OTC: MKLD

JUN

@ 2002 markland technologies



# **Site Map**

Home Page

**About Us** 

News Room

# **Emerging Technologies**

- Acoustic Core™
  - Summary
  - Ilicit Materials Detection
  - APTIS Portal Design Cycle
    - APTIS Engineering/Design
- Crypto.Com™
  - Summary
  - Technical Information

# **Border Security**

- Vehicle Stopping System (VSS)
- Logistics Support

Search:

All Media Types



**BROWSE HISTORY** 

Anonymous User (login or join us)

# 411 Billion web pages saved over time. DONATE

Q Advanced Search















# Tools

Wayback Machine Availability API Build your own tools.

WordPress Broken Link Checker Banish broken links from your blog.

404 Handler for Webmasters Help users get where they were going.



# **Subscription Service**

Archive-It enables you to capture, manage and search collections of digital content without any technical expertise or hosting facilities. Visit Archive-It to build and browse the collections.



# Save Page Now

SAVE PAGE

Capture a web page as it appears now for use as a trusted citation in the future.

Only available for sites that allow crawlers.

FAQ | Contact Us | Terms of Use (10 Mar 2001)

OTC: MKLD

OC1

@ 2002 markland technologies

OTC: MRKL

AUG

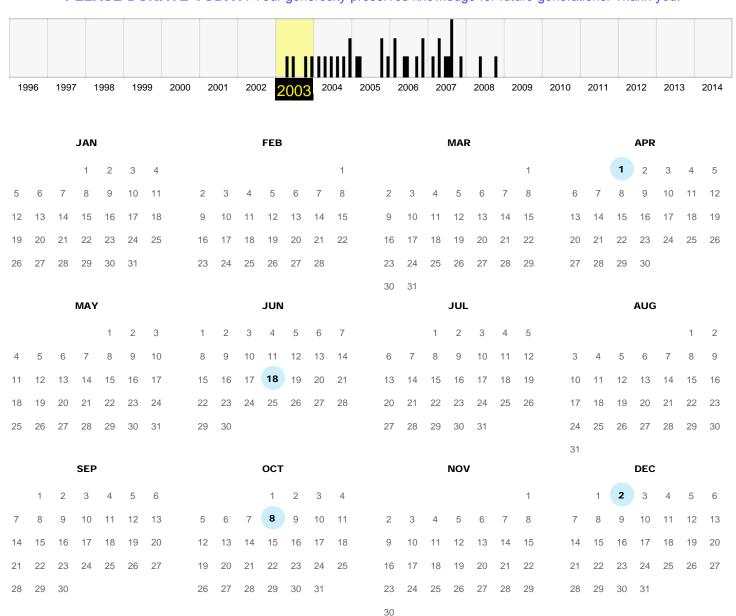
@ 2003 markland technologies



# http://www.marklandtech.com/index.html

Saved 34 times between April 1, 2003 and October 9, 2008.

PLEASE DONATE TODAY. Your generosity preserves knowledge for future generations. Thank you.



# **Note**

This calendar view maps the number of times http://www.marklandtech.com/index.html was crawled by the Wayback Machine, *not* how many times the site was actually updated. More info in the FAQ.



The Wayback Machine is an initiative of the <u>Internet Archive</u>, a 501(c)(3) non-profit, building a digital library of Internet sites and other cultural artifacts in digital form.

Other projects include Open Library & archive-it.org.

Your use of the Wayback Machine is subject to the Internet Archive's <u>Terms of</u> Use.



# About Us...

The United States has been thrust into a new era where protecting our way of life here at home is priority

Home . Site Map . Contact Us

Markland Technologies is committed to the delivery of integrated security solutions to meet these new era challenges.

Our innovative emerging technologies and expert services are focused solely to provide our customers with the tools necessary to protect personnel, data and infrastructure assets.

# **Directors/Executives**



## Delmar R. Kintner

Delmar R. Kintner, CEO and Director, has over 35 years of experience in the areas of technical marketing and emerging technology development project management with United States government customers in the Department of Defense and various other government agencies and departments. He has BS/MS degrees in Electrical Engineering and has been involved in numerous successful startup companies.



# Ken Ducey

Ken Ducey, CFO/President, has led over a dozen small companies to substantial revenue growth. He has headed the commercialization of a number of technologies ranging from computer software to medical devices, and has extensive experience working with a variety of financial institutions.



## Robert Tarini

Robert Tarini, Director, has over 20 years of experience in the areas of acoustic remote sensing and product development with scientific customers within the United States government and Pacific Rim countries. He has a BS degree in Electrical Engineering and has been involved in numerous successful past and ongoing United States government logistics support and product development programs.



# Ernie Mercier

Ernie Mercier, Chairman of the Board of Advisors, has worked for the United States Customs Service for the past 30 years. Ernie was formerly the Director of Research & Development for the US Department of Customs and headed the US Customs Service SouthWest division for many years. He was instrumental in bringing many technologies to the US borders, including backscatter X-Ray inspections, License Plate Readers, and Dedicated Commuter Lanes.



# Chad Verdi

Chad Verdi, Director of Business Development, currently serves as Vice Chairman of Eurotech Ltd, a public company that trades under the symbol EUOT. He is responsible for assisting the company in the establishment of strong business relationships with outside organizations with emphasis on identifying longterm strategic financial and joint venture opportunities. Mr. Verdi has helped raise over 25 million dollars for the company since April 1999 and continues to advise the company on these matters.

He owns and co-owns several successful businesses in New England. He acts as a financial consultant to corporations in diversified industries. He has raised funds for start-up companies, and has developed two New England corporations into highly successful retail/wholesale businesses. His sizable commercial real estate developments and recent entrepreneurial transactions include major acquisitions and sales of various corporate entities. He was formerly the Chief Executive Officer of Coastal Food Services & Provisions Inc. and Coastal Food Service Companies (1988 - 2000) located in Providence and Cranston, Rhode Island. These companies grew from 1 million in sales to generate over 25 million dollars in sales annually, and Coastal Foods Service was part of a multimillion dollar acquisition in 2000 by a Massachusetts-based company.

# **Investor Relations**

Markland Technologies: About Us

ECON Investor Relations, Inc. Dawn Van Zant, 1-866-730-1151 dvanzant@investorideas.com



# News Room...

Press releases and relevant news items concerning Markland Technologies are posted here. Please bookmark this page and return to check for updates.

Home . Site Map . Contact Us

- January 28, 2002
   Markland Technologies Announces Status on Security Products and Development Initiatives
- January 17, 2002
   Markland Technologies Announces Joining Homeland Security Industry Association Board of Advisors
- January 15, 2002
   Markland Technologies, Inc. and Law Enforcement Associates to Present at the Homeland Security/Defense Stocks Forum February 27
- December 11, 2002
   Markland Technologies Announces Exchange of Promissory Note for Shares of Newly Issued Series C Convertible Stock
- December 10, 2002
   Markland Technologies Announces Contract to Provide Border Security Logistic Support and Product Development Services to United States Government
- December 9, 2002
   Eurotech, Ltd. Announces New Subsidiary With Markland Technologies, Inc. To Focus on Homeland Security Marketplace



# **Acoustic Core™**

Summary | Illicit Materials Detection | APTIS Portal Design Cycle

# **Summary**

After almost a decade of intensive laboratory and field research, AC technology is poised to enter the security marketplace to fill high-priority Homeland Security needs. AC has unique primary screening capabilities that are suitable for the development of remote screening products for many security applications. Because AC technology can utilize the unique and independent acoustic signatures of illicit materials, products can be developed and programmed to detect a large array of harmful substances, including explosive, bio-hazardous and radioactive compounds.

The technology appears capable of supporting the development of a variety of new products for computerized automatic screening of containers, vehicles and humans for a broad range of illicit materials at high rates of speed and with low rates of false alarms. It uses low-frequency acoustic energy that is safe for human exposure and is ideal for screening large volumes of containers or humans quickly and accurately.

AC appears capable of automatically screening large containers while they are in motion. A proposed configuration of the equipment would permit screening of these containers while they are being transported by cranes, trucks, or railcars. Primary screening of containers in this manner can allow segregation of suspicious containers for secondary screening by a handheld versions of the remote sensing products. Future AC products should be usable in conjunction with current secondary screening methods to provide fully integrated inspection and screening systems.

The AC technology can be utilized to develop products that can automatically screen luggage for plastic explosives by retrofitting AC technology based sensors into existing carry-on luggage inspection systems. The technology is very flexible and can be used to safely screen humans for explosives when incorporated into existing entry portal systems such as metal detectors, eliminating the need to replace these systems. Additionally, AC technology based products can be developed that can be installed in the floor space of airline passenger entry portals to detect explosives in footwear.

Return to top Next page: Illicit Materials Detection









# Acoustic Core™

Summary | Illicit Materials Detection | APTIS Portal Design Cycle

## **Illicit Materials Detection**

Acoustic Core™ is a non-intrusive acoustic remote sensing technology, which exhibits great promise relative to the automated detection of a large variety of illicit materials. The technology is capable of computerized automatic screening of containers, vehicles and humans. It can detect a broad range of illicit materials at high rates of speed, with low false alarm rates and utilizes safe for human exposure low frequency acoustic energy. This makes the technology ideal for primary screening applications where large volumes of containers or humans need to be screened quickly and accurately such as in an airport or border crossing.

The technology is based on the scientific theory that all materials exhibit unique acoustic properties which when quantitatively analyzed produce an acoustic fingerprint. This acoustic fingerprint—based on the material spectral acoustic properties of impedance, sound velocity and absorption—will allow a computer to be programmed to automatically detect illicit materials such as plastic explosives. The acoustic fingerprint is obtained by transmitting a short wide bandwidth burst of acoustic energy, receiving the returned acoustic energy and processing the returned acoustic energy utilizing proprietary Acoustic Core™ spectral analysis tools.

The technology was first described in research conducted in the late 1980's and in the subsequent award of US Patent #4922467, issued in 1990. Since then, significant additional research has resulted in additional patent filings for improvements and construction of various prototype laboratory equipments which can determine materials properties via non-contact acoustic means. The non-contact acoustic sensor technologies employed include air parametric acoustic transmitters and receivers, as well as laser vibrometers. The combination of one or more of these technologies in the sensor design provides tremendous flexibility and a broad range to the possible applications.



The technology has been proposed for use in various primary-screening applications where the computerized scan rate capability of one target per second at a detection probability of 95% is very attractive. Acoustic Core™ spectral analysis techniques, which are utilized, are easily implemented in digital signal processing components, which are readily available. We believe that various forms of an Acoustic Core™ sensor capable of detecting illicit materials can be made into products which are affordable, lightweight and compact. Some examples of the markets that we intend to enter are graphically depicted below.



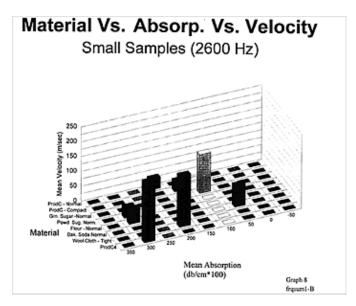
The technology is ideally suited for primary screening applications where humans may be exposed and high rates of traffic require automated computer controlled detection. A version of the technology is undergoing engineering design, which when finished is intended to be used to screen humans for plastic explosives. This Acoustic Core<sup>TM</sup> based portal design is expected to work in conjunction with existing metal detector portals and would be capable of giving a green light/red led output and audio feedback which reflects the possible presence of plastic explosives and or metal on the person, clothing or footwear. The expectation is that the prototype when completed will exhibit characteristics that should allow the product to then obtain FAA certification.

**Integrated Metal and Acoustic Explosives** 

# **Detection Portal**

As quoted in Aviation Security International (October 2000), "In the same way that access control systems (biometrics and card) can now be integrated with metal detection to facilitate the movement of staff into restricted areas, so too the aim must now be for the manufacturers of metal detection and explosive detection and/or passenger X-ray technologies to continue to work tighter to develop fully integrated screening portals that combine the different detection methodologies."





Acoustic Absorption and Velocity Profiles For C4 Explosives, Cocaine and Other Common Materials

Classification of Low Z Plastic Explosive Material by
Utilizing Acoustics with Existing X-Ray Backscatter
Inspection Systems

Illicit Materials Detection Utilizing Non-Intrusive
Acoustic Sensing

Initial Measurements of the Acoustic Properties of Materials Encountered in the Screening of Humans for Illicit Materials

?

Return to top

Next page: APTIS Portal Design Cycle

OTC: MKLD

© 2002 markland technologies

10 captures 13 Dec 02 - 10 Oct 04









Home • Site Map • Contact Us

# **Acoustic Core™**

<u>Summary</u> | <u>Illicit Materials Detection</u> | APTIS Portal Design Cycle



Click Images for More Information





**View of Prototype Unit** 

Return to top

OTC: MKLD

© 2002 markland technologies



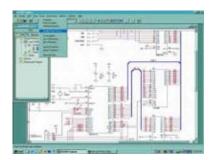
# **Acoustic Core**<sup>™</sup>

Summary | Illicit Materials Detection | APTIS Portal Design Cycle



# **Engineering/Design**

Click images to view larger picture.





Home • Site Map • Contact Us





# Crypto.Com™

Summary | Technical Information

# **Summary**

The need for increased cyber security has never been as critical as it is at the present time. To meet the fundamental confidentiality, integrity, and availability objectives of communications security, better encryption than that currently employed is required to defend against unauthorized access to non-perishable confidential data. This need for better encryption systems also extends to protection that cannot be decrypted today nor in the future, even in the face of much improved computer speed and capacity.

Crypto.Com's cryptology provides the theoretically ultimate encryption security. Today's industry standards use encryption technologies with either secret key or a public/private key encryption method, which becomes part of a system, transmitted to another party for decoding purposes or is stored in password protected electronic files. The transmission of these secret keys is vulnerable to intruders. Crypto.Com's cryptology is a double cipher, keyless transmission system, with no transmitted key subject to compromise. This is a new class of cryptology that prevents deciphering of intercepted messages by the most powerful methods or computers. This system appears ideal for the transmission of non-perishable credit card and debit card information over the wired and wireless communication systems found in ATM and Internet transactions.

