Dark digital preservation storage network spanning multiple institutions and geographic regions.

- University of California, San Diego (UCSD)
- National Center for Atmospheric Research (NCAR)
- University of Maryland Institute for Advanced Computer Studies (UMIACS)
- Texas Digital Library (TDL)

Three software migrations:
- SRB -> iRods -> ChronCore

Initial partners have changed over time.

TRAC audit received in 2012.
CORE PRINCIPLES

- Dark archive
- Data is managed independently at three different sites; no one person can access data at all of the sites.
- A minimum of three copies must be stored in the network.
- Data will be returned to depositor in exactly the same form as provided.
- Except for sensitive data (PII/HIPAA), there are no constraints on what type of data can be deposited.
### UCSD

**Program Manager:** Sibyl Schaefer

*Research Data Curation Program Manager:* David Minor

**Systems Administrator:** Ron Stanonik

**Operations Manager:** Tim Marconi

**Head of IT:** Declan Fleming

**University Librarian/ PI:** Tammy Dearie

### NCAR

**PI:** Eric Nienhouse

**System Administrator:** Brian Bonnland

**Dashboard Developer:** Nathan Hook

### UMIACS

**Software Developer:** Mike Ritter

**Professor/ PI:** Joseph Jaja

### TDL

**Executive Director:** Kristi Park

**Services Manager:** Courtney Mumma

**Software Engineer:** Nick Woodward

**Senior Systems Administrator:** Clark Kim
<table>
<thead>
<tr>
<th></th>
<th>Number of Depositors</th>
<th>Number of TBs</th>
<th>Number of Files</th>
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<tr>
<td><strong>Chronopolis</strong></td>
<td>11</td>
<td>~ 45.22 TB</td>
<td>~1,863,901</td>
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<td><strong>DPN @ UCSD</strong></td>
<td>22</td>
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SUSTAINABILITY

1. Application
2. Staffing
3. Partner Nodes
DATA PROVIDERS

- Uses DuraCloud interface to deposit materials into Chronopolis
- Named DuraCloud Chronopolis

Chronopolis + DuraCloud + DPN = DuraCloud Vault

UC San Diego
- UCSD Library
- UCSD Researchers
RECENT ACTIVITIES

- DuraCloud Chronopolis service
- University of Goettingen partnership
- TDL partnership official
- Repair development
- NCAR dashboard development
- Lowered price points for Chronopolis
- Multiple ingest node development
SERVICES ADVISORY BOARD

- Review proposed policies and specifications and provide feedback specifically with regards to:
  - Common requests from depositors
  - ISO 16363 compliance
SOFTWARE OVERVIEW

- **ChronCore** - ingests, tracks, and replicates data throughout the system.
- **ACE** - provides ongoing fixity checking.
- **Dashboard** - provides an overview of Chron collections at each node.
- **DuraCloud** - used to provide a user interface between Chronopolis and depositors.
- The **Bridge** connects DuraCloud and ChronCore.
● Intake
● Ingest
● Replication
ACE: Audit Control Environment

- Provides fixity checking at each node
- Audits checksums (SHA-256) as well as token values
- Run at each Chronopolis node
THANK YOU!

Sibyl Schaefer
sschaefer@ucsd.edu
http://libraries.ucsd.edu/chronopolis/