



# Technology to Support Digital Preservation

An Update from the PERERSIST  
Technology and Research Working Group

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**International Council on Archives  
US National Archives**



# 1. THE CHALLENGE

- Documentary heritage now digital
- At risk from format and software obsolescence
- Mission of libraries, archives, other memory institutions to preserve documentary heritage
- Can't do it alone!

## 2. UNESCO'S RESPONSE: RECOMMENDATION ON DOCUMENTARY HERITAGE



- Adopted at the 38<sup>th</sup> General Conference, November 2015
- Points to Memory of the World programme as coordinator of global response
- Provides framework for world's memory institutions to work together

## 3. EXISTING ECO-SYSTEM:

Already an active international Digital Preservation Community

- Coalitions, networks
- Conferences, forums and workshops
- Research and development in government, universities, industry

Producing:

- Best practices, tools, technical registries



# EXISTING ECO-SYSTEM

## PROVIDERS & ENABLERS

### OPEN SOURCE

Open source tools and services  
*Providers:* Associations (Open Preservation Foundation - OPF), libraries, universities, etc.

### COMMERCIAL SOLUTIONS

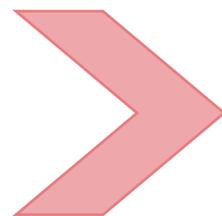
Preservation solutions by Preservica, ExLibris, Archivum, etc.

### INFRASTRUCTURE PROVIDERS

Universities, libraries and archives  
*Cloud providers:* Amazon, Microsoft, Oracle, etc.

### FUNDING

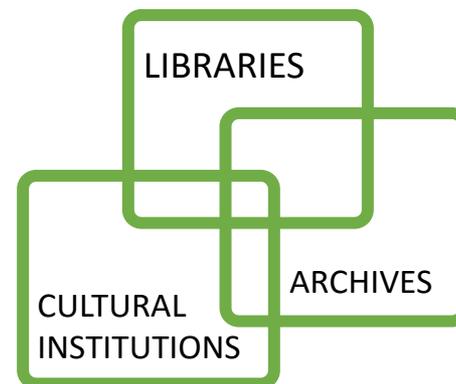
Government, private, national and international funding agencies and research foundations



## TECHNOLOGIES

*Technical registry*  
*Characterization and attribution tools*  
*File type identification*  
*Media transfer tools*  
*File format migration*  
*Content rendering tools*  
*Software emulation and virtualization*  
*Storage infrastructure*

## PRACITIONERS



*Standards and professional guidelines*

## COMMUNITY PRACTICES

Professional associations of libraries and archives:  
IFLA, OCLC, ICA, OPF, DPE, DPC, DCC

# WHERE CAN PERSIST ADD VALUE?

- UNESCO speaks for whole world's heritage
- PERSIST can distribute capabilities more evenly around world
- On behalf of world libraries and archives it can:
  - Gather requirements
  - Evaluate and accredit tools
  - Maintain access to legacy software

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## UNESCO PERSIST

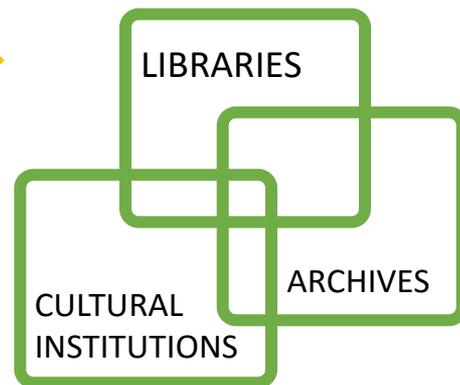


*Policy and regulations: lifecycle management of digital technologies, legacy software deposit, licensing, and dissemination*

*Access to legacy software licenses and virtualized legacy software*

*Best practices, standardization, and certification of tools and preservation solutions*