As decryption methods become more efficient and computing power more available, the current industry standards will become more vulnerable, while requiring more and more bandwidth to prolong the time before their inevitable compromise. The Cipher Cracking Challenge first published in the book "The Code Book" by Simon Singh in September 1999 was decoded by October 2000. This challenge, which included widely used encryption methods such as DES and RSA, is a prime example of how vulnerable today's widely used encryption methods are to attack by sophisticated amateurs. The RSA and DES encrypted texts were broken in 13 months without using the power of supercomputers.

The strong Crypto.Com theoretical cryptology base means that technology should remain invulnerable to compromise without requiring ever-increasing bandwidth to stay ahead of attacks. Crypto.Com's cryptology appears adaptable to a wide variety of communications such as networked systems, private email messages, file transfers, and can be adapted to levels of security appropriate to the communication link. It provides the highest theoretical level of security available for transmission of large files, email, and graphics and for important small files such as passwords, debit and credit card information, ID cards, and personal authentication.

Crypto.Com's advanced VYN algorithmic system has been evaluated by leading scientists and mathematicians. Their analysis of the underlying mathematical approach verified its inherent security. Subsequently, alpha stage demonstrations of software implementations of the VYN algorithm for communications, file transfers, passwords, and credit cards proved the applicability of the mathematical approach to the generation of secure encryption algorithms. The encryption technology development has proceeded to the stage where it is ready for adaptation to computer operating systems, browsers, programming languages, communications protocols, and hardware device drivers.

Return to top Next page: Technical Information



# Crypto.Com™

Summary | Technical Information

# **Technical Information**

# Using Information Semantic Systems for Absolutely Secure Processing

## Contents.

- 1. Semantic Theory of Information.
  - 1.1. Disadvantages of the Shannon's Theory of Information.
  - 1.2. Different approaches to meaning of information.

Figure 1. The general schema of obtaining information.

- 1.3. Semantic Information.
- 1.4. Transmitting of semantic information.

Figure 2. Semantic communication line.

- 1.5. Absolutely Secure Communication over Insecure Channel.
- 1.6. Absolutely unbreakable cipher.
- 1.7. Processing semantic information.
- 1.8. Explore a researched object.
- 2. Semantic Theory of Information Applied to Cryptology.
  - 2.1. Cryptographic concepts.

2.1.1. Secret-key concept.

Figure 3. Secret-key concept.

2.1.2. Public-key concept.

Figure 4. Public-key concept.

2.1.3. Double-ciphering concept.

Figure 5. Double-ciphering concept.

- 2.2. Definitive cryptographic equation.
  - 2.2.1. Secret-key concept.
  - 2.2.2. Double-Key concept.
  - 2.2.3. Public-Key concept.
  - 2.2.4. Why we need definitive equations?

Figure 6. Unified cryptographic concepts.

- 2.3. Double-ciphering communication Line.
  - 2.3.1. Equations.
  - 2.3.2. The cryptographic process. First Level.
  - 2.3.3. The cryptographic process. Second Level.
- 2.4. Real Absolutely Secure Communication System. (Example of encrypted text)
- 3. Advantages of Double Key concept and its applications.
  - 3.1. Advantages of Double key concept.
  - 3.2. Applications.
  - 3.3. Demonstration programs.

# References

- 1. Algorithmic Theory of Information Applied to Cryptology.
- 1.1. Disadvantages of the Shannon's Theory of Information.

The word "information" is used in different senses. In common life, in computer science, in mathematics and statistics, or in the theory of communications we use this word in different ways depending on its applications. It is commonly thought that cryptology is the science of secure communications [10] and thus the theory of communications must be laid as a theoretical base of cryptology. For this reason modern cryptology uses it's ideas and notions that were stated by C. Shannon in his classical papers [8, 9]. But there are three reasons that force us to look for another information theoretical base for cryptology:

1. There is a difference between the Shannon's theory approach and cryptology needs:

The theory of communications studies problems of transmitting information from one correspondent to another. It is not interested in the content of the message. For this reason the theory uses probabilistic definition of information. Cryptology is concerned with the actual message content.

- 2. Shannon's theory does not treat the semantic content of a message. (It is not interested in the meaning of a message). It is interested a number of characters only. For that reason today's cryptography does not have methods for ciphering and deciphering of semantic information.
- 3. Communication theory cannot explain the public-key cryptographic concept.

According to the Shannon's theory amount of information I(M; C) of the message M, that can be revealed if a cipher C was intercepted is

$$I(M; C) = H(M) - H(M/C),$$
 (1.1)

where H(M) is amount of information (entropy) in the message and H(M/C) is the conditional amount of information (entropy) of the message when the encrypted text C (cipher) is available. But as far as for any public-key method entropy

$$H(M/C) = 0,$$
 (1.2)

then any public-key method (according to Shannon's theory) is not really a cryptographic method because it does not hide any information. For any public-key method always

$$I(M; C) = H(M).$$
 (1.3)

To find the theoretical base for cryptology consider existing approaches to information. Return to top

1.2. Different approaches to the meaning of information.

There are 3 different mathematical approaches to meaning of information :

- 1. Experimental approach. R. A. Fisher (1925) [2]) thought about information as something that can be obtained from processing of experimental data.
- 2. The Theory of Communication. R. V. Hartley (1928) [3] defined information as a choice when an event was selected from a set of possible events (we will call it as an information set). C. E. Shannon (1948) [8] defined information as a choice of the actual message from a set of possible messages.
- 3. The Algorithmic Theory of Information. A. A. Kolmogorov (1965) [4, 5] (see also [6]) was the first who introduced algorithmic ideas to approach of information. He defined information as algorithmic complexity of the object. (The algorithmic theory of information is not widely known. Articles [4]-[6] are not translated in English. In the English literature base, only [1] is available.)

We see that there are different ideas about what is information:

- The experimental approach thinks about information as a property of the object that must be determined.
- The theory of communications defined information as a process of choice.
- The algorithmic theory considers information as an algorithm needed to rebuild the object.

The algorithmic theory is concerned with content of the actual message. For this reason it is more suitable for cryptographic needs. However, its authors did not consider cryptographic tasks. Today it is necessary to develop the algorithmic idea for cryptographic needs. To understand what we need consider a question about what is information in the most general case. Intuitively we imply that information about an object or event is any property or characteristic of the object that can be considered, transmitted or processed without (1.4)

necessity for physical presence of the object or event.

In other words, information about an object is anything that can be considered separately from this object. This definition is not a mathematically strong one. So we should discuss it in more detail:

- 1. The abstraction from physical content of the object means that there is congruity between the object and a symbolic set or that we can make a mathematical or a symbolic model (representation) of the object.
- 2. The model of the object is built according to a research technique (algorithm) and experimental devices.
- 3. The model of the object itself is not needed by us. We use models to make our decision. This decision we make according to a processing algorithm. Symbolic representation of the object (its model) is input data for the processing algorithm. Our decision (choice) is output of the processing algorithm.
- 4. Any transfer from a real object to its model and from the model to a choice (information set) must be (if we want to be within the bounds of strong mathematical definitions) described by mathematical algorithms (research algorithm and processing algorithm).
- 5. A real object is a carrier of information. A choice from an information set is of real usefulness to us. But the model of the object is actual information about the object.

In the future we will call our approach as the cryptographic approach.

Figure 1 shows the general schema of information and relationship between different approaches about the question what is information.

Fig. 1. The general schema of obtaining information.

There are different starting points for definition of information:

- an information set.
- a model.

Communication theory chooses a starting point for the definition of information as an information set of possible properties or messages. Algorithmic theory supposes that information is an algorithmic link between the model and its information set. What is the difference ?

Definition (1.4) defined information as any property or characteristic of the object. The property of the object is one from the set of any possible properties. So if we have determined a property we have made a choice from a set of possible properties. However the real information is a model but we are interested in a choice. For this reason we omit often the previous stages: model and processing algorithm and think that real information is a choice from information set. But it will be right if for any predicate about an arbitrary model an algorithm solving this predicate exists. (1.5)

- C. Shannon published his papers in 1948-49 and wrote them earlier. In that time, the presumption (1.5) seemed obvious. Hovewer in the following years many unsolvable models were found (The first algorithmic unsolvable mathematical models were built by A.A.Markov and E. L. Post in 1947). For these models the statement (1.5) is wrong. It means that:
- 1. For definition of information it is necessary to take into consideration the research and processing algorithms that are used for obtaining information.
- 2. If we transfer from an object model to its information set we can lose information about the object model. Return to top

## 1.3. Semantic Information.

What information about the object can be lost if we transfer from its model to the its information set? We saw above that this is information about the meaning of the predicate. So it is semantic information. Semantic information about the predicate expresses a link between elements of the model. This link we will call as a semantic relation. The set of elements with semantic relation we will call as semantic set. An algorithm that makes a semantic relation we will call a semantic algorithm. As opposed to semantic information, Shannon's information we will call as coded information. Certainly there are a lot of links between elements expressed by algorithm can be shown as coded information. In order to avoid confusions in the future we will call semantic information only links that cannot be shown as coded information therefore these links cannot be algorithmic solved. So

Semantic information about an object is algorithmic unsolvable links between elements of the object. (1.6)

Semantic information is expressed by algorithmic unsolvable problems. There are infinitely enumerable set of unsolvable problems that cannot be reduced to each other. Any of these problems can be used for formulation of semantic information. The properties of algorithmic unsolvable problems establish the properties of information systems for processing of semantic information.

Note the most important features of semantic information:

- 1. Semantic information cannot be revealed by any algorithm.
- 2. Semantic information may "go through" algorithms untouched.
- 3. There are an infinite number of forms for expression of the same semantic information.

The features 1 and 2 are important for cryptography and secure information system. It means that we can make absolutely secure communication and processing information systems. Any coded information may be expressed by links between elements. It means that we can use semantic information for transmitting and processing coded information.

Semantic information is the property of the object that cannot be reduced to coded information form. We called these properties as semantic properties or semantic information. But in order for these properties to be real information according to definition (1.4), we should have the possibility to transmit and process semantic information immediately by semantic form.

Return to top

# 1.4. Transmitting of semantic information.

According to definition of semantic information, there is no algorithmic way to reveal a semantic relationship. Therefore, if we have transmitted a few symbols combined by semantic relationship, then our correspondent is not able to reveal the received semantic information. It is possible to transmit both symbols and semantic algorithm, but it will mean that we expressed semantic information by coded form. For applications it is important to answer the following question: can semantic information be transmitted immediately by semantic

form'

For transmitting semantic information in semantic form we propose the following protocol. Assume there are two correspondents Alice and Bob. Alice wishes to send semantic information to Bob. The correspondents perform the following operations:

- 1. Alice makes a semantic relation the following way. Any semantic relation includes a set of objects and semantic algorithm that introduces a semantic relationship. Assume the set of objects is M. Alice's semantic algorithm is A. So A\*M is a new set with semantic relationship.
- 2. Alice transmits the set

$$C1 = A*M$$
 (1.7)

to Boh

- 3. Bob cannot reveal the Alice's semantic relation. But he can make a conjecture about it. According to his conjecture he adds his semantic set L. As far as his set depend on Alice's message we write it symbolically as (A\*M + L).
- 4. Bob uses his semantic relation B and sends the result

$$C2 = B*(A*M + L)$$
 (1.8)

back to Alice.

5. Alice is not able to reveal the Bob's semantic relation. But she knows her semantic set M and her semantic algorithm A. Alice can use the inverse algorithm  $(-A)((-A)^*A = I)$ , where I is identity operator):

$$(-A)C2=(-A)*B*(A*M + L)$$
 (1.9)

6. If A and B are commutative each other then

$$(-A)*B*(A*M + L) = B*M + (-A)*B*L$$
 (1.10)

7. If the semantic set M has a special property then Alice uses it to separate the first and the second terms in (1.10). In that case she will get

$$C3 = B*M$$
 (1.11)  
 $C4 = (-A)*B*L$  (1.12)

8. Now Alice has two equations (1.11) and (1.12) and two unknowns B and L. And she may try to solve them.

From these considerations we obtain necessary conditions for the semantic relationship for semantic communication systems:

- 1. Coding operators for semantic relationship must be commutative.
- 2. Alice must be able to separate semantic relationship M and L.

Now consider the semantic communication line (Fig. 2)



Fig. 2. Semantic communication line.

If communication line includes Alice's information set, transmitting line and Bob's information set then communication is possible if Alice and Bob have the same information sets. But if we consider semantic information then it is not a necessity that Alice's and Bob's sets were coincident. For semantic communication line it is a necessity that Alice's and Bob's models were the same but their information sets may be different.

Return to top

1.5. Absolutely Secure Communication over Insecure Channel.

Let Xa be Alice's information set and Xb be Bob's information set. Alice has sent a message M to Bob. In that case we can write that amount of information which was sent by Alice is

$$Ia = H(Xa) - H(Xa/M)$$
 (1.13)

Bob received the same message M and the received amount of information for Bob is

$$Ib = H(Xb) - H(Xb/M)$$
 (1.14)

Eve has intercepted a cipher C. And intercepted amount of information is

$$Ie = H(Xe) - H(Xe/C)$$
 (1.15)

Suppose Alice and Bob want to have an absolutely secure communication. It means that le must be equal zero (le = 0). It is possible if a communication line has loss L. In that case

$$Ib = H(Xb) - H(Xb/M) - L$$
 (1.16)

$$Ie = H(Xe) - H(Xe/C) - L$$
 (1.17)

If Ie = 0 then 
$$L = H(Xe) - H(Xe/C)$$
 (1.18)

And finally

$$Ib = (H(Xb) - H(Xb/M)) - (H(Xe) - H(Xe/M))$$
 (1.19)

Where the first term H(Xb) - H(Xb/M) is amount of pure information that would be received without losses and the second term (H(Xe) - H(Xe/M)) describes unavoidable loss.

From the considerations above, it follows that if we have an absolutely secret communication then there is probability of mistakes. If we wish to have unmistakable communication we are not able to have absolutely secure. We are not able to have absolutely secure and absolutely unmistakable communication at the same time.

