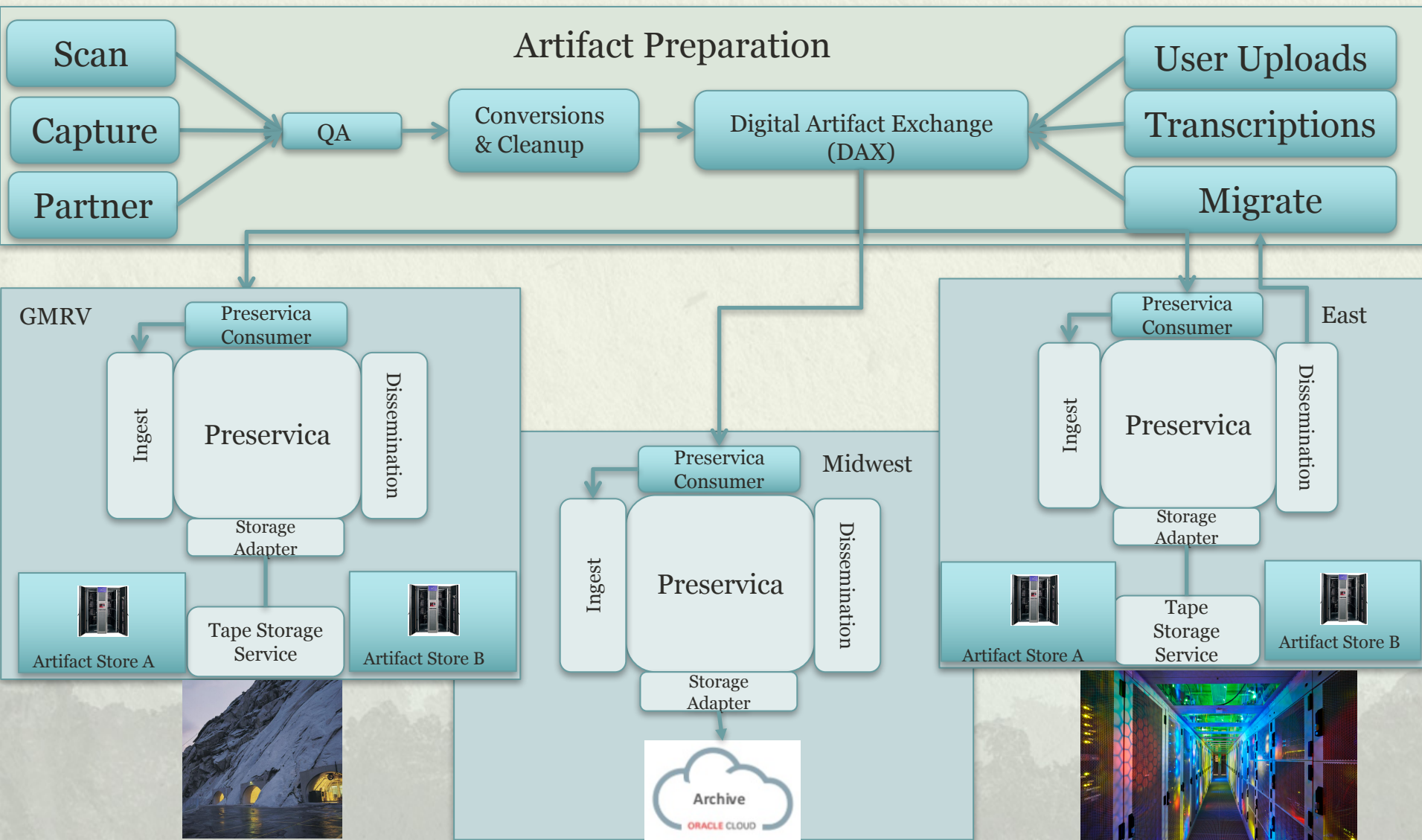
Digital Preservation System

v3.0



Digital Preservation System

v3.1



Use Case: Search

Refine your search ▾

Deceased Ancestor's Name

First Names

Last Names

Search with a life event:

[Birth](#)
[Marriage](#)
[Residence](#)
[Death](#)
[Any](#)

Search with a relationship:

[Spouse](#)
[Parents](#)
[Other Person](#)

Restrict records by:

[Location](#)
[Type](#)
[Batch Number](#)
[Film Number](#)

Lock filters
 Match all terms exactly

Records **Collections**

Search Results from Historical Records

1-20 of 48,440 results for Name: **Thomas Percy Creighton**

Number of results to show:

[Export Results 1-20](#)

Name	Events	Relationships	View
Thomas Percy Creighton Find A Grave Index	birth: 25 July 1893 death: 6 January 1941 burial: 1941 Colton, San Bernardino, California, United States of America		
Thomas Percy Creighton Texas, World War I Records, 1917-1920	birth: 25 July 1893 Erath, Texas military service: 29 June 1917 Los Angeles, , Texas, United States		
Thomas Percy Creighton United States World War I Draft Registration Cards, 1917-1918	birth: 25 July 1893 Waco, Texas, United States draft registration: from 1917 to 1918 Taylor County, Texas, United States		
Thomas Percy Creighton California Death Index, 1940-1997	birth: 25 July 1893 Texas death: 6 January 1941 San Bernardino, California, United States	father: Creighton mother: Mccravey	

https://www.familysearch.org/ark:/61903/3:1:33SQ-GYYB-XMW

United States World War I...stration Cards, 1917-1918 ▼ | Texas > Taylor County; A-M >

Source Box

Attach to Family Tree

Image 1467 of 3710

Print Download Tools

Form 1 3127 REGISTRATION CARD No. 105

1 Name in full: Thomas Percy Creighton Age in yrs: 25

2 Place of birth: Waco, Texas

3 Date of birth: July 25 1893

4 Are you (1) a natural born citizen, (2) a naturalized citizen, (3) an alien, (4) or have you declared your intention (specify which)? Naturalized citizen

5 Where were you born? Waco, Texas

6 If not a citizen, of what country are you a citizen or subject? Citizen

7 What is your present trade, occupation, or office? Clerk

8 By whom employed? Employer

9 Have you a father, mother, wife, child under 18, or a sister or brother under 18, wholly dependent on you for support (specify which)? No

10 Married or single (which)? Single Have (specify which)? None

11 What military service have you had? None

12 Do you claim exemption from draft (specify grounds)? None

I affirm that I have verified above answers and that they are true.

T. P. Creighton

42-4-00 A REGISTRAR'S REPORT

1 Full name as stated (specify which): Thomas Percy Creighton

2 Color of eyes: Blue Color of hair: Brown Build: No.

3 Has person had wife, leg. hand, foot, or both lost, or is he otherwise disabled (specify)? No

I certify that my answers are true; that the person registered has read his own answers, that I have witnessed his signature, and that all of his answers of which I have knowledge are true, except as follows:

Signature of Registrar: [Signature]

