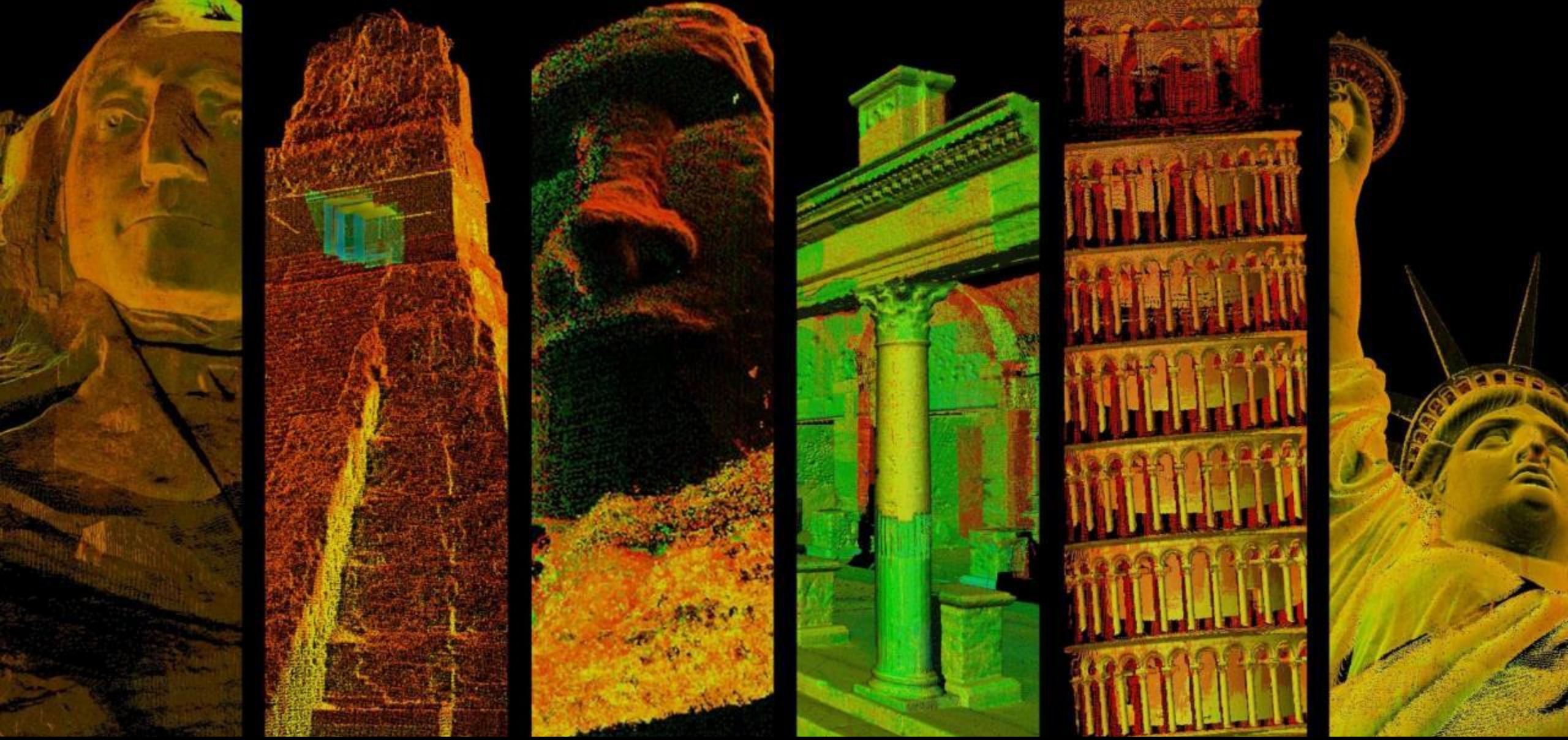


CyArk

CyArk Overview and Ellis Island Proposal

CyArk's Mission

Digitally preserving cultural heritage sites through collecting, archiving and providing open access to data created by laser scanning, digital modeling, and other state-of-the-art technologies.