Return to top

## 1.6. Absolutely unbreakable cipher.

Absolutely secure system is a cryptosystem that cannot be broken neither in practice nor in theory. No matter :

- · how much time an interceptor has (suppose he has unlimited time).
- how many messages were intercepted (suppose he had intercepted all messages).
- what power computer he is using (suppose he has the most powerful computer).
- how much cryptography he knows ( suppose he knows all methods and he also has our software, programs, hardware and knows our cryptography method in details ).
  But this definition is not a mathematically strong one. We have no way to determine whether the cryptosystem is absolutely secure or not. In 1949 Claude Shannon introduced [9] the term a perfect secure system and gave the mathematically strong definition of these systems. According to the Shannon's theory amount of information I(M; C) of the message M, that can be revealed if a cipher C was intercepted is

```
I(M; C) = H(M) - H(M/C), (1.20)
```

And according to Shannon's definition perfect secure system is a system that is

$$I(M; C) = 0,$$
 (1.21)

or

$$H(M) = H(M/C),$$
 (1.22)

where H(M) is amount of information (entropy) in the plaintext. H(M/C) is the mutual information of the plaintext and the encrypted text (cipher). It is possible to calculate entropy in the plaintext. But how can H(M/C) be calculated in general case if we do not have any information about its key? We can introduce a universal deciphering algorithm Dk (like a universal Turing machine, recursive function or Markov's algorithm (that can be used for any cipher). If we apply the Dk to actual cipher we get a set of deciphered texts D = Dk(C). After that we define that

```
H(M/C) = H(D) (1.23)
```

So

$$Ik(M; C) = H(M) - H(Dk(C)), (1.24)$$

We see that the amount information I depends on the parameter k, where k may be number of algorithmic operations. It allows us to give strong definition for security of public-key system. And give another definition of an absolutely secure system. We will call it an absolutely unbreakable system to differ it from the Shannon's definition of perfect secure system (1.21). So an absolutely unbreakable system is the system that is

```
Iinf(M; C) = 0.(1.25)
```

linf is lk if k is infinite.

Note 1. There is an important difference between the Shannon's definition (1.21) and definition (1.25). The Shannon's definition means that H(M) = H(M/C)). The definition (1.25) means that the task to decrease entropy of its cipher is an algorithmically unsolvable problem.

Note 2. I(M; C) may have negative value. It means that the system has excessive hardness. For example, consider one-time pad method. If the part of one-time pad Ip was intercepted. It means

that Ip information can be revealed. If we use a semantic cipher and I(M; C) has negative value, then the cipher will be absolutely unbreakable even if part of the keys were intercepted or the cryptographer made mistakes.

Return to top

# 1.7. Processing semantic information.

To process semantic information we have to find an unsolvable problem U that can be used to accomplish a universal set of logical gates. A set of logic gates is said to be universal if any feasible computation can be accomplished in a circuit comprising only gates of the type found in that set. Although there are sets that have a single gate (alternative and joint denial) it is more convenience use AND and NOT gates. The semantic relationship U must be distribution semantic relationship. So

$$A(M1)*(A*M2) = A(M1*M2),$$
 (1.26)

Where M1 and M2 are initial sets.

Return to top

## 1.8. Explore a researched object.

The concept of semantic information opens a new way to explore a researched object. The only way that it is applied in science is to get information about the researched object using information sets of properties. But the semantic information concept allows us to arrange research like semantic communications between two partners. This method does not mean that both partners must be alive and intelligent ones. We can arrange semantic information interaction with insensate objects also or research another information system even if it does not know or use an appropriate algorithm.

There are an infinite numbers of unsolvable problems in mathematics (more strictly: the number of these problem is a enumerable set). Any unsolvable problem has unique properties and can be used to make an absolutely unbreakable information system.

Return to top

2. Semantic Theory of Information Applied to Cryptology.

## 2.1. Cryptographic concepts.

Now we explain our idea about the absolute secret communication using visual images. Suppose Alice wishes to send a secret message to Bob. What should she do?

# 2.1.1. Secret-key concept.

The secret-key concept is the traditional concept in cryptography. In secret-key communication we use the same key for encryption and decryption. If Alice wants to send a message to Bob, she encrypts it using her secret key in the forward direction. When Bob receives this message he decrypts it using the same key in the inverse direction.

We can illustrate this using a safe analogy (see Fig. 3)

If Alice wants to send a secret message to Bob, she must go through the following steps:



Fig. 3. Secret-key concept.

- 1. Alice makes a safe and two keys for it.
- 2. Alice sends one key to Bob through a secret channel.
- Alice writes her message, puts it into the safe, closes it and sends this safe to Bob.
   When Bob receives this safe, he opens it using the second key and gets the message from Alice.
   Return to top

# 2.1.2. Public-key concept.

If Alice uses a method of the Public-Key concept she will do (Fig. 4):

- 1. She sends an open letter to Bob. She asks him to send a special safe. This safe has a slot. Anybody can put a letter into the safe but it is necessary to have a key to open this safe. Bob only has the key.
- 2. Bob sends this safe to Alice.
- 3. Alice puts her letter into the safe and sends the safe back to Bob.
- 4. Bob opens the safe using his key and takes out Alice's letter.



Fig. 4. Public-key concept.

# Return to top

# 2.1.3. Double-ciphering concept.

Fig. 5. demonstrates the basic idea of the Double-ciphering conception. Let there be two correspondents - Alice and Bob and the eavesdropper (a passive attacker) Eve. Let Alice sends a secret message to Bob over an insecure channel. She will perform the following steps:

- Step 1. Alice makes a safe with two doors.
- Step 2. Alice installs her lock on the first door and keeps the key.
- Step 3. Alice sends the empty safe with still non-locked second door to Bob with the request to Bob to install his lock on the second door and locks both doors.

Fig. 5. Double-ciphering concept.

Step 4. Bob installs his lock.

Step 5. Bob locks both doors.

Step 6. Bob sends the safe back to Alice and keeps his key.

Step 7. Alice receives the safe with both doors locked. She opens the first door with her key.

Step 8. Alice puts the message into the safe via door 1, locks the door 1 and sends the safe to Bob while keeping her key.

Step 9. Bob receives the safe with both doors locked. He opens door 2 with his key.

Since the keys have never left the hands of Alice and Bob, Eve having intercepted the safe, will never be able to open it.

Return to top

# 2.2. Definitive cryptographic equation.

Every cryptography concept can be described a mathematical equation. This mathematical equation we will call as a definitive equation.

# 2.2.1. Secret-Key concept.

Let M represent a message. Alice perform an operation for coding it. That implies that Alice use a mathematical operator E. The result is a cipher C. There is an inverse operator (-E) We can calculate the inverse operator if we know E. So we can write

$$C = E*M$$
 (2.1)  
 $(-E)*E = I$  (2.2)  
 $M = (-E)*C$  (2.3)

where I is identity operator. Any cryptography method that belongs to the secret-key concept can be describe by this equation. So equations (2.1)-(2.3) is definitive equation for the secret-key concept. Return to top

2.2.2. Double-ciphering concept.

At first, we consider a definitive equation for Double-Key concept. Public-Key concept we will consider later. If we wish to get a definitive equation, we should go through all steps of the Double-Key concept idea.

- 1. Alice constructs a mathematical object S(safe). It will represent a safe with two open doors.
- 2. Alice locks the first door. This operation can be described by an operator A (Alice). So the A operates on the S. After that, Alice sends the object A\*S (the safe with one locked door) to Bob.
- 3. Bob puts his lock on the second door and puts his letter into the safe. It means that Bob have added an object L (lock). He has A\*S + L (The sign "+" has symbolic meaning of addition).
- 4. Bob locked his door. It means that he has performed an operation B (Bob) on the object A\*S + L. He sends the object B\*(A\*S + L) to Alice.
- 5. Alice opens her door. The inverse operator (-A) operates on the object  $B^*(A^*S + L)$ . After that she will get cipher C. Alice will be able to decode it and read Bob's letter.

We have described all steps of the Double Key concept. So we can describe the Double-Key concept by the equation :

$$C = (-A)*B*(A*S + L) = (-A)*B*A*S + (-A)*B*L (2.4)$$

Using the definitive equation we can understand why Eve is unable to decrypt Alice's and Bob's messages and how Alice and Bob can read their letters. The first time (Alice -> Bob) Eve has intercepted cipher

$$C1 = A*S$$
 (2.5)

Eve has one equation (2.5) and two unknowns A and S. So she cannot solve this equation. The second time (Alice <- Bob) Eve have intercepted cipher

$$C2 = B^*(A^*S + L)$$
 (2.6)

She knows A\*S but she does not know B and L. So she has one equation and two unknowns again. So she are not able to solve the equation. Alice decrypts  $B^*(A^*S + L)$  using her key (the inverse operator (-A) for decryption. We can say that she has put away her operator A for encryption (we suppose  $A^*B = B^*A$ ) and she gets:

$$C3 = (-A)*B*(A*S + L) = B*S + (-A)*B*L$$
 (2.7)

Alice has one equation and two unknowns B and L too. But she can try to separate B\*S from (-A)\*B\*L. In this case Alice will get

$$C4 = B*S$$
 (2.8)

Alice knows C4 and S. She can try to solve the equation, finds Bob's operator B, and use it for encrypting her message and read Bob's message L. Therefore S should have a special mark or another property for separation. This mark should be secret for Eve. Bob's operator B should not change it. Eve is unable to see the S mark because Eve knows only A\*S. We can say that the operator A "hides" the secret mark. But there is a question. How can we mark S? The mark should be absolute secret if we want to have an absolute unbreakable cipher. Eve has intercepted A\*S and (-A)\*B\*L. So she is able to analyze them and find all their properties. How can these objects have absolute secret properties. We will consider this question in the next chapter. Now we should write a definitive equation for Public-Key concept.

Return to top

# 2.2.3. Public-Key concept.

We have seen the idea of Double-Key concept. Now let see how Public-Key concept can be described using double-key definitive equation. We saw that Bob can send his letter to Alice when he send back Alice's safe. If Alice and Bob use Public-Key concept Bob does not add anything into Alice's safe. So we will get the definitive equation for Public-key concept if suppose that

$$L = 0.$$
 (2.9)

In this case we have

$$C2 = B*(A*S)$$
 (2.10)

What does it means? Suppose (A\*S) does not have an inverse element. Eve knows A\*S but she cannot figure out B as

$$B = C2*(-(A*S))$$
 (2.11)

But A has an inverse operator. Eve cannot figure out it because she intercepted only A\*S. So Eve has one equation and two unknowns A and S. But Alice knows A. And A has an inverse operator. So Alice can figure out (-A) and write

$$C4 = B*S$$
 (2.12)

Idea of the Public-Key concept is that S is very simple. But A\*S is very difficult. So equation (2.12) is offers a greater possibility for solution than equation (2.11). A\*S is a public key and A is a private key Return to top

# 2.2.4. Why we need definitive equations?

Cryptographic science does not have strong definitions for its cryptographic concepts. Session key and updating key methods look like Double-Key concept method. Definitive equations allow us to differentiate methods.

For example: session key protocol may be described as an updating key protocol. We see that Secret-Key concept is a special case of Double-Key concept. If we get A=B and S=0 we will get that Alice receive a cipher from Bob. It is the same equation. We have seen that both the Secret-Key concept and the Public-Key concept are special cases of the Double-Key concept:



Fig. 6. Unified cryptographic concepts.

But the Secret-Key concept is not converted to Public-Key concept. Therefore there is no misconception between Secret-Key and Public-Key methods. But it is easy to make a mistake between Public-Key concept and Double-Key concepts.

Return to top

2.3. Double-ciphering communication Line.

## 2.3.1. Equations.

The simplest semantic relationship is that one element is produced from another elements. So there are n independent elements {O1, ã, On}. And

$$On+1 = A(O1, \tilde{a}, On),$$
 (2.13)

where A is a semantic algorithm. We saw above (see 1.4) that it is necessary to have two commutative algorithms A and B for semantic communication. Let B is another algorithm.

$$B(A(O1, \tilde{a}, On)) = A(B(O1), \tilde{a}, B(On))$$
 (2.14)

In that case we can make a semantic communication line in the following way :

We have two necessary conditions for double-key method realization:

1. Two strong one-way functions F and T (or in general algorithms). The function (algorithm) F has n arguments and the function (algorithm) T has one argument. So

$$F = F(O1, \tilde{a}, On)$$
 (2.15)  
 $T = T(O1)$  (2.16)

A strong one-way functions means that :

First. We can not calculate the inverse functions. The equations

$$C1 = T(X)$$
 (2.17)  
 $C2 = F(X1, \tilde{a}, Xn)$  (2.18)

(where X, X1, ã, Xn are unknowns and C1 and C2 are arbitrary constants) are insolvable. Second. For arbitrary constant C1 and C2. We cannot decide whether they do or do not have a solution.

2. The function F and T must be commutative to each other. It means that

$$T(F(O1, \tilde{a}, On)) = F(T(O1), \tilde{a}, T(On))$$
 (2.19)

## Return to top

2.3.2. The cryptographic process. The first level.

The first Alice session.

Step 1. Alice makes a safe.

Alice makes an initial cryptographic framework (safe). The cryptographic framework consists of n mathematical objects {O1, O2, ã, On}.

Step 2. Alice installs her lock on the first door.

There is a strong one-way function

$$On+1 = F(O1,O2, \tilde{a}, On)$$
 (2.20)

The value of the function F will change if transposition of its arguments is made. The function F is known only to Alice. It is her key. Alice calculates On+1.

Step 3. Alice sends the empty safe to Bob.

Alice sends the broaden cryptographic framework {O1, O2, ã, On, On+1} to Bob.

The first Bob session.

Step 4. Bob installs his lock.

Bob transforms the cryptographic framework objects {O1,ã,On, On+1} using a secret function T. The T is known to Bob only. It is his key. The T is a strong one-way function too. Functions T and F are commutative to each other

$$T(F(O1,O2, \tilde{a}, On)) = F(T(O1), T(O2), \tilde{a}, T(On))$$
 (2.21)

Step 5. Bob locks both doors.

Bob makes a permutation of the framework objects, deletes originally received from Alice objects {O1,ã,On, On+1} and leaves the following set only:

$$\{T(Ok1), T(Ok2), \tilde{a}, T(Ok(n+1))\}\$$
 (2.22)

Step 6. Bob sends the safe to Alice.

Bob sends the permutated cryptographic framework (2.22) back to Alice.

The second Alice session.

Step 7. Alice opens the safe.

Alice re-builds the cryptographic framework back to the original order by looking through all possible transpositions and using the F function for verification. Thus, Alice can compute Bob's permutation. Now she uses it as the cipher key for making the secret message to be sent. This operation accomplishes the scope of level one.