Product: 10

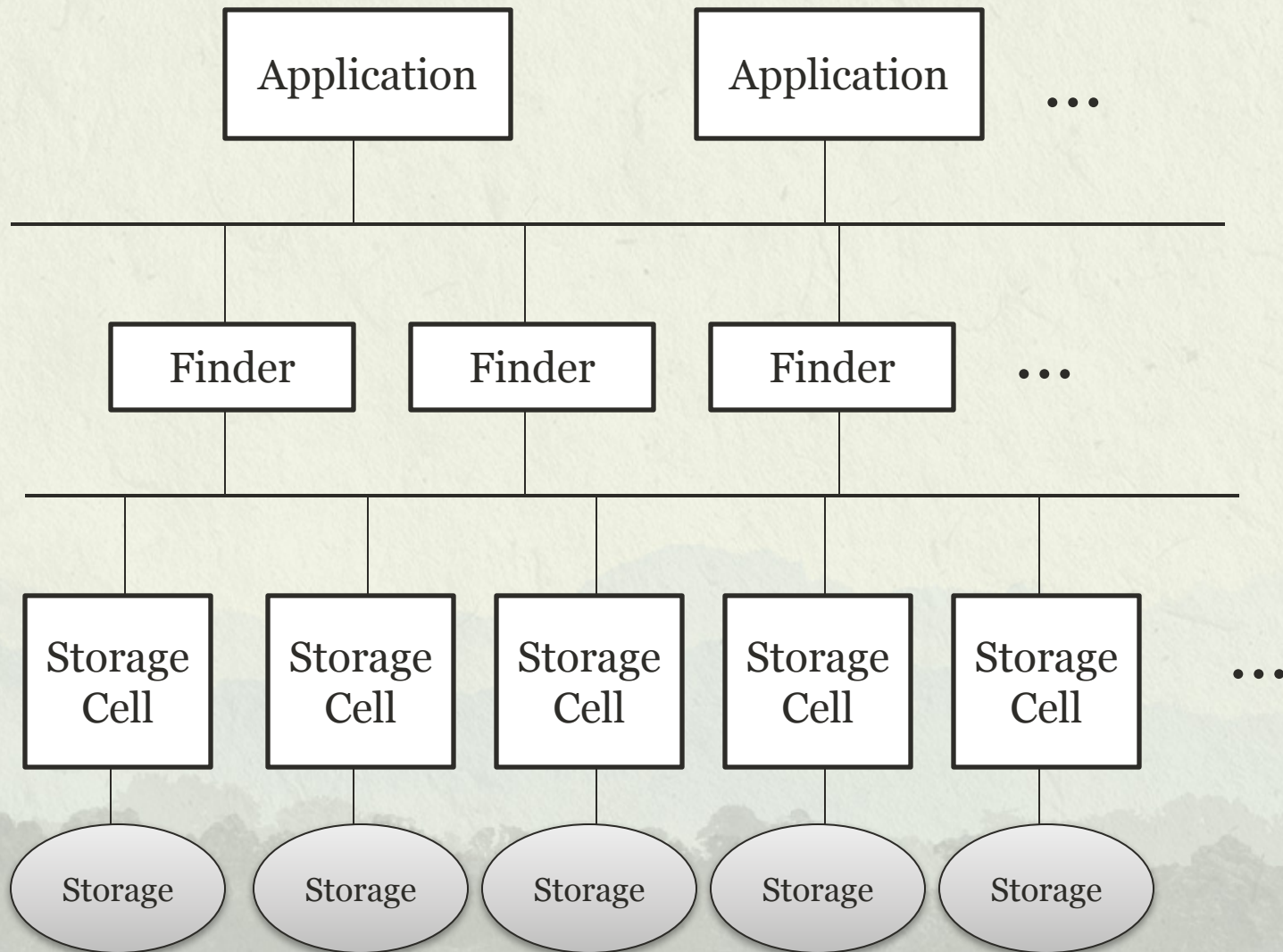
City or County: Waco, Texas

State: Texas

Image Index Information

Name	Event Type	Event Date	Event Place	Gender	Nationality	Birth Date	Birthplace
Thomas Percy Creighton	Draft Registration	1917-1918	Taylor County, Texas, United States	Male	United States	25 Jul 1893	Waco, Texas, United States