CyArk's Projects

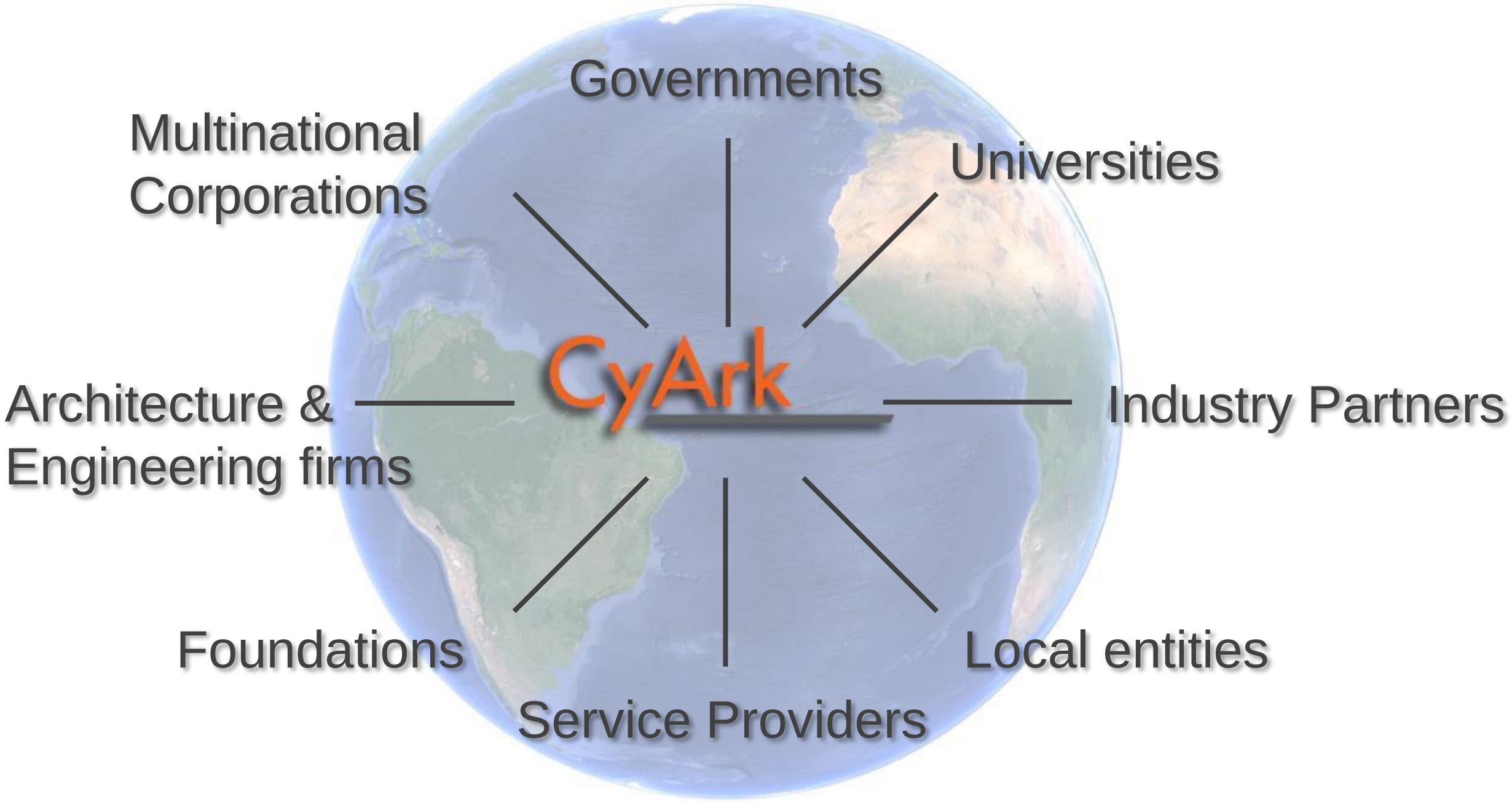
CyArk

SCOTTISH TEN

www.scottishten.org

CyArk Partners

CyArk

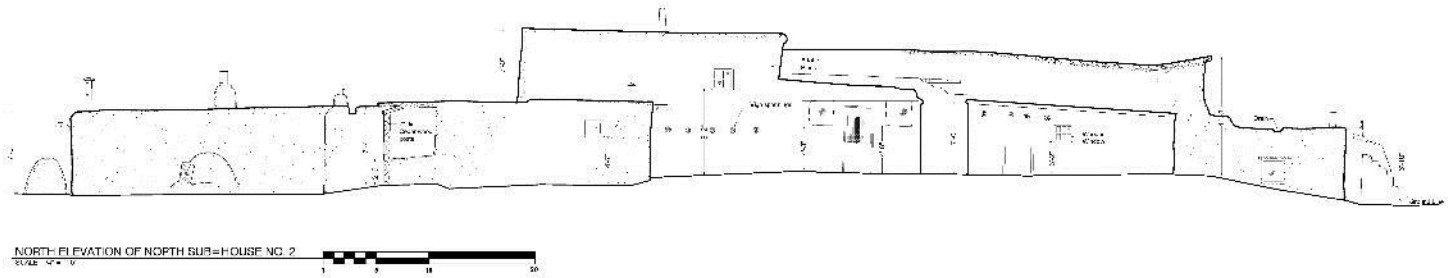

Governments
Multinational Corporations
Universities
CyArk
Architecture & Engineering firms
Industry Partners
Foundations
Local entities
Service Providers

Vision

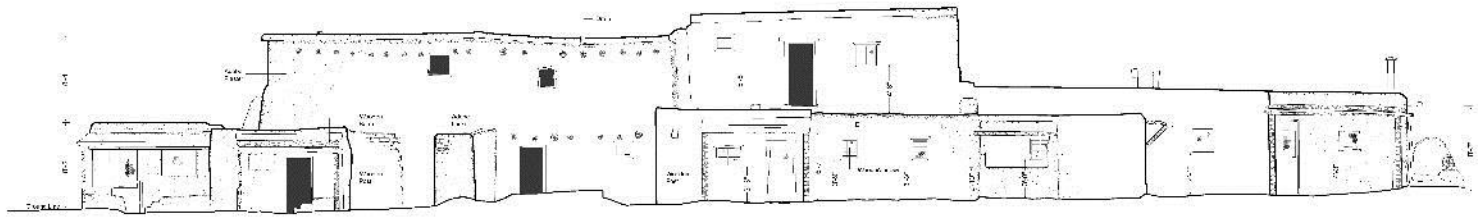
To achieve an order of magnitude improvement in the way we document, preserve, experience and archive