The second Bob session.

Step 8. Bob opens the safe.

Bob uses his key to decode Alice's message.

Return to top

2.3.3. The cryptographic process. The second level.

Regardless of the fact that F and T functions are absolutely strong one-way functions the first cryptographic system is not absolutely secret because it is vulnerable to the brute-force attack. This brute-force attack can be withstood by adding the second level of the cryptographic system.

# Step 1.

Alice converts her initial message (plaintext) to a binary format. The converted message is a string of 0s or 1s. Alice and Bob make an agreement about the conversion rule using an open channel before the secret communication session begins.

Conversion Rule

Initial message -----> Binary format (2.23)

\*

Example. Suppose an initial message is a word "No". If we use ASCII conversion the converted message becomes "10011101101111".

Initial message No

Conversion rule: ASCII conversion
Binary initial message 0100111001101111

\*\*\*\*\*\*\*\*\*\*\*\*\*

Step 2.

Alice makes cryptographic binary words for every digit of the initial binary message. A cryptographic binary word is a string of n ( $n \ge 2$ ) bits. Therefore, there are n power of 2 different cryptographic words. Alice and Bob make arrangement through open channel about which cryptographic words correspond to 0 and 1. The words made out of 11...1 becomes a decoy word as it carries no information essential to the secret message. Alice randomly selects cryptographic words for every digit of her binary initial message. If she encounters the word 11..1 she keeps the word but repeats the selection for this digit again. This can be illustrated by the following example.

\*\*\*\*\*\*\*\*\*\*\*\*

### Exampl

Suppose Alice and Bob have made an arrangement that if a cryptographic word has even ones then it presents 0. If it has odd ones then it presents 1. Let cryptographic words have 4 digits (n = 4). In that case the words

0011, 0101, 0110, 1001, 1010, 1100, 0000 correspond to 0 (2.24)

0001, 0010, 0100, 1000, 0111, 1011, 1101, 1110 correspond to 1 (2.25)

The word

1111 is the decoy word (2.26)

\*\*\*\*\*\*\*\*\*\*\*\*\*

## Step 3.

Alice transmits every digit of the binary cryptographic words to Bob using the level one of the cryptographic system as given below 1.If she transmits 1 she makes an additional object On+1 using function F. If she transmits 0 she does not use function F and makes the object On+1 by random. In that case cryptographic framework has not function F.

- 2. Bob makes transposition and sends the cryptographic framework back to Alice.
- 3. If Alice transmits 1 she can calculate Bob's transposition and sends to Bob the correct transposition number. If she transmits 0 she cannot calculate Bob's transposition and sends a random transposition number. Alice and Bob have an agreement that if Alice sends the correct transposition number it means 1. If Alice sends the incorrect transposition number it means 0.

Security of the first level cryptographic system is based on the secret function F. If Eve wants to break the cipher she has to find the F. Eve knows exactly that F exists. Therefore she makes a brute-force attack. It is an algorithmically defined process.

Security of the second level cryptographic system is based on the knowledge that the function F exists or not. Eve does not know if F exists. To break the cipher Eve has to find F or prove that the function F does not exist. However, it can be demonstrated that Alice will be able to choose from those functions that are algorithmically unsolvable mathematical tasks. It means that Eve will not be able to prove existence of F. The Secret-Key conception uses one to one function. The Public-Key conception uses one-way function with drop door. The proposed Double-Key conception allow use one-way function without drop door. It allows for the use of a strong one-way function and makes an absolutely unbreakable cipher.

Return to top

2.4. Real Absolutely Secure Communication System.

We can build a real absolutely secure communication system if we use Diophantine functions as the T and F functions. Solution of Diophantine equations is an algorithmic unsolvable task [7]. So commutative Diophantine equations can be used for building real absolutely secure communication systems. For example. Let



Where Anm an arbitrary mathematical objects that must be commutative and associative. K1, K2, ã, Kn, P1, P2, ã, Pm are rational numbers. It is easy to see that function F and T satisfied (2.21) and can be used for building secure communication system.

We have encrypted a short text. Three files below (Alice-Bob1, Bob-Alice, Alice-Bob2) show a real cipher encrypted by method of Diophantine equations.

Alice-Bob 1

Bob-Alice

Alice-Bob 2

# Return to top

- 3. Advantages of Double Key concept and its applications.
- 3.1. Advantages of Double key concept.

Double Key concept has the following advantages :

- 1. Alice's key and Bob's key are independent of each other.
- 2. Double key concept uses one-way functions without drop door.
- 3. Double key methods allows one to work in infinite fields.
- There are unlimited number of Bob's key which match with Alice's key. And the contrary is right too.
- 5. Secret key concept and Public key concept are special cases of Double key concept.
- 6. Semantic information may "go through" algorithms untouched.

# Return to top

# 3.2. Applications.

Advantages 1-3 allows to make absolutely secure communication systems.

Advantages 4 -5 allows to make a new class of applications.

We think the most important advantage is number 5 and 6. It allows one to develop new concepts and methods for deciphering. These methods will be the most powerful methods. In our opinion any cryptographic method in which a ciphering algorithm is determined (any public key method is a determined algorithm) can be broken for polynomial number of steps. .

Return to top

3.3. Demonstration programs.

We have made demonstration programs for

- 1. Secure communication between two correspondents.
- 2. Protection password file for firewall.
- 3. Protection Credit card.

# Return to top

## References.

- 1. "Encyclopedia of Mathematics : An Updated and Annotated Translation of the Soviet Mathematical Encyclopaedia" by edited M. Hazewinkel, v. 1-10. 1988-1999.
- 2. R.A.Fisher, Proc. Cambridge Phil. Soc., vol. 22, pp. 700 -725, 1925.
- 3. R.V.L.Hartley. "Transmission of information", Bell System Technical Journal, v. 7, pp. 535-563, 1928.
- 4. A.N.Kolmogorov "Three approaches to definition of amount of information", Problemu Peredachi Informacii, v.1 pp. 3-11, 1965.
- 5. A.N.Kolmogorov "Logical Basic of Information Theory and Probability Theory", Problemu Peredachi Informacii, v.5, pp. 3-7, 1969.
- 6. L.A.Levin, A.K.Zvonkin, "Meaning of Information and Probability", Uspechi Matematicheskich Nauk, v. 25, n. 6, pp. 85-127, 1970.
- 7. Y.V.Matiyasevich, "Hilbert's Tenth Problem", 1993.
- 8. C.E.Shannon, "The mathematical theory of communication", Bell System Technical Journal, vol. 27, 1948, pp. 379-423, 623-56. (See Shannon, C. E. "Collected Papers", IEEE Pres, 1992, pp. 5-83).
- 9. C.E.Shannon, "Communications theory of secrecy systems", Bell System Technical Journal, vol. 28, 1949, pp. 656-715. (See Shannon, C. E. "Collected Papers", IEEE Press, 1992, pp. 84-143).
- 10.G.J.Simmons, "Cryptology", Encyclopedia Britannica 1995, v. 16, p. 860.

Return to top



# **Vehicle Stopping System (VSS)**



Less than 20 miles south of downtown San Diego lies the world's busiest port of entry - the international border crossing between San Ysidro, CA and Tijuana, Mexico. On the average day over 40,000 vehicles pass through this location. Port exit and entry security systems are undergoing evolutionary changes to implement improvements. Such improvements are necessitated by the ever increasing risks to unauthorized and illegal entry into the country. One such improvement is the "Vehicle Stopping System". It is designed and intended to safely capture "port runners". "Port Runners" constitute an ever

increasing threat to border integrity and capturing them with minimal danger and threat to United States INS and Customs Border Patrol agents has become a priority. The Vehicle Stopping System is capable of stopping any vehicle attempting to gain illegal entry at speed up to and exceeding 65 miles per hour safely; and without personal injury to occupants and United States government border personnel.



# Watch the Vehicle Stopping System in action!

Videos require Real Player version 6 or above.



Real Media Video File - 450kbs (high res)



Real Media Video File - 56kbs (low res)









# Dedicated Commuter Lane (DCL) Border Crossing Logistics Support Program

We were selected by the U.S. Immigration and Naturalization Service (INS) to maintain the automated international border crossings located at San Ysidro,CA; Otay Mesa, CA; El Paso, TX; Detroit, MI; and Buffalo, NY. The system, named the Dedicated Commuter Lane (DCL), is part of a larger U.S. Customs and INS initiative to reduce wait times, improve data accuracy, and improve overall efficiencies at all border crossings for both freight and passengers.



Home . Site Map . Contact Us

The DCL employs automatic vehicle identification (AVI) technology, which allows participants to pass through the border crossing more efficiently. Participants run a card through a swipe card reader, which

instantaneously sends patron information, including a photograph, to the Inspector's screen for clearance. The gate rises and allows the patron through. The whole process takes about 30 seconds. The DCL software also controls a variety of security subsystems, including video surveillance, gates, and tire shredders.

We are presently engaged in the design of system wide enhancements including the <u>Vehicle Stopping System</u> (VSS).

OTC: MKLD

© 2002 markland technologies



# **Site Map**

Home Page

**About Us** 

News Room

# **Emerging Technologies**

- Acoustic Core™
  - Summary
  - Ilicit Materials Detection
  - APTIS Portal Design Cycle
    - APTIS Engineering/Design
- Crypto.Com™
  - Summary
  - Technical Information

# **Border Security**

- Vehicle Stopping System (VSS)
- Logistics Support



# Site Map

# **Home Page**

# About Us:

- Management
- Company Profile

# **News Room**

# **Emerging Technologies:**

- Gas Plasma
  - 1. Introduction
  - 2. Market Applications of Plasma Technology
  - 3. Unique Characteristics of a Plasma Antenna
  - 4. Government Sponsored Work
  - 5. Plasma Decontamination and Sterilization
- Acoustic Core<sup>™</sup>
  - Summary
  - Ilicit Materials Detection
  - APTIS Portal Design Cycle
    - APTIS Engineering/Design
- Crypto.Com™
  - 1. Introduction
  - 2. Mathematics
  - 3. <u>Design Rationale</u>
  - 4. Specifications
  - 5. <u>Implementation</u>
  - 6. <u>Performance</u>
  - 7. Expected Strength
  - 8. <u>Suitability</u>
  - 9. Advantages and Limitations
- Vapor Trace

# **Border Security**

- Vehicle Stopping System (VSS)
- Logistics Support



# Site Map

# **Home Page**

# About Us:

- Management
- Company Profile

# **News Room**

# **Emerging Technologies:**

- Gas Plasma
  - 1. Introduction
  - 2. Market Applications of Plasma Technology
  - 3. Unique Characteristics of a Plasma Antenna
  - 4. Government Sponsored Work
  - 5. Plasma Decontamination and Sterilization
- Acoustic Core<sup>™</sup>
  - Summary
  - Ilicit Materials Detection
  - APTIS Portal Design Cycle
    - APTIS Engineering/Design
- Crypto.Com™
  - 1. Introduction
  - 2. Mathematics
  - 3. <u>Design Rationale</u>
  - 4. Specifications
  - 5. Implementation
  - 6. <u>Performance</u>
  - 7. Expected Strength
  - 8. <u>Suitability</u>
  - 9. Advantages and Limitations
- Vapor Trace

# **Border Security**

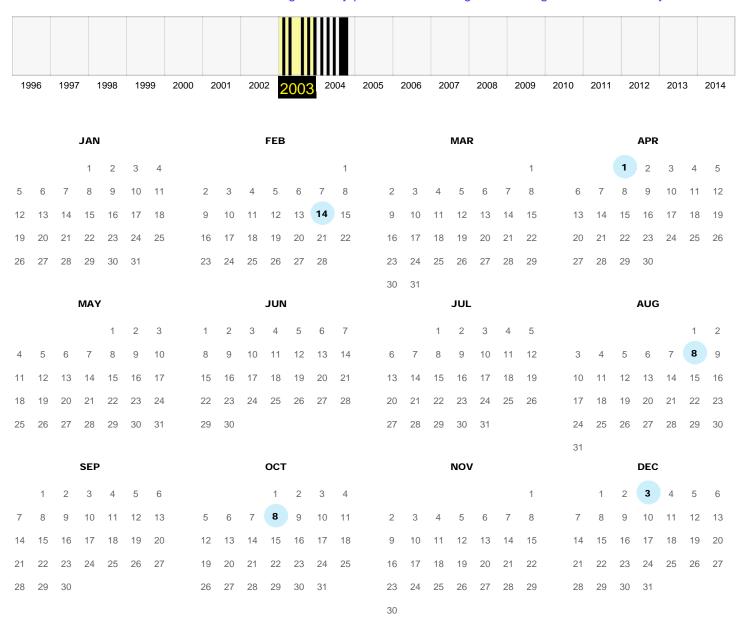
- Vehicle Stopping System (VSS)
- Logistics Support



# http://www.marklandtech.com/sitemap.html

Saved 11 times between February 14, 2003 and October 10, 2004.

PLEASE DONATE TODAY. Your generosity preserves knowledge for future generations. Thank you.



# **Note**

This calendar view maps the number of times http://www.marklandtech.com/sitemap.html was crawled by the Wayback Machine, *not* how many times the site was actually updated. More info in the FAQ.



The Wayback Machine is an initiative of the <u>Internet Archive</u>, a 501(c)(3) non-profit, building a digital library of Internet sites and other cultural artifacts in digital form.

Other projects include Open Library & archive-it.org.

Your use of the Wayback Machine is subject to the Internet Archive's <u>Terms of</u> Use.

Donate | Store | Blog | FAQ | Jobs | Volunteer Positions

Search:

All Media Types

**Q** Advanced Search

Anonymous User (login or join us)

# Announcements (more)

Authors Alliance Launch at Internet Archive, May 21

Wayback Machine Hits 400,000,000,000!

Bitcoin and the Internet Archive Swag Store

# Web 411 billion pages saved over time



# Welcome to the

The Internet Archive, a 501(c)(3) non-profit, is building a digital library of Internet sites and other cultural artifacts in digital form. Like a paper library, we provide free access to researchers, historians, scholars, the print disabled, and the general public.

# Video

**Browse** 



Input - #14 - Anatomy of Life - Part 1 - Born...

AIR DATE: 12-29-1968 REC DATE: 12-5-1968 TITLE: Anatomy of Life -Part 1 - Born Free? Dr ....