Digital Artifact Store



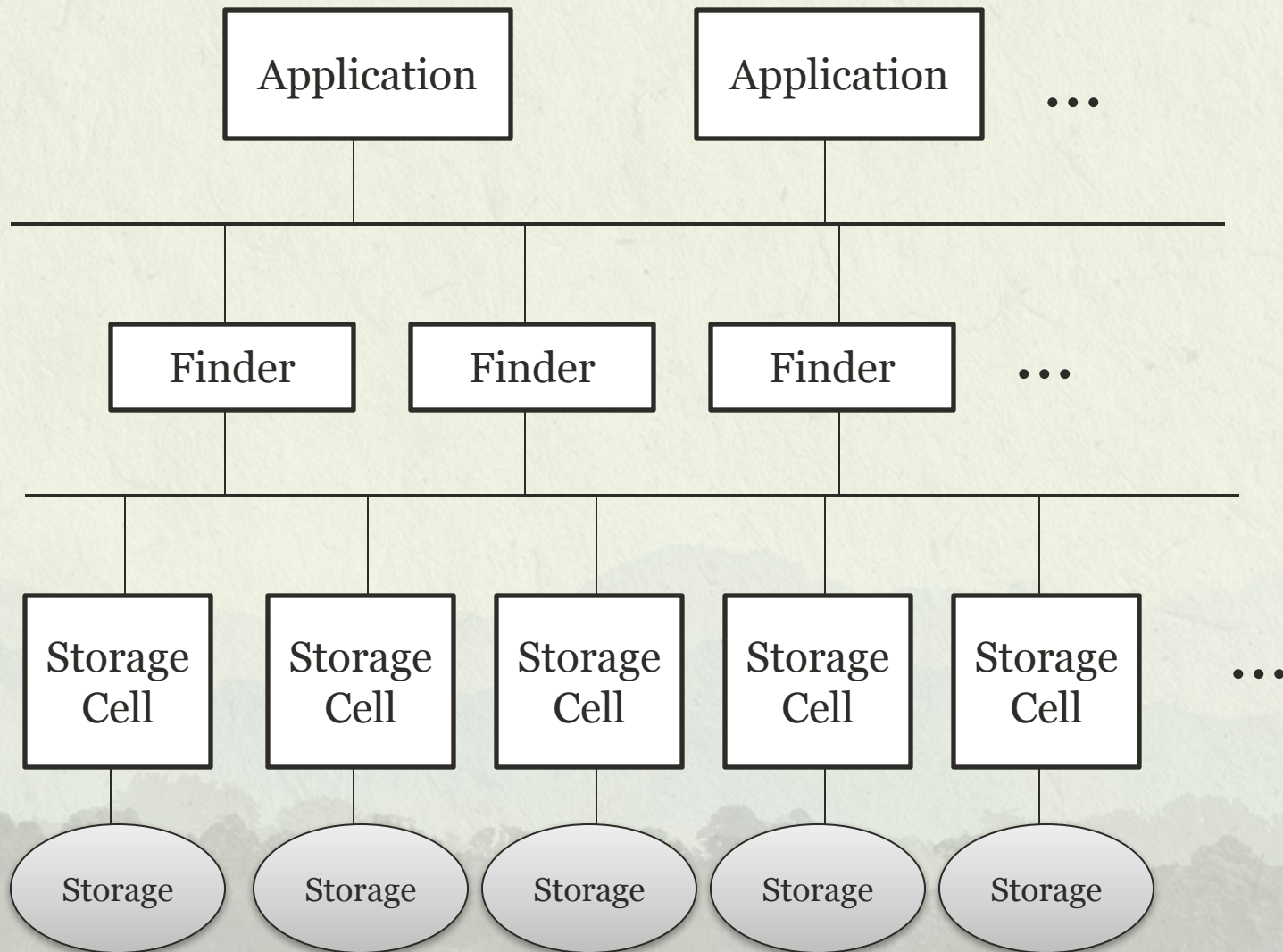
Finder Functionality

- Provide external API (REST)
- Route object operations to correct storage cell.
 - Check free space for optimum new object placement
 - Retrieve appropriate data stream
- Enforce access control

Data Streams

- TH-266-12450-42919-53
 - metadata.xml
 - displayImage.jpg
 - thumbnail.jpg
 - fullImage.jp2

Digital Artifact Store



Storage Cell

- Knows its own objects by ID
- Uses a standard file system
- Storage size based on time to restore
- Optimizations
 - Bloom filters
 - Algorithmic mapping of ID to folder

Questions?

Tom Creighton, CTO
tc@familysearch.org