our cultural heritage through bridging and integrating islands of automation in 3D, digital technologies.

CyArk

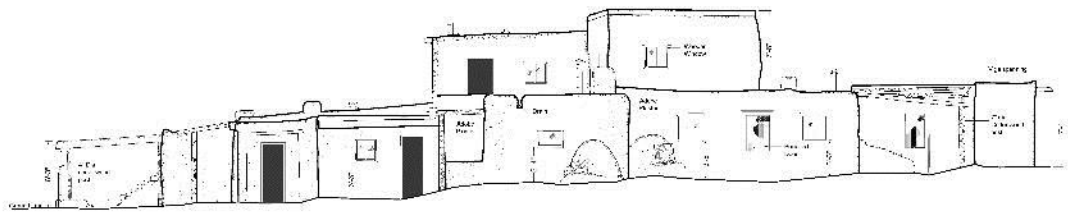

DATUM LINE
1st STORY ROOF
2nd STORY ROOF
1st STORY ROOF
1st STORYTERRACE
Oven
Oven
Adobe Buttress
1st STORY ROOF
2nd STORY ROOF
1st STORYTERRACE
Drain
2nd STORY ROOF
Cedar wood Viga
Parapet Wall
DATUM LINE
N
NORTH SUB-HOUSE NO. 2 PLAN
SCALE: 1/4" = 1'-0"
ADDENDUM TO: THE PUEBLO OF TAOS
TAOS COUNTY NEW MEXICO