The Hobbit Kingdoms of Middle Earth Cheats Android iOS Telecharger Gratuit Pirater Average rating:

Live Music

**Browse** 



Grateful Dead Live at Nashville Municipal...

Set 1 Sugaree Beat It On Down The Line Candyman Me And My Uncle -> Big River Stagger Lee Looks Like...

Jerry Joseph and the Jackmormons Live at Boulevard Café on 2002-07-

Average rating:

# **Browse** Audio



John F. Kennedy Speech, June 26, 1963

"Ich bin ein Berliner" speech. Berlin, Germany.

Best 100 Instrumental Songs Average rating:

# **Browse** Texts



The history of Scotland, its Highlands, regiments...

"The Caledonia edition. Limited to one thousand sets ..." This set is not numbered

Safe 0734408121 Abortion clinic in Witbank, Mamelodi, Tembisa, kempton park, randburg, alexandra, diepsloot Middelburg, Ermelo, Bronkhorstspruit, Daveyton, Nigel, Brits ( Pills for sale & Delivery)

Average rating:

# Most recent posts (write a post by going to a forum) more...

Subject	Poster	Forum	Replies	Date
Re: file not found	suchenwi	movies	0	14 minutes ago
Godzilla-(NON-DEAD)	c-freedom	GratefulDead	0	1 hour ago
Re: A Cream question (non-Dead)	craven714	GratefulDead	0	1 hour ago
Please move	picfixer	feature_films	0	1 hour ago
Re: How to delete old documents	dreken	faqs	0	3 hours ago
Re: What's in-between	ColdRain108	GratefulDead	0	3 hours ago
Re: A Cream question (non-Dead)	craven714	GratefulDead	0	4 hours ago
Re: What's in-between	Jack o' Roses	GratefulDead	0	4 hours ago
Please Move to Classic TV	John Quigley	classic_tv	0	4 hours ago
42 years ago tonight	snoori	GratefulDead	0	4 hours ago

# **Institutional Support**

Alexa Internet **Prelinger Archives** LizardTech

**HP Computer** National Science Foundation Sloan Foundation

The Kahle/Austin Foundation Library of Congress Individual contributors





Animation & Cartoons | Arts & Music | Community Video | Computers & Technology | Cultural & Academic Films | Ephemeral Films | Movies | News & Public Affairs | Prelinger Archives | Spirituality & Religion | Sports Videos | Television | Videogame Videos | Vlogs | Youth Media

Search:

Video

Q Advanced Search

Anonymous User (login or join us)

#### **Moving Image Archive**

### Spotlight Item

Home



#### Experiments in the Revival of **Organisms**

This disturbing film records the successful experiments in the resuscitation of life to dead animals (dogs), as conducted by Dr. S.S. Bryukhonenko at the Institute of Experimental Physiology and Therapy, Voronezh, U.S.S.R. Director: D.I. Yashin. Camera: E.V. Kashina, Narrator: Professor Walter B....

#### **About the Archive**

**Background** 

Frequently Asked Questions

#### Rights

This collection is free and open for everyone to

Our goal in digitizing these movies and putting them online is to provide easy access to a rich and fascinating core collection of archival films.

By providing near-unrestricted access to these films, we hope to encourage widespread use of moving images in new contexts by people who might not have used them before.

### Contributors

Charlie Churchman Dave Wolber John Monteleone Josephine Chuang Kelly Gottlib Rodrigo Garay Sebene Selassie Tom Jacobs Tommy Yen Yang Wu Choon

#### Welcome to Moving Image Archive

1,623,306 items

#### Download or listen to free movies, films, and videos

This library contains digital movies uploaded by Archive users which range from classic fulllength films, to daily alternative news broadcasts, to cartoons and concerts. Many of these videos are available for free download. Check our FAQ for more information.

#### Contribute Your Movies and Video

Please feel free to upload your movies (Uploaders, please set a Creative Commons license as part of the upload process, so people know what they can do with your movies and video - thanks!)

All items (most recently added first) RSS

2.198 items

1,295 items

368,016 items

84,491 items

10,786 items

2,357 items

#### **Animation & Cartoons**

**Sub-Collections** 

Whether you want to watch classic cartoons from a bygone era, Brick Films made with your favorite building toys, Machinima patched together from video games, or the artful computer animations...

#### **Arts & Music**

This library of arts and music videos features This or That (a burlesque game show), the Coffee House TV arts program, punk bands from Punkcast and live performances from Groove TV. Many of these...

#### **Community Video**

You are invited to view or upload your videos to the Community collection. These thousands of videos were contributed by Archive users and community members. These videos are available for free...

#### Computers & Technology

Featuring two television programs popular in the 1980's and 1990's: Computer Chronicles and Net Café, this library showcases videos about computing and technology. Collection topics include BBS, the...

#### **Cultural & Academic Films**

This library of academic and cultural films features collections from the Academic Film Archive and the Media Burn Independent Film Archive, as well as a selection of documentaries created by Dorothy...

#### Ephemeral Films

Ephemeral films are non-fiction films usually made for educational, industrial, or promotional purposes. The two classic ephemeral film collections found on the Archive are the Prelinger Archives and...

#### **Movies**

Watch full-length feature films, classic shorts, world culture documentaries, World War II propaganda, movie trailers, and films created in just ten hours: These options are all featured in this...

**News & Public Affairs** 

11,095 items

68,258 items

## Most Downloaded **Items Last Week**

- 1. gwe2e-asd1f 188,856 downloads
- 2. qwe2e-asd1f 178,015 downloads
- 3. <u>electricsheep-flock-</u> 244-82500-7 129,557 downloads
- 4. qwe2e-asd1f 126,861 downloads
- 5. electricsheep-flock-244-82500-3 124,785 downloads
- 6. gwe2e-asd1f 109,615 downloads
- 7. <u>electricsheep-flock-</u> 244-82500-5 107,140 downloads
- 8. Dr Oz On Garcinia Cambogia 1 106.826 downloads
- 9. electricsheep-flock-244-82500-8 106,524 downloads
- 10. electricsheep-flock-244-82500-6 100,273 downloads

#### **Most Downloaded** Items more

- 1. About Bananas 26,984,604 downloads
- 2. www.themostuseful.n 16,100,937 downloads
- 3. Doctor in Industry (Part I) 13.455.297 downloads
- 4. Health: Your Posture 10,548,113 downloads
- 5. From the Ground Up 10,450,940 downloads
- 6.

https://archive.org/details/movies[5/16/2014 3:09:44 PM]

An analysis of news and public affairs independent from traditional corporate media is available from this diverse video library. From Democracy Now's daily news program, to three days of TV news...

#### **Prelinger Archives**

View thousands of films from the Prelinger Archives! Prelinger Archives was founded in 1983 by Rick Prelinger in New York City. Over the next twenty years, it grew into a collection of over 60,000...

#### **Spirituality & Religion**

View videos about spirituality and religion.

104,914 items

6,480 items

#### **Sports Videos**

From soccer to sailing, to rock climbing, cheerleading, and underwater hockey: You are invited to watch or download free sports videos contributed by Archive users!

4,293 items

#### **Television**

Collections of items recorded from television, including commercials, old television shows, government proceedings, and more.

4,550 items

#### **Videogame Videos**

The Internet Archive is working with multiple external parties, including the IGDA's Preservation SIG and Stanford University's How They Got Game Project to preserve all kinds of rare and difficult...

6.625 items

More serious (or at least prolific) vloggers are showcased in this video library. You may learn how to be happy, geocache, run, or play boardgames by keeping up with these vloggers' videos. In...

39,766 items

#### **Youth Media**

Videos created by (or which are about) teens and young adults are featured in the Youth Media collection.

562 items

#### Recently Reviewed Items (more)

Razor E 300 Electric Scooter Average rating:

The Hobbit Kingdoms of Middle Earth Cheats Android iOS Telecharger Gratuit Pirater

Average rating:

Telecharger Real Racing 3 Hack ios Android [Triche] 2014

Average rating:

MR. DO

Average rating:

generalTranscription\_Qnex

Average rating:

### This Just In (more)

Dolore Allo Stomaco, Acido Stomaco Rimedi, Curare II Reflusso In Modo Naturale 28 minutes ago

The Real Garden May 20, 2014

32 minutes ago

kurt-seyit-ve-sura-10

35 minutes ago

TheTruthAboutDenominationalism 14-04-20

35 minutes ago

www.themostuseful.n 10,010,572 downloads

- 7. www.themostuseful.n 8,174,219 downloads
- 8. Final Fantasy II (SNES) - 3:56 -Kevin Juang 6.780.396 downloads
- www.themostuseful.n 6.703.727 downloads
- 10. Sleep for Health 5,877,122 downloads

#### Staff Picks

- the Market
- 2. Governor's Traffic Safety Committee commercials
- 3. Bush Announces Hussein Capture
- 4. League of Women Voters Selectmen Candidate Debate May 2, 2012
- 5. Prescott Circus
- 6. Reality Cooking -Episode 3
- 7. City Council Meeting December 27th 2011
- 8. Letters to Patrick
- 9. Universal Justice
- 10. PC Video Arabic

Module II
39 minutes ago

Moving Images Forum ⊠ RSS			New Po
Subject	Poster	Replies	Date
New files - but maybe 700+ pages worth?	Noah 8-?	0	May 6, 2014 8:38am
The Best of Lezsploitation	Marcos Kenij Kaneko	0	Apr 24, 2014 6:17pm
CHARADE!	liltimmy98	0	Apr 22, 2014 3:14pm
file not found	Paul JW Leonard	1	Apr 16, 2014 10:27am
Re: file not found	<u>Jeff Kaplan</u>	1	Apr 16, 2014 1:37pm
Re: file not found	Paul JW Leonard	2	Apr 17, 2014 6:56am
Re: file not found	Jeff Kaplan	0	Apr 17, 2014 11:38am
Re: file not found	<u>suchenwi</u>	0	May 16, 2014 11:55am
Changing cover image in the movie	Fontes, Luiz R.	0	Apr 11, 2014 6:02am
Changing cover image in the movie	Fontes, Luiz R.	1	Apr 11, 2014 6:02am
Re: Changing cover image in the movie	Jeff Kaplan	0	Apr 11, 2014 9:28am
"The Galaxy Invader" youtube claims infringement	ShaKeyJ100	2	Apr 2, 2014 3:08pm
Re: 'The Galaxy Invader' youtube claims infringement	skybandit	0	Apr 2, 2014 4:29pm
Re: 'The Galaxy Invader' youtube claims infringement	m8w	0	Apr 2, 2014 8:52pm
Please change the mediatype of transitionmovie2 from book to movie	Transition Network	1	Mar 28, 2014 3:25pm
Re: Please change the mediatype of transitionmovie2 from book to movie	Jeff Kaplan	1	Mar 28, 2014 4:59pm
Re: Please change the mediatype of transitionmovie2 from book to movie	Transition Network	0	Mar 29, 2014 1:55am
Obat Pembesar Penis	Vimax Group	1	Mar 21, 2014 1:21pm
FTP upload very slow or not working	<u>JeffT</u>	1	Mar 17, 2014 9:46am
Re: FTP upload very slow or not working	Jeff Kaplan	0	Mar 17, 2014 10:23am
https gives certificate invalid error	<u>BardOfMilling</u>	2	Mar 10, 2014 9:16pm
Re: https gives certificate invalid error	Meanbandit	1	Mar 10, 2014 11:03pm
Re: https gives certificate invalid error	Jeff Kaplan	1	Mar 11, 2014 6:47am
Re: https gives certificate invalid error	<u>BardOfMilling</u>	0	Mar 11, 2014 10:40pm
Re: https gives certificate invalid error	Jeff Kaplan	4	Mar 10, 2014 11:04pm
Re: https gives certificate invalid error	Meanbandit	0	Mar 11, 2014 5:24am
Re: https gives certificate invalid error	Harry Wilson	0	Mar 11, 2014 2:23pm
Re: https gives certificate invalid error	<u>BardOfMilling</u>	0	Mar 11, 2014 10:44pm
Re: https gives certificate invalid error	<u>FannuvFilm</u>	1	Apr 16, 2014 6:23pm
Re: https gives certificate invalid error	Jeff Kaplan	0	Apr 16, 2014 8:58pm
Mercury 8	<u>aabill</u>	0	Mar 10, 2014 1:00pm
Pornography	gl1200phil	1	Mar 7, 2014 12:09am
Re: Advertizen ment	Ach Chew	1	Mar 7, 2014 1:19am
Re: Advertizen ment	gl1200phil	1	Mar 7, 2014 8:15pm
Re: Advertizen ment	Ach Chew	1	Mar 16, 2014 7:26am
Re: Advertizen ment	gl1200phil	0	Mar 28, 2014 7:00pm
Can't download	dumpster diver	1	Mar 5, 2014 11:51am
Re: Can't download	Raw Meat	1	Mar 6, 2014 5:58am
Re: Can't download	dumpster diver	0	Mar 6, 2014 6:33am
Security certiicates	<u>BasilBob</u>	1	Mar 5, 2014 8:08am
Re: Security certificates	dumpster diver	1	Mar 5, 2014 11:48am

eaming : Moving Image Archive : Internet Archive				
Re: Security certiicates	<u>hullajump</u>	0	Mar 5, 2014 12:24pm	
Please move my movie	Alpha Eridani	0	Mar 2, 2014 6:33am	
Please move my movie	Alpha Eridani	0	Mar 2, 2014 6:21am	
Move request	Space Man	0	Feb 26, 2014 8:44am	
Please move	claytone1953	0	Feb 22, 2014 7:38am	
copyright for videos	brandon333	0	Feb 18, 2014 8:04am	
More-Memory overload on purpose	Noah 8-?	1	Feb 16, 2014 2:58pm	
Re: More-Memory overload on purpose	mrcold	1	Feb 16, 2014 6:15pm	
Re: More-Memory overload on purpose	mrcold	0	Mar 10, 2014 1:43am	
Mercury 7 NASA	<u>aabill</u>	2	Feb 16, 2014 11:15am	
Re: Mercury 7 NASA	Jeff Kaplan	1	Feb 16, 2014 8:31pm	
Re: Mercury 7 NASA	<u>aabill</u>	0	Feb 18, 2014 10:38am	
Re: Mercury 7 NASA	CWO-Lister	1	Feb 17, 2014 9:59am	
Re: Mercury 7 NASA	<u>aabill</u>	0	Feb 18, 2014 10:38am	
Possible nefarious activity, Admin please check.	Mr Cranky	0	Feb 13, 2014 10:56am	
Excessive Keyword list	Noah 8-?	0	Feb 12, 2014 8:22am	
no player	<u>dey59</u>	1	Feb 9, 2014 4:04am	
Re: no player	Jeff Kaplan	2	Feb 9, 2014 8:15am	
Re: no player	<u>dey59</u>	1	Feb 9, 2014 1:08pm	
Re: no player	tracey pooh	0	Feb 11, 2014 7:18pm	
Re: no player	dey59	0	Feb 9, 2014 1:08pm	
View more forum posts				



Search:

Texts

Q Advanced Search

Anonymous User (login or join us)

#### eBook and Texts

## Spotlight Item



Das Leiden unsers Herren Jhesu Christi

Manuscript on paper in black and red ink with red and green rubricated initials

#### **About the Archive**

Background

Frequently Asked Questions

#### Rights

Free to read, download, print, and enjoy.