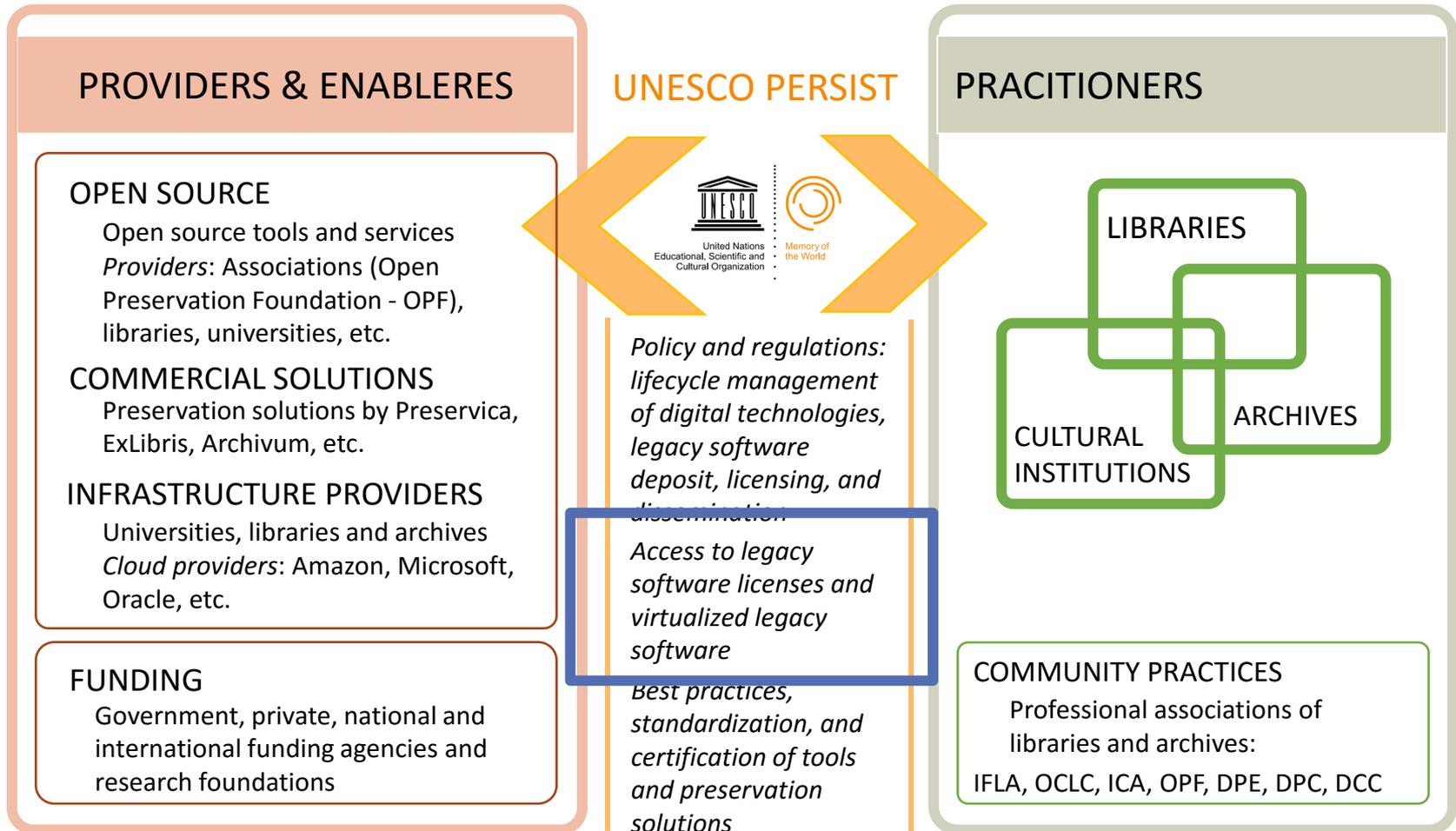
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# EXISTING ECO-SYSTEM