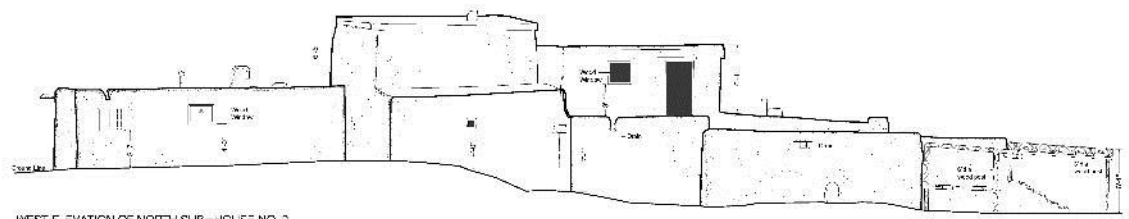
NORTH ELEVATION OF NORTH SUB-HOUSE NO. 2



SOUTH ELEVATION OF NORTH SUB-HOUSE NO. 2



EAST ELEVATION OF NORTH SUB-HOUSE NO. 2



WEST ELEVATION OF NORTH SUB-HOUSE NO. 2

ADDENDUM TO: TIL PUEBLO OF TAOS

NATIONAL PARK SERVICE

CyArk

Securing the data


FUJIFILM


134028
XT
TRF320

CHALLENGE:

CyArk had a manual solution consisting of offsite storage using hard disk drives and this system was cumbersome, time consuming and outdated. The organization needed a secure, scalable solution to protect the longevity of its vast digital content and to manage growing data volumes in a secure and cost-efficient manner.

SOLUTION:

File-based active archive to reliable digital data tape:

- *Crossroads StrongBox LTFS archive with NAS interface to tape storage*
- *Fujifilm LTO-5 tape media*
- *Spectra Logic T950 enterprise tape library*

RESULTS/BENEFITS:

Longevity and Convenient Accessibility of Data

- *30 years with tape versus 10 years with spinning disk*
- *Persistent view of data*

Scalable

- *Currently storing 50TB of data; 2PB server planned for future archiving*

Secure

- *Both onsite and offsite data storage*

Cost-Effective

- *Tape storage has significant cost advantages versus disk storage*

CASE STUDY

CyArk (digital archiver of the world's heritage sites)

CyArk Looks to Active Archive Solution for Preserving the Past and Protecting the Future

CyArk is a non-profit foundation focused on the digital preservation of cultural heritage sites including places such as Mt. Rushmore, Pompeii and the ancient Mayan city of Tikal. Unlike artifacts safely housed in museums, the world's cultural heritage sites face constant risk from numerous factors, including prolonged exposure to sun, wind and rain, earthquakes, fires, and even acts of human aggression. In order to protect and preserve these records of mankind's history, CyArk captures these sites using 3D technology to create a robust digital archive.

Overcoming the Data Deluge

CyArk previously had a manual solution of offsite storage using hard disk drives but this system was becoming cumbersome, time consuming and outdated. While newer, advanced technologies help CyArk capture more facets of each site it surveys, these technologies also require the organization to manage a greater volume of data than it did in the past – upwards of 5 to 10 TB per project, versus volumes in the range of 500GB just a few years ago.

Managing CyArk's growing stores of data and safeguarding the world's cultural heritage in the most cost-effective manner possible required a different approach to data storage – one that uses advanced tape technologies to deliver the simplicity and performance of disk drives at a much more affordable price point. What CyArk needed, was an active archive.