Some have restrictions on bulk re-use and commercial use, please see the collection or the sponsor of a book.

By providing near-unrestricted access to these texts, we hope to encourage widespread use of texts in new contexts by people who might not have used them before.

#### Welcome to eBook and Texts

6,122,825 items

### The Internet Archive's Digital **Books Collections**

Borrow a Book

The Internet Archive and Open Library offers over 6,000,000 fully accessible public domain eBooks. This includes a special modern collection of over 500,000 eBooks for users with print disabilities, and a very interesting curated, modern collection for the world at large. You can browse, read and borrow fascinating contemporary materials at OpenLibrary.org.



OpenLibrary is a free, digital lending library with millions of eBooks that can be read in a browser or downloaded for reading offline. Originally developed to support the Print Disabled community, OpenLibrary now contains public domain and contemporary eBooks. Get a free OpenLibrary card and borrow an eBook today!

#### Get Something Digitized

The Internet Archive also encourages libraries, content holders and the reading community at large, to have their printed materials non-destructively digitized and put online for the benefit of all. The Internet Archive has digitized over 2.1 million books and microforms. Both large and small collections of monographs, serials, archival materials, maps, diaries and photographs to name a few, can be digitized in over 33 global scanning centers found on 4 continents. For more information please visit <a href="http://archive.org/scanning">http://archive.org/scanning</a>.

Since 2005, the Internet Archive has collaborated and built digital collections with over 1100 Library Institutions and other content providers. Partnerships include: Boston Public Library, the Library of Congress and the Lancaster County's Historical Society. These collections are digitized from various mediatypes including: microfilm and microfiche, journals and serial publications, and a wide variety of archival material. Significant contributions have come from partners in North America (American and Canadian Libraries), Europe and Asia, representing more than 184 languages.

#### Contribute a Book

The Internet Archive encourages our global community to contribute physical items, as well as uploading digital materials directly to the Internet Archive. If you have physical or digital items that you would like to add to the Internet Archive, please check out this link Create a new item using the uploader interface. Click here to apply the specific creative commons license Creative Commons license to communicate how the material can be used. For donation of physical books or items, please contact info@archive.org

Sub-Collections

#### **Staff Picks**

- 1. First Triennial Register and Circular of the Mount Carroll **Seminary**
- 2. Designs of Bilt-well millwork, design book no. 55
- 3. Builders' Hardware Cat. no. 19
- 4. Homes of today
- 5. The home garage of concrete masonry
- 6. Coraddi (Volume **Spring 1995)**
- 7. The Architectural Review Vol. III, No. 4 (April 1914)
- 8. Houses, camps and equipment as prefabricated by **Hodgson**
- 9. Book of Lawn Furniture, The
- 10. Zehn Jahre Berliner **Psychoanalytisches** Institut

#### **American Libraries**

Colorful Favorites Goody Two-Shoes (details | read it) Publisher's chromolithographed pictorial wrappers c1888 Caw caw; or, the chronicle of crows (details | read it) The house that Jack built, a game of forfeits: to which is added, The entertaining fable of "The Magpie" (details |...

### 1,976,611 items

#### **Canadian Libraries**

See a Tag Cloud for the Internet Archive Canadian Libraries Collection(s). Canadian Library Partners Canadian Manufacturer's Trade Journals. Thanks to both the Thomas Fisher Fisher Rare Book Library and the Toronto Public Reference Library, for allowing us to digitize very unique Canadian...

#### 459,970 items

#### **Universal Library**

The Universal Library Project, sometimes called the Million Books Project, was pioneered by Jaime Carbonell, Raj Reddy, Michael Shamos, Gloriana St Clair, and Robert Thibadeau of Carnegie Mellon University. The Governments of India, China, and Egypt are helping fund this effort through scanning...

#### 107,276 items

#### **Community Texts**

Open Source Books has been renamed to Community Books! (The URL is still the same, though.) These books are books contributed by the community. Click here to contribute your book! For more information and how-to please see

http://www.archive.org/about/faqs.php#Texts\_and\_Books Uploaders, please...

#### 475,279 items

#### **Project Gutenberg**

Books of Interest Alice Underground: being a facimile of the original book later developed into Alice in Wonderland (1882) (details | read it) The Dance (by An Antiquary): Historic Illustrations of Dancing from 3300 B.C. to 1911 A.D. (details | read it) Gulliver's Travels (details | ...

#### 36,432 items

#### **Biodiversity Heritage Library**

The Biodiversity Heritage Library (BHL) is a consortium of natural history and botanical libraries that cooperate to digitize and make accessible the legacy literature of biodiversity held in their collections. This literature is made available for open access and responsible use as a part of a...

#### 81,038 items

#### **Children's Library**

Books of Interest Abroad 1882 Wonderful Wizard of Oz 1900 Cinderella 1865 Books for children from around the world. From University of California Libraries (list), the University of Florida's "Literature for Children" Collection, the National Yiddish...

#### 2,815 items

#### **Additional Collections**

Additional collections of scanned books, articles, and other texts (usually organized by topic) are presented here.

1,736,798 items

#### Text Archive Forum RSS **New Post Subject Poster** Replies Date 2 Can I download the text of the books in a zip package? nathani2rastar May 14, 2014 10:22pm 0 Re: Can I download the text of the books in a zip package? Jeff Kaplan May 14, 2014 11:14pm 0 Re: Can I download the text of the books in a zip package? stbalbach May 15, 2014 7:47am May 13, 2014 5:51pm Google's Terrible scans lotusgreen~ 1

wnload & Streaming: eBook and Texts: Internet Archive			
Re: Google's Terrible scans	sputt	1	May 14, 2014 11:25am
Re: Google's Terrible scans	lotusgreen~	1	May 14, 2014 1:54pm
Re: Google's Terrible scans	lotusgreen~	1	May 14, 2014 1:59pm
Re: Google's Terrible scans	lotusgreen~	0	May 14, 2014 2:14pm
League of Legends Detailed Review and Advices for Beginners	mindnurse106@gmail.com	0	May 12, 2014 9:30pm
Problem with derivatives	dudeman5685	1	May 10, 2014 3:45pm
Re: Problem with derivatives	Jeff Kaplan	0	May 10, 2014 7:17pm
The Shearin Group Lisa national Bestselling Author: Bogen hjernen syndrom på krigsstien	<u>riadehne10</u>	0	May 7, 2014 6:28pm
White borders	Stig Ove Voll	1	May 6, 2014 9:45am
Re: White borders	Stig Ove Voll	0	May 6, 2014 10:44am
Deleting a book page	Stig Ove Voll	1	May 6, 2014 8:05am
Re: Deleting a book page	Stig Ove Voll	1	May 6, 2014 8:21am
Re: Deleting a book page	Jeff Kaplan	1	May 6, 2014 8:25am
Re: Deleting a book page	Stig Ove Voll	0	May 6, 2014 8:28am
Where To Find World War 1 Texts?	<u>DavidsonC</u>	3	Apr 29, 2014 10:43pm
Re: Where To Find World War 1 Texts?	<u>DavidsonC</u>	1	Apr 29, 2014 10:45pm
Re: Where To Find World War 1 Texts?	Jeff Kaplan	0	Apr 29, 2014 11:12pm
Re: Where To Find World War 1 Texts?	<u>DavidsonC</u>	0	Apr 29, 2014 10:45pm
Re: Where To Find World War 1 Texts?	<u>Jeff Kaplan</u>	0	Apr 29, 2014 11:09pm
Add Keywords to existing descriptions	<u>TinaHE</u>	2	Apr 29, 2014 7:49am
Re: Add Keywords to existing descriptions	stbalbach	1	Apr 29, 2014 8:50am
Re: Add Keywords to existing descriptions	<u>TinaHE</u>	1	Apr 29, 2014 10:51am
Re: Add Keywords to existing descriptions	stbalbach	1	Apr 29, 2014 8:26pm
Re: Add Keywords to existing descriptions	garthus1	2	Apr 29, 2014 9:41pm
Re: Add Keywords to existing descriptions	stbalbach	1	Apr 29, 2014 10:40pm
Re: Add Keywords to existing descriptions	garthus1	1	Apr 29, 2014 11:04pm
Re: Add Keywords to existing descriptions	stbalbach	0	Apr 30, 2014 7:07pm
Re: Add Keywords to existing descriptions	<u>TinaHE</u>	0	May 1, 2014 9:06am
Re: Add Keywords to existing descriptions	<u>DavidsonC</u>	1	Apr 29, 2014 10:41pm
Re: Add Keywords to existing descriptions	garthus1	0	Apr 29, 2014 10:44pm
Delete this please	garthus1	1	Apr 28, 2014 10:39pm
Re: Delete this please	Jeff Kaplan	0	Apr 30, 2014 4:38pm
club magazine	<u>stuboy</u>	2	Apr 28, 2014 6:20am
Re: club magazine	garthus1	1	Apr 28, 2014 9:43pm
		1	
Re: club magazine	stuboy gorthug1		Apr 28, 2014 10:31pm
Re: club magazine	garthus1	0	Apr 28, 2014 10:40pm
Re: club magazine	<u>DavidsonC</u>	0	Apr 29, 2014 10:43pm
club magazine	stuboy	0	Apr 28, 2014 6:20am
club magazine	stuboy	0	Apr 28, 2014 6:20am
club magazine	stuboy	0	Apr 28, 2014 6:20am
please delete	paulr1	0	Apr 27, 2014 3:12pm
When are PDFs converted to DjVu on upload?	bluerasberry	1	Apr 22, 2014 12:32pm
Re: When are PDFs converted to DjVu on upload?	<u>Jeff Kaplan</u>	0	Apr 22, 2014 8:53pm
PDFs digitalised by Google- how to download	Inforequest	1	Apr 22, 2014 9:06am
Re: PDFs digitalised by Google- how to download	stbalbach	1	Apr 22, 2014 6:38pm
Re: PDFs digitalised by Google- how to download	Inforequest	0	Apr 23, 2014 6:40am
spam, please delete	<u>salsaman</u>	0	Apr 20, 2014 2:54pm

wnload & Streaming : eBook and Texts : Internet Archive   Please Move	greg-kennedy	1	Apr 17, 2014 7:05am	
Re: Please Move	Jeff Kaplan	0	Apr 17, 2014 1:15pm	
Info Tentang Obat Hernia Herbal Dan Celana Hernia Magnetic	kosmeticshop	0	Apr 6, 2014 6:10pm	
Please delete	<u>Lchs</u>	1	Apr 5, 2014 1:04pm	
Re: Please delete	Jeff Kaplan	0	Apr 5, 2014 10:51pm	
How do I upload and store zipped (JPG) images in a book format?	<u>TheGreenLama</u>	1	Apr 3, 2014 8:21am	
Re: How do I upload and store zipped (JPG) images in a book format?	<u>ericdawyer</u>	0	Apr 29, 2014 4:05am	
Text Upload	<u>TheGreenLama</u>	3	Apr 2, 2014 7:57pm	
Re: Text Upload	Jeff Kaplan	0	Apr 3, 2014 10:37am	
Re: Text Upload	<u>DavidsonC</u>	0	Apr 29, 2014 10:41pm	
Titles sorting in a collection	Taunton Public Library	3	Apr 2, 2014 8:38am	
Re: Titles sorting in a collection	beep*	0	Apr 2, 2014 12:40pm	
Re: Titles sorting in a collection	garthus1	0	Apr 2, 2014 3:33pm	
Re: Titles sorting in a collection	<u>DavidsonC</u>	0	Apr 29, 2014 10:42pm	
Help Please	<u>vit374</u>	2	Apr 1, 2014 4:59am	
Re: Help Please	<u>vit374</u>	0	Apr 1, 2014 5:35am	
Re: Help Please	Jeff Kaplan	1	Apr 3, 2014 9:42am	
Re: Help Please	<u>vit374</u>	1	Apr 3, 2014 10:53am	
Re: Help Please	<u>vit374</u>	0	Apr 17, 2014 9:52pm	
<u>View more forum posts</u>				

Home







Audio Books & Poetry | Community Audio | Computers & Technology | Grateful Dead | Live Music Archive | Music, Arts & Culture | Netlabels | News & Public Affairs | Non-English Audio | Podcasts | Radio Programs | Spirituality & Religion

Search:

Audio

Q Advanced Search

Anonymous User (login or join us)

Most Downloaded **Items Last Week** 

1. 11111111111

alem

<u>Thikr</u>

6. rga iiih

8. alrokia

9. Ezanlar

10. Alaimy

Items more

64,821 downloads

50,936 downloads

3. doukkali mohamed el

41,420 downloads

40,023 downloads

38,422 downloads

38,418 downloads

38,146 downloads

36,901 downloads

34,798 downloads

34,327 downloads

4. Morning & Evening

5. m.Khalid.AlRashid

more

#### **Audio Archive**

#### Spotlight Item

Nelson Mandela : noblest son of Africa - 50th anniversary of Pacifica Radio

Several voices come together to tell the four part documentary on the life and influence of Nelson Mandela, South African president who served from 1994-1999 and the first president to be elected in South Africa by a representative democratic election. Sandra Radley is the producer, writer, and...