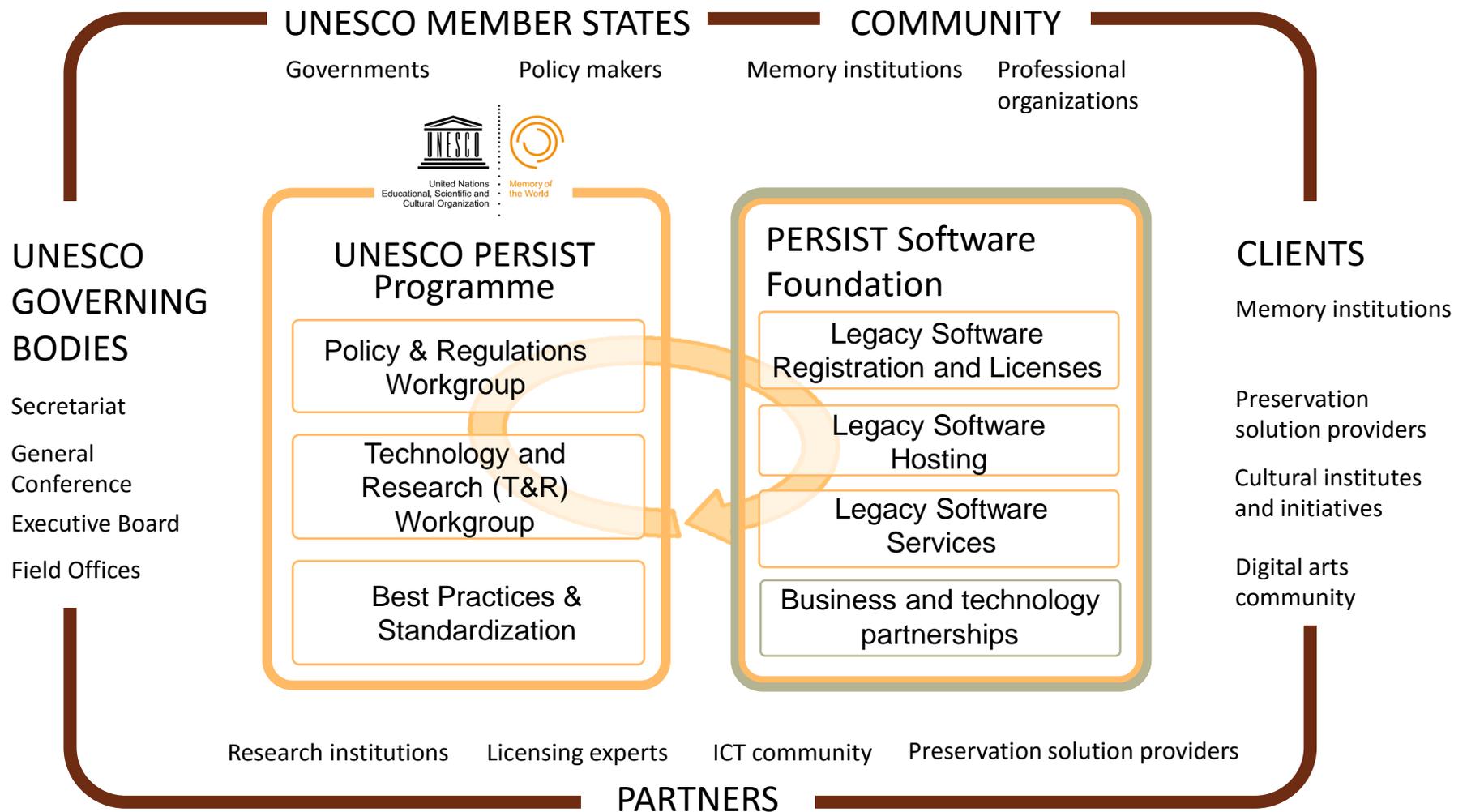
# 4. PERSIST SOFTWARE FOUNDATION

Foundation being explored by ICA

Separate, legal entity able to:

- Negotiate rights to use obsolete commercial software
- Host virtualised instances of obsolete software
- Provide access and manage use by libraries, archives, etc.

# PERSIST PROGRAMME AND PSF



# 5. SUSTAINABLE BUSINESS MODEL

- Leverage previous software virtualisation initiatives.
- Create a business model and
- Create a legal framework for distribution of virtualized legacy software
- Develop partnerships with industry
- Develop a fully operational, product grade service that is economically sustainable

# DISCUSSION / FEEDBACK

What services would your institution find most helpful for the PERSIST Software Foundation to provide?