CyArk

Diagrammatic image of the Mayan ruins of Xochicalco in central Mexico showing field data collection with a 3D scanner

OPERATIONAL ENVIRONMENT

BACKUP AND RECOVERY

ACTIVE DATA

INACTIVE DATA

Office

Field data on portable HDS

Onsite storage and processing (2 servers)

Weekly backup

Backup tapes

@local vault

Initial ingestion

Final ingestion

Onsite LTFS archive

Ingestion creates a second LTFS tape

Offsite LTFS archive

@remote underground storage facility

Results

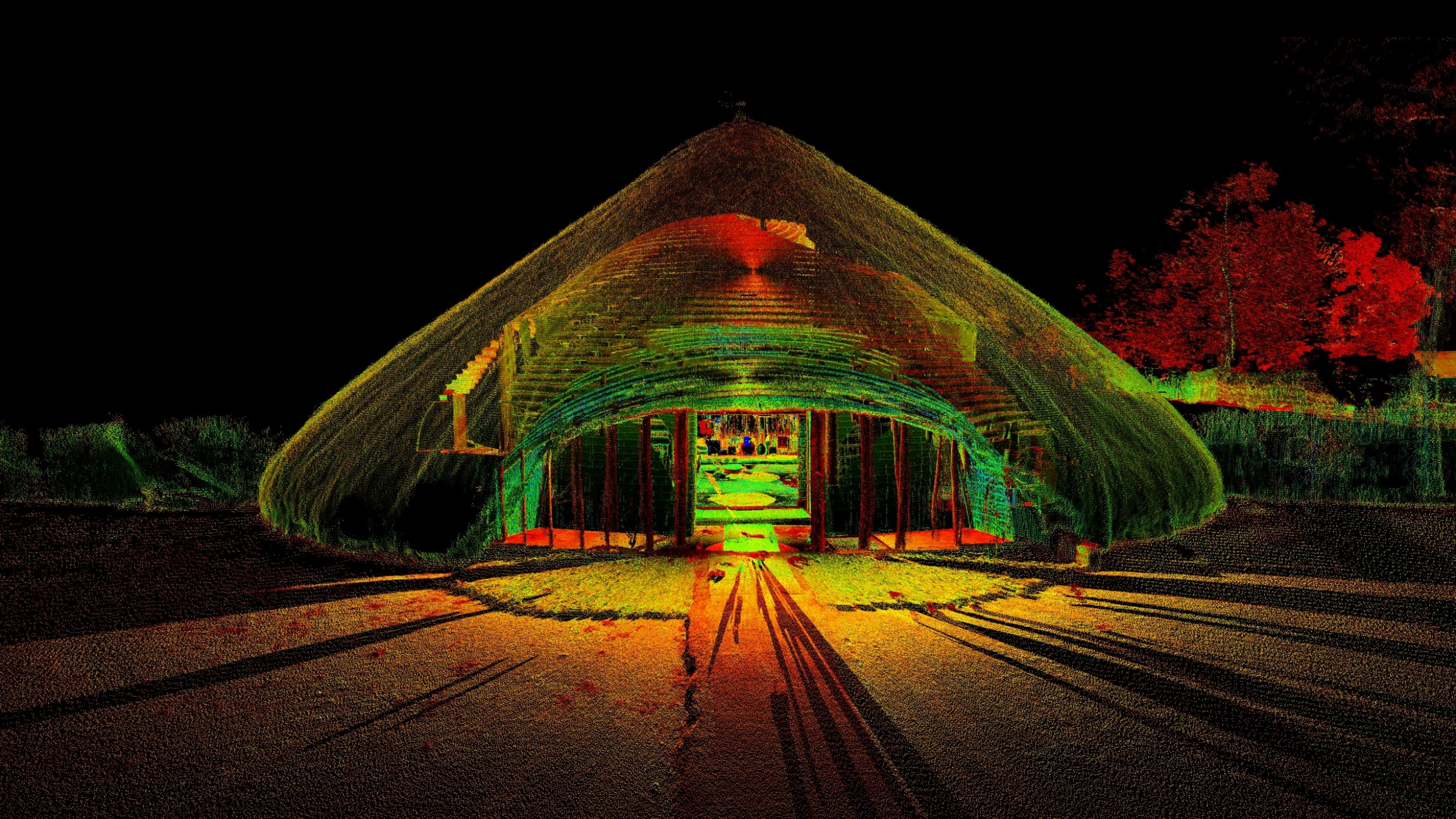