#### **About the Archive**

**Background** 

Frequently Asked Questions

#### **Contributors**

Aaron Parker BLGuillen Brad Leblanc Bram Cohen Caleb Epstein Diana Hamilton Eric Goldhagen Greg Pope

Kris Koeller Lauren Gelman

Lee Azzarello

Ryan Brase Steve Dannemiller

Tom Anderson

Tom Horton

Tyler Huff Will Foy

### Welcome to Audio Archive

1,983,239 items

#### Download or listen to free music and audio

This library contains recordings ranging from alternative news programming, to Grateful Dead concerts, to Old Time Radio shows, to book and poetry readings, to original music uploaded by our users. Many of these audios and MP3s are available for free download. Check our FAQ for more information.

#### **Contribute Your Audio**

Please feel free to upload your audio (Uploaders, please set a Creative Commons license as part of the upload process, so people know what they can do with your audio thanks!)

All items (most recently added first) RSS

#### **Sub-Collections**

#### **Audio Books & Poetry**

Listen to free audio books and poetry recordings! This library of audio books and poetry features digital recordings and MP3's from the Naropa Poetics Audio Archive, LibriVox, Project Gutenberg,...

#### **Community Audio**

Open Source Audio has been renamed to Community Audio! (The URL is still the same, though.) You are invited to view or upload audios to the Community collection! These thousands of audios were all...

#### **Computers & Technology**

Computers, technology, and science are the topics featured here. Listen to weekly interviews with leading scientists and technologists in the Berkeley Groks collection; or explore issues related to...

#### **Live Music Archive**

Welcome to Internet Archive's Live Music library. etree.org is a community committed to providing the highest quality live concerts in a lossless, downloadable format. The Internet Archive has teamed...

#### Music, Arts & Culture

art and culture. Collections include the unique contemporary compositions and performances found in the Other Minds collection, the...

#### Netlabels

Welcome to the Netlabels collection at the Internet Archive. This collection hosts complete, freely downloadable/streamable, often Creative Commonslicensed catalogs of 'virtual record labels'. ...

#### **News & Public Affairs**

Alternative independent radio news programming is featured here. In addition to a host of intriguing radio news shows, this collection features the Presidential

9.648 items

#### 128,136 items

1. The Holy Quran 72,671,914 downloads

Most Downloaded

2. Maher Al-Muaigly-TvQuran.com 14,851,410 downloads

3. TvQuran.com Ahmad Al-Ajmy 14,788,085 downloads

4. Fares Abbad 12,435,735 downloads

5. <u>11111111111</u> 11,590,743 downloads

6. Mishary Alafasi 9,823,202 downloads

7. Rougia 9,645,379 downloads

8. Alsudaes

1,484,508 items

721 items

#### 17,749 items

8,228 items

This collection features audio collections relecting music,

#### 43,923 items

Recordings collection of historical...

#### Non-English Audio

Non-English language collections contributed to the Open Source Audio collection are featured here.

#### **Podcasts**

Diehard podcasters are featured here! These podcast collections were all created from user contributions to the Open Source Audio collection. A great resource for podcasters: the Creative Commons...

#### **Radio Programs**

If you're looking for advice about raising your child, conversations about personal change, a forum for transgender issues, or want to listen to an Old Time Radio show: the Radio Programs collection...

#### **Spirituality & Religion**

Listen to sermons and lectures concerning religion and spirituality here.

#### 2,837 items

22,186 items

8,572 items

4,566 items

9,286,366 downloads

9. <u>Saad Al-Ghamdi</u> 8,874,401 downloads

TvQuran.com

10. Morning & Evening Thikr 6,874,351 downloads

#### Staff Picks

- Nelson Mandela:
   noblest son of Africa
   50th anniversary of
   Pacifica Radio
- 2. <u>Electronystagmograp</u> <u>hic Torture</u>
- 3. ARNR-001 Ruin -Special Victims Unit
- 4. CD Kreisverband Fri edrichshain Free Radio
- 5. <u>hexakai dekagon -</u> <u>portals 2</u>
- 6. [NKR011] Plugin EP
- 7. <u>Castero -</u> <u>Consequences Of</u> <u>Thought (2010)</u>
- 8. <u>Sobria Ebrietas Media Res</u>
  [onmp216]
- 9. [NKR016] Oh My God
- 10. <u>Netz Klang -</u> <u>Ausgabe 19.06.2006</u>

### Recently Reviewed Items (more)

Ligo Fws Xrysafi (10) 15 05 2014 By Ilio

Average rating:

Best 100 Instrumental Songs

Average rating:

Rasslab. Ru Relaxed Love Part 027

Average rating:

Rasslab. Ru Relaxed Love Part 005

Average rating:

Rasslab. Ru Relaxed Love Part 004

Average rating:

#### This Just In (more)

CBS Radio update for 2010-06-16

1 hour ago

Studio 54 And More Playlist

1 hour ago

FülRádio Live Archive 024 (rest of excertps)

2 hours ago

CBS Radio update for 2010-06-15

2 hours ago

Dora E Sahih Bukhari 03

2 hours ago

Audio Forum 🖾 RSS			New Post
Subject	Poster	Replies	Date
Why is my old account locked up?	Archival Benedictus Patris	0	May 9, 2014 4:26pm
Pk jazz Collective - Unpredictable Feelings [SCL127]	NoiseMaxIm	0	May 8, 2014 10:16am
How to Upload audio files to one's own Pre-existing Folder	Swarup 101	1	May 7, 2014 4:42pm
Re: How to Upload audio files to one's own Pre-existing Folder	Vishvas Vasuki	1	May 7, 2014 5:30pm
Re: How to Upload audio files to one's own Pre-existing Folder	Swarup 101	0	May 7, 2014 5:43pm
Pk jazz Collective - Unpredictable Feelings [SCL127]	<u>NoiseMaxIm</u>	0	May 7, 2014 5:34am
Ховбай Хвекмеев - Летающий Папа	<u>NoiseMaxIm</u>	0	May 6, 2014 8:50am

eaming : Audio Archive : Internet Archive				
Please change identifier	djirockjesus	2	May 1, 2014 11:04pm	
Re: Please change identifier	<u>djirockjesus</u>	0	May 1, 2014 11:06pm	
Re: Please change identifier	<u>Jeff Kaplan</u>	0	May 3, 2014 10:57am	
please delete	paulr1	0	Apr 27, 2014 3:19pm	
delete	achnn	1	Apr 25, 2014 9:17am	
Re: delete	Jeff Kaplan	0	Apr 25, 2014 11:55am	
Please delete	<u>lolapolozalola</u>	1	Apr 23, 2014 5:05am	
Re: Please delete	Jeff Kaplan	0	Apr 23, 2014 6:32am	
<u>Please Delete</u>	Holy Segments	2	Apr 22, 2014 3:17pm	
Re: Please Delete	<u>liltimmy98</u>	0	Apr 22, 2014 3:44pm	
Re: Please Delete	Jeff Kaplan	0	Apr 22, 2014 8:57pm	
Kai Engel - Deathless: The Renaissance	<u>NoiseMaxIm</u>	0	Apr 21, 2014 2:02pm	
please delete	gracusbegonia	0	Apr 21, 2014 1:39pm	
Please delete	Lycosalis	2	Apr 21, 2014 10:46am	
Re: Please delete	<u>Lycosalis</u>	1	Apr 21, 2014 11:17am	
Re: Please delete	Jeff Kaplan	0	Apr 21, 2014 3:06pm	
Re: Please delete	Jeff Kaplan	1	Apr 21, 2014 3:07pm	
Re: Please delete	Lycosalis	1	Apr 21, 2014 3:32pm	
Re: Please delete	Jeff Kaplan	0	Apr 23, 2014 10:25am	
Please Delete	Brother Bear	0	Apr 20, 2014 10:45pm	
Please Change Identifiers	Brother Bear	0	Apr 20, 2014 10:43pm	
NilssonAudio speakers - Amazing	Audiophile ONE	0	Apr 18, 2014 8:59am	
NilssonAudio Speakers - Amazing	Audiophile ONE	0	Apr 18, 2014 8:54am	
Please remove an old source	Morph430	1	Apr 17, 2014 11:07am	
Re: Please remove an old source	Jeff Kaplan	0	Apr 17, 2014 1:16pm	
my upload	rcmsoluciones	0	Apr 16, 2014 9:11am	
Suitable format(s) for uploading	richw42	0	Apr 12, 2014 7:02pm	
remove item from test collection	Planeta X	1	Apr 11, 2014 12:19pm	
Re: remove item from test collection	Jeff Kaplan	0	Apr 11, 2014 6:08pm	
FISGON MORBOSON: SER COMO EL NINO	<u>room101</u>	0	Apr 11, 2014 4:21am	
Problem creating derivative files	<u>TheGreenLama</u>	1	Apr 7, 2014 4:36pm	
Re: Problem creating derivative files	Jeff Kaplan	0	Apr 7, 2014 8:26pm	
posting	timbo2003	1	Mar 31, 2014 11:10am	
Re: posting	librivoxbooks	0	Apr 4, 2014 3:48pm	
<u> Чокнутый Пропеллер - В Наших Сердцах (LP, 2014)</u>	<u>NoiseMaxIm</u>	0	Mar 30, 2014 11:54am	
View more forum posts				

#!/usr/bin/perl-w

Historical Software Collection | Classic PC Games | The Shareware CD Archive | The Console Living Room

Search:

All Media Types

Advanced Search

Anonymous User (login or join us)

#### The Internet Archive Software Collection

#### Spotlight Item



#### TOSEC: Coleco ColecoVision (2012-04-23)

The ColecoVision is Coleco Industries' second generation home video game console, which was released in August 1982. The ColecoVision offered near-arcade-quality graphics and gaming style along with the means to expand the system's basic hardware. Released with a catalog of 12 launch titles, with...

#### About the Archive

**Background** 

Frequently Asked Questions

#### Contributors

Alan Blount Charlie Churchman Dave Wolber John Monteleone Josephine Chuang Kelly Gottlib Parker Thompson Rodrigo Garay Sebene Selassie Simon Carless Stewart Cheifet Tom Jacob Tommy Yen Yang Wu Choon

#### Welcome to The Internet Archive Software Collection

53,167 items

The Internet Archive Software Collection is the largest vintage and historical software library in the world, providing instant access to millions of programs, CD-ROM images, documentation and multimedia.

The collection includes a broad range of software related materials including shareware, freeware, video news releases about software titles, speed runs of actual software game play, previews and promos for software games, high-score and skill replays of various game genres, and the art of filmmaking with real-time computer game engines.

#### Some highlighted collections:

#### **The Old School Emulation** Center (TOSEC) is a

retrocomputing initiative dedicated to the cataloging and preservation of software, firmware and resources for microcomputers, minicomputers and video game consoles. The main goal of the project is to catalog and audit



various kinds of software and firmware images for these systems. TOSEC catalogs over 200 unique computing platforms and continues to grow. The project has identified and cataloged over 450,000 different software images/sets, consisting of over 3.60TB of software, firmware and resources. The goal of the TOSEC project is to maintain a database of all software and firmware images for all microcomputers, minicomputers and video game consoles. In addition to this, the project also catalogs other computing and gaming resources such as software and hardware manuals, magazine scans and computing catalogs.



Internet Archive's file listing interface.

The CD Archive collects thousands of Shareware and Cover CD-ROMs from the heyday of the CD-ROM (late 1980s to mid 2000s) and provides ISO images as well as links inside these collections of software. With over 2,500 discs now hosted, the archive allows access to a wide range of historical collections, including curations by defunct groups like Walnut Creek and Linux/Unix distributions of the past. Other CD-ROMs include images and digitized music, documentation sets and game modifications. Most of these CD-ROMs can be downloaded as .ISO or .CDR files, as well as browsed online through the

The DEMU collection is a curated collection hosting over 4,000 classic PC-based games from a quarter century. The collection contains shareware, freeware, and demo programs, all DOS or Windows-based.

#### The FTP Site Boneyard is a collection of various FTP sites from around the internet, gathering what were once the dominant form of file transfer online but which have fallen to the wayside in favor of other update servers and cloud-based storage. From the mid 1980s to the late 2010s, FTP sites would gather various needed patches, programs, utilities or information and make it available in a quick, seamless fashion. This boneyard contains many prominent FTP sites of the past, including MPOLI.FI and its ancient machine drivers, ftp.netscape.com and

Many times, contributions and collections come in the form of a disk drive, or the

ftp.lotus.com. In all, many gigabytes of

historical files are located here.

## **Items Last Week** more

Most Downloaded

- 1. TOSEC DAT Pack -Complete (2001) (TOSEC-v2012-12-28) 13,500 downloads
- 2. DOOM + Accessories 12,803 downloads
- 3. TOSEC: Coleco ColecoVision (2012-04 - 23)3,423 downloads
- 4. Diagnostic Test Cartridge 3,044 downloads
- 5. The Hobbit v1.0 (1982)(Melbourne House) 2,879 downloads

#### Most Downloaded Items more

- 1. TOSEC: Coleco ColecoVision (2012-04 - 23)1,152,455 downloads
- 2. TOSEC DAT Pack -Complete (2001) (TOSEC-v2012-12-28) 600,815 downloads
- 3. DOOM + Accessories 574,855 downloads
- 4. Karateka (1984) (Broderbund) 436,941 downloads
- 5. Akalabeth (1980)(California Pacific Computer) 436,088 downloads

### Staff Picks

- 1. Joan Miro
- 2. E.T. The Extra-Terrestrial (1982) (Atari) (NTSC)
- 3. ChristmasSavers.com



output from a single hard drive's contents. Instead of delaying these items until they can be curated, the <u>Disk Drives</u> collection

provides access to these large file repositories. In most cases, these collections can be browsed online, allowing access to all manner of user-created software writing dating from the 1980s-1990s period.

Built from the cache of an ISP that stopped providing a mirror after many years, the Linux **Distributions** collection contains many Linux and other Free OS distributions going back to the dawn of open-source operating systems. The collection primarily contains ISOs of the original CD and DVD-ROMs.

Many other groups are working hard to save and provide easier access to vintage software. Besides preserving the data off the original medium, these groups also classify, curate, and describe the software for historical context. In some cases, additional programs are provided to analyze the works and allow modern computers to access the material. The vintage **software** contains the many different efforts put out by these groups.