What obsolete software should be high priority for acquiring a means of access?

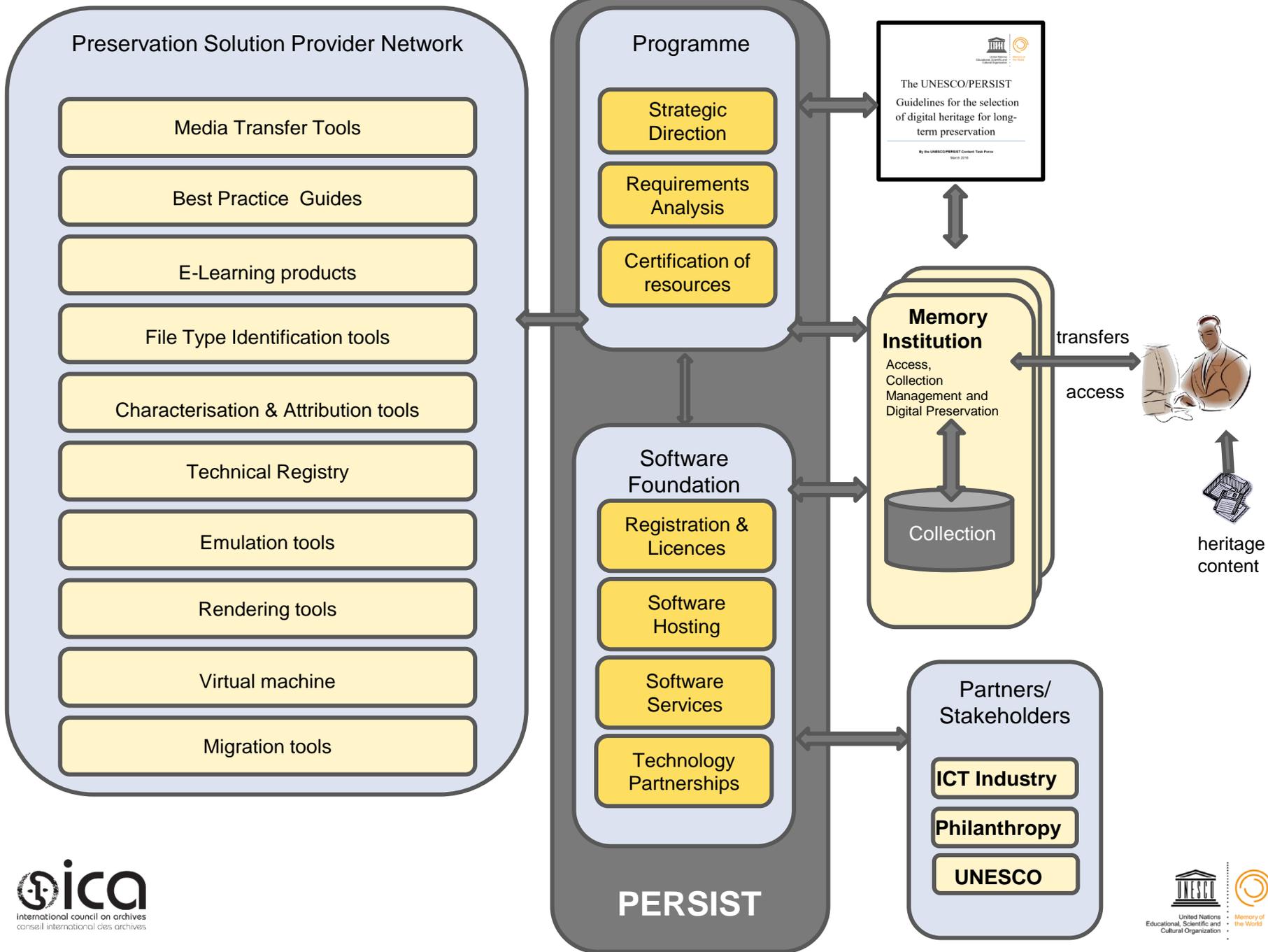
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# PROJECT GOVERNANCE