System went online

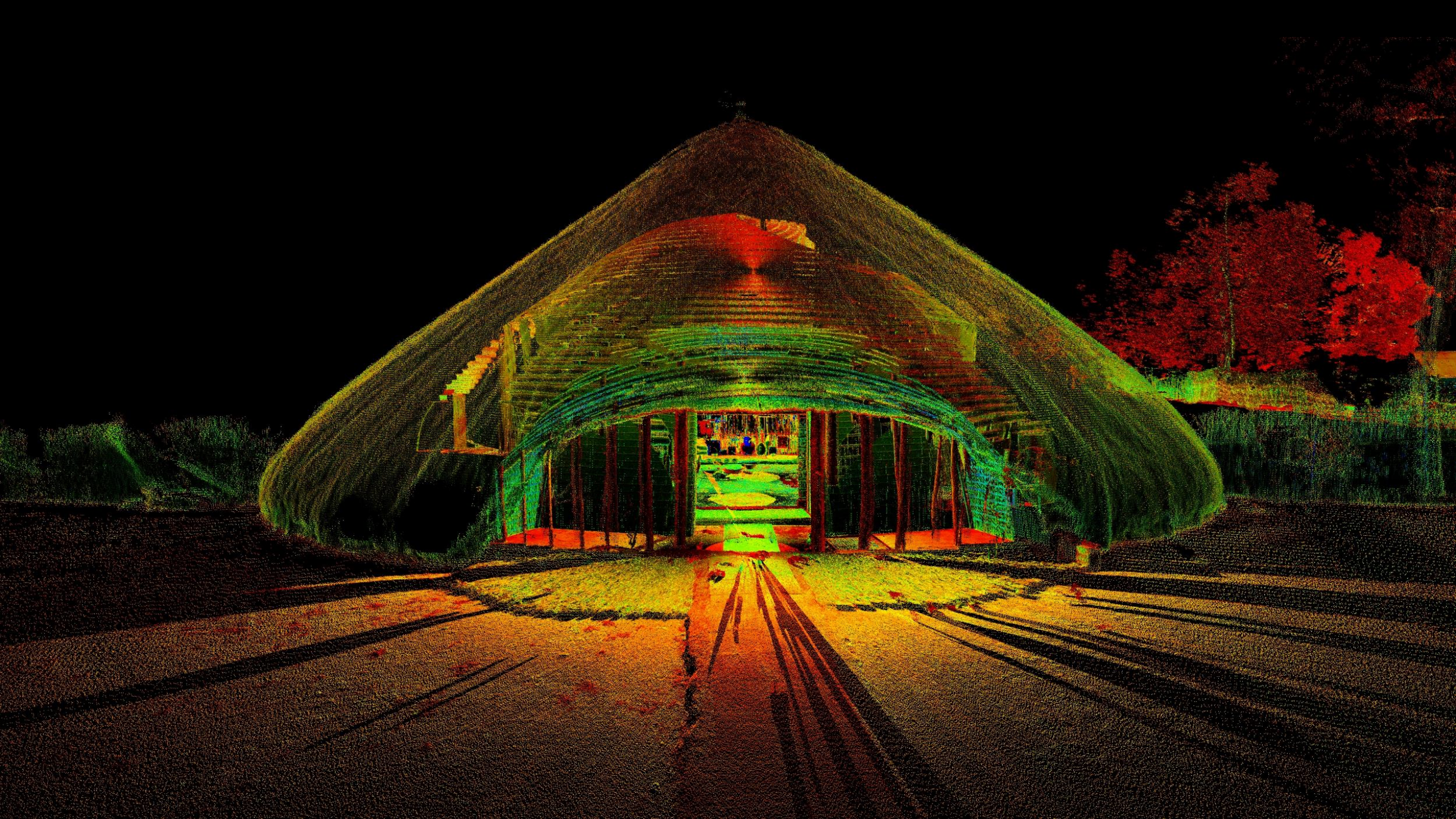
September 29, 2012

50% growth rate last year

Due to launch of **CyArk 500**

Substantial growth expected






CyArk
500
Challenge


Ellis Island


CBS
NEWS


Treating th
Marked and Wanted
With a Variety to Cure

Fujifilm CyArk and Ellis Island

- 3D capture and data processing of Ellis Island, with a focus on the Main Arrivals Building
- Creation of architectural drawings and multimedia for the NPS' use in conservation and public interpretation of the site
- Launch of a public web portal for the digital media created from the 3D laser scan of Ellis Island
- Creation of mobile app to augment visitor experience with 3D interactive content
- Archiving the 3D data in the CyArk archive

CyArk

FUJIFILM

NATIONAL PARK SERVICE

CyArk

Get in touch

- www.cyark.org
- twitter @cyark
- facebook.com/cyark
- elizabeth.lee@cyark.org

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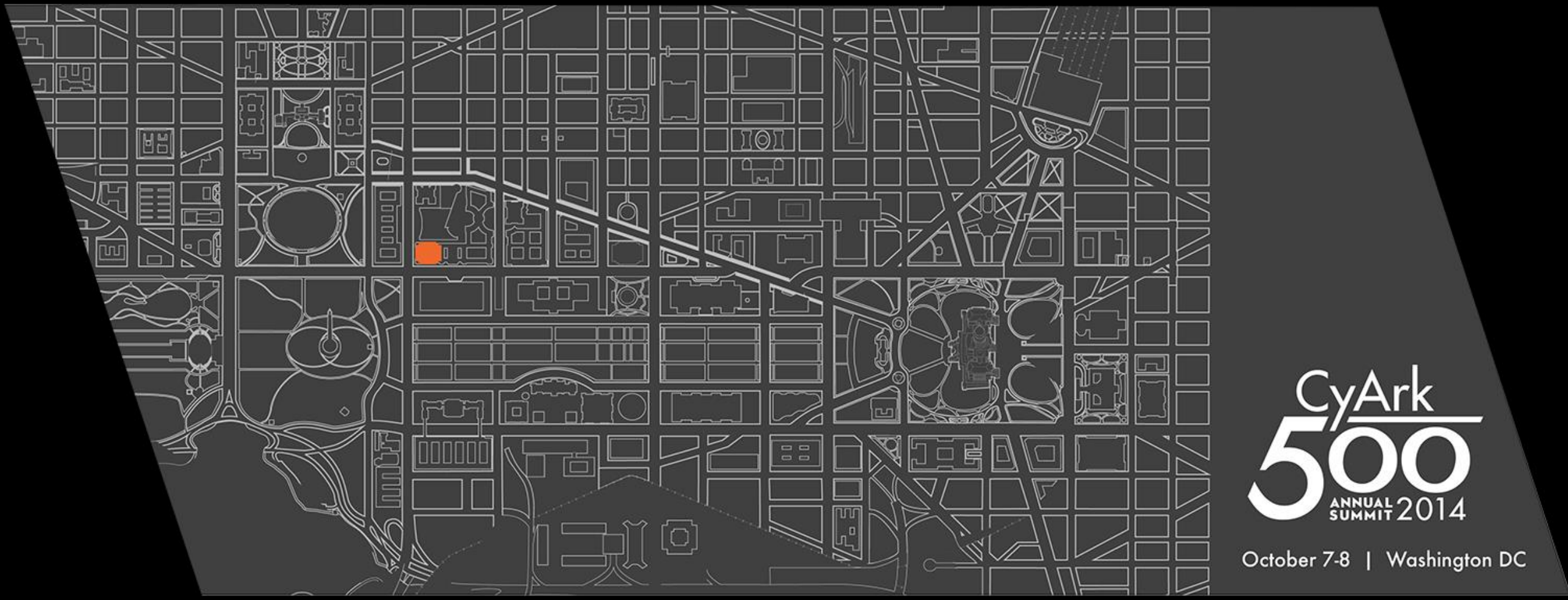
CyArk
500
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October 7-8 | Washington DC