Be sure to browse the **Software Sites** collection, which gathers a number of now-dormant mirrors and collections to allow continued access to the older materials. Among the highlights are a 2004 TUCOWS mirror, a 2012 GITHUB gathering of deleted files, and

Finally, do not miss the **Open Source Software Collection**, which is the default contribution space for the users of the Internet Archive to keep copies of software available to all. Tens of thousands of programs, distributions and provisions are located here.

The Software Collection primarily provides the actual binary data for programs, as well as the original storage archives for files. If you are looking for manuals, books, or printed information, there are a number of other collections at the archive, including sections for manuals, computer magazines, computer newsletters and computer books.

Please contact Jason Scott, software curator at the Internet Archive, with questions, suggestions or possible donations to the collection.

All items (most recently added first) RSS

67 items

#### Sub-Collections

#### **Historical Software Collection**

This collection contains selected historically important software packages from the Internet Archive's software archives. Through the use of in-browser emulators, it is possible to try out these...

#### **Classic PC Games**

301Works.org

Take a step back in time and revisit your favorite DOS and Windows games. The files available in this collection consist primarily of demos, freeware, and shareware. New games are added to the...

#### **The Shareware CD Archive**

One of the most historically important artifacts to come from the home computer telecommunications revolution was shareware CDs, compact discs put out by companies containing hundreds of megabytes of...

#### 1,670 items

5,721 items

4,141 items

- 4. STARR Wars
- 5. Anna Nicole Smith 2
- 6. It's LIFE Jim
- 7. Spacewar! for the PDP-1

301works.org 301Works.org is an independent service for archiving URL mappings. The goal of the service is to provide protection for every day users of short URL services by providing transparency...

#### **BSD Distributions**

17 items

This collection contains iso file images of the numerous open source BSD variants currently out there. This is an ongoing project and the current status is: adding FreeBSD isos

#### **CD and DVD Coverdisc Collection**

1,977 items

In the early years of home computer ownership, magazines and newsletters might come bundled with a floppy disk to make it easier to load up programs discussed within their pages. These attached...

## <u>Disk Drives: Collections of Files from the Era of the Drive</u>

22 items

With the introduction of offline storage (in the form of tape and punch cards, later floppy disks, hard drives and cards), computer users began to create and acquire all manner of data to use with...

#### github\_files

1 items

Description Forthcoming

#### **Linux Distributions**

602 items

The Linux Distribution Archive is a growing collection of media for the installation of Linux on various systems from the past 20 years. Since its formation in the early 1990s, the open source nature...

#### **MESS and MAME**

33 items

MAME (an acronym of Multiple Arcade Machine Emulator) is an emulator application designed to recreate the hardware of arcade game systems in software on modern personal computers and other platforms....

#### **Open Source Software**

1,154 items

The Open Source Software Collection includes computer programs and/or data which are licensed under an Open Source Initiative or Free Software license, or is public domain. In general, items in this...

#### **Rhode Island Apple Group Disk Crate 001**

152 items

#### Software Sites Collection

32,331 items

Software Sites are collections of software available on websites over the last few decades that were mirrored at the Archive and then left in a dormant state. While the data on them is still valid,...

#### **The Business Case**

73 items

The Business Case: Applications and Programs for the Home Office In the early days of home computers, the mere ability to work with a machine in your own home, far away from the requirements and...

#### **The Console Living Room**

2,882 items

The Internet Archive Console Living Room harkens back to the revolution of the change in the hearth of the home, when the fireplace and later television were transformed by gaming consoles into a...

#### **The Dataset Collection**

25 items

The Dataset Collection consists of large data archives from both sites and individuals.

#### The evolt.org Browser Archive

133 items

The evolt.org browser archive hosts historical copies of web browsers stretching back to the early days of the Internet. In

addition to the most well-known browsers such as Internet Explorer and...

#### **The FTP Site Boneyard**

130 items

Created in 1971 (and refined in 1985), the File Transfer Protocol allowed Internet or network-connected computers to transfer binary and ASCII files between each other. To facilitate transferring of...

#### **The Vintage Software Collection**

45 items

The Vintage Software collection gathers various efforts by groups to classify, preserve, and provide historical software. These older programs, many of them running on defunct and rare hardware, are...

#### **TOSEC: The Old School Emulation Center**

191 items

The Old School Emulation Center (TOSEC) is a retrocomputing initiative dedicated to the cataloging and preservation of software, firmware and resources for microcomputers, minicomputers and video...

#### Recently Reviewed Items (more)

Ghazal12345

Average rating: \*

codex-bound.by.flame

Average rating:

ISO images of the SuSE June 1996 release media for i386 processors

Average rating:

Halo 2600 (Ed Fries)

Average rating:

<u>Tunneler</u>

Average rating:

### This Just In (more)

ftp.rarlab.com

30 minutes ago

Knights of the Temple: Infernal Crusade Demo

1 hour ago

ftp.2600.com

4 hours ago

Almuaadel 5.0

4 hours ago

codex-dreadout

6 hours ago

Software 🖾 RSS			New Post
Subject	Poster	Replies	Date
Joomla! CMS	Aureo Silva Hernandes	0	Apr 1, 2014 8:15am
www.hotovost-hned.cz	<u>Hotovost</u>	0	Mar 6, 2014 5:37am
Last Chance to See torrent - needs updating?	<u>earthnative</u>	0	Feb 25, 2014 2:45am
Copyright and Atari Software	SourJim42	1	Jan 24, 2014 6:48am
Re: Copyright and Atari Software	Tickled_Pink	1	Jan 25, 2014 3:08pm
Re: Copyright and Atari Software	SourJim42	0	Jan 27, 2014 8:58am
<u>Uploading new game patches?</u>	<u>Arkiver</u>	0	Jan 19, 2014 12:43pm

ning: The Internet Archive Software Collection: Internet Archive			
irst upload, first mistake	<u>WorBas</u>	1	Jan 18, 2014 2:55am
Re: First upload, first mistake	Jeff Kaplan	1	Jan 18, 2014 9:20am
Re: First upload, first mistake	<u>WorBas</u>	1	Jan 18, 2014 11:57am
Re: First upload, first mistake	Jeff Kaplan	0	Jan 20, 2014 11:40am
Corrupt file - Computer Gaming World CD-ROM Number 163	<u>Tempora</u>	0	Jan 16, 2014 10:58pm
ire and ice help	Ellie86	2	Jan 1, 2014 9:38am
Re: fire and ice help	<u>eXoScoriae</u>	0	Jan 15, 2014 5:03am
Nanting to preserve OS/2 operating system - Need suggestions	os2warp	2	Jan 1, 2014 9:01am
Re: Wanting to preserve OS/2 operating system - Need suggestions	<u>DFJustin</u>	1	Jan 3, 2014 2:43pm
Re: Wanting to preserve OS/2 operating system - Need suggestions	os2warp	0	Jan 3, 2014 5:06pm
Re: Wanting to preserve OS/2 operating system - Need suggestions	Sfan00	1	Jan 21, 2014 1:11pm
Re: Wanting to preserve OS/2 operating system - Need suggestions	os2warp	0	Jan 25, 2014 7:01pm
RE: old video games (emulations)	Old Guy In Stanton	0	Dec 29, 2013 3:45pm
MESS in-browser never loads	Chuckolicious	2	Dec 29, 2013 11:29am
Re: MESS in-browser never loads	<u>patriziaf</u>	0	Dec 29, 2013 5:03pm
Re: MESS in-browser never loads	<u>patriziaf</u>	0	Dec 29, 2013 5:03pm
MESS in-browser never loads	Chuckolicious	0	Dec 29, 2013 11:25am
MESS in-browser never loads	Chuckolicious	0	Dec 29, 2013 11:25am
now do i read the book?	<u>jeanrn</u>	1	Dec 20, 2013 3:49am
Re: how do i read the book?	<u>Jeff Kaplan</u>	0	Dec 20, 2013 8:04am
Downloading large files?	Rectangular	2	Dec 13, 2013 12:31am
Re: Downloading large files?	Andre Robatino	1	Dec 14, 2013 2:12am
Re: Downloading large files?	<u>DFJustin</u>	0	Dec 14, 2013 10:37pm
Re: Downloading large files?	<u>aibek</u>	0	Jan 23, 2014 5:18am
question	<u>pokinsmot</u>	1	Dec 11, 2013 9:36pm
Re: question	Jeff Kaplan	1	Dec 11, 2013 9:52pm
Re: question	pokinsmot	0	Dec 12, 2013 12:46am
now to verify or repair downloads	Andre Robatino	3	Dec 8, 2013 4:16am
uploading issues	CrazyLarry62	0	Dec 8, 2013 4:58am
uploading issues	CrazyLarry62	1	Dec 8, 2013 4:58am
Re: uploading issues	Jeff Kaplan	1	Dec 8, 2013 6:39pm
Re: uploading issues	CrazyLarry62	0	Dec 8, 2013 7:28pm
Re: how to verify or repair downloads	<u>DFJustin</u>	0	Dec 14, 2013 10:35pm
Move Request	Central Access	1	Nov 12, 2013 5:42pm
Re: Move Request	Jeff Kaplan	1	Nov 12, 2013 10:22pm
Re: Move Request	Central Access	0	Nov 13, 2013 1:08pm
Contributing to the software archive	tag2015	3	Nov 9, 2013 9:10am
Re: Contributing to the software archive	Jeff Kaplan	1	Nov 9, 2013 4:13pm
Re: Contributing to the software archive	tag2015	1	Nov 11, 2013 2:42am
Re: Contributing to the software archive	Jeff Kaplan	0	Nov 11, 2013 12:32pm
Re: Contributing to the software archive	DFJustin_	0	Nov 12, 2013 11:18am
Re: Contributing to the software archive	Nemo bis	0	Nov 17, 2013 11:37pm
android apps for ebooks?	SteveBMe	1	Oct 27, 2013 8:35pm
Re: android apps for ebooks?	<u>shotacon</u>	1	Oct 29, 2013 1:50am
to anator appoint abound:		1	Oct 29, 2013 7:58pm
Re: android anns for ehooks?			UULEU. EU IU 1.JUUIII
Re: android apps for ebooks?	<u>SteveBMe</u>		
Re: android apps for ebooks?  Re: android apps for ebooks?  Re: android apps for ebooks?	droidflow  RoseDragon	1	Dec 2, 2013 1:54am  Dec 23, 2013 4:12am

Re: Astrology	<u>OMBubba</u>	0	Feb 9, 2014 3:56am	
Exporting emails from lotus notes into outlook	alisha.aleart	1	Oct 3, 2013 2:26am	
Re: Exporting emails from lotus notes into outlook	<u>isaacnezry</u>	0	Oct 4, 2013 1:02am	
Free pdf readers for windows 8	newphotos	2	Aug 11, 2013 1:43pm	
Re: Free pdf readers for windows 8	shotacon	0	Oct 29, 2013 1:54am	
Erotic content	<u>L.Houtbos</u>	1	Aug 10, 2013 7:53am	
Re: Erotic content	Jeff Kaplan	0	Aug 10, 2013 10:00am	
Search for items with unknown year	<u>Anamon</u>	3	Jul 31, 2013 7:53am	
Re: Search for items with unknown year	Jeff Kaplan	0	Jul 31, 2013 8:37pm	
Re: Search for items with unknown year	<u>DFJustin</u>	2	Aug 8, 2013 10:06am	
Re: Search for items with unknown year	<u>Anamon</u>	0	Aug 9, 2013 8:14am	
<u>View more forum posts</u>				

Donate | Store | Blog | FAQ | Jobs | Volunteer Positions | Contact | Bios | Forums | Projects | Terms, Privacy, & Copyright

Search:

All Media Types

Q Advanced Search

Anonymous User (login or join us)

Upload

#### **Read More**

Why the Archive is Building an 'Internet Library'

**Future Libraries** 

Storage and Preservation

Related Projects and Research

Researcher Access

Server Statistics

**Archive Statistics** 

Job Opportunities at the Internet Archive

Usage Logs

#### News [more]

How Brewster Kahle is using open-source principles to build affordable housing for non-profit workers

Someone in San Francisco is digitizing 40,000 homemade VHS tapes

How to preserve the webâ €™s past for the future

Down the memory hole

A New Map Reveals the Geography of American TV News

Brewster Kahle

Banking with Bitcoin

Internet Archive

Bit rot: The Internet never forgets, or does it?

Flowers for Bitcoin: A Large Exchange Sputters, but Digital Currency Stays Afloat in San Francisco

Member





#### **About the Internet Archive**

The Internet Archive is a 501(c)(3) non-profit that was founded to build an Internet library. Its purposes include offering permanent access for researchers, historians, scholars, people with disabilities, and the general public to historical collections that exist in digital format.

Founded in 1996 and located in San Francisco, the Archive has been receiving data donations from Alexa Internet and others. In late 1999, the organization started to grow to include more well-rounded collections. Now the Internet Archive includes: texts, audio, moving images, and software as well as archived web pages in our collections, and provides specialized



services for adaptive reading and information access for the blind and other persons with disabilities.

#### Why the Archive is Building an 'Internet Library

Libraries exist to preserve society's cultural artifacts and to provide access to them. If libraries are to continue to foster education and scholarship in this era of digital technology, it's essential for them to extend those functions into the digital world.

Many early movies were recycled to recover the silver in the film. The <u>Library of Alexandria</u> - an ancient center of learning containing a copy of every book in the world - was eventually burned to the ground. Even now, at the turn of the 21st century, no comprehensive archives of television or radio programs exist.

But without cultural artifacts, civilization has no memory and no mechanism to learn from its successes and failures. And paradoxically, with the explosion of the Internet, we live in what Danny Hillis has referred to as our "digital dark age."

The Internet Archive is working to prevent the Internet - a new medium with major historical significance - and other "born-digital" materials from disappearing into the past. Collaborating with institutions including the <u>Library of Congress</u> and the <u>Smithsonian</u>, we are working to preserve a record for generations to come.

Open and free access to literature and other writings has long been considered essential to education and to the maintenance of an open society. Public and philanthropic enterprises have supported it through the ages.

The Internet Archive is opening its collections to researchers, historians, and scholars. The Archive has no vested interest in the discoveries of the users of its collections, nor is it a grant-making organization.

At present, the size of our Web collection is such that using it requires <u>programming skills</u>. However, we are hopeful about the development of tools and methods that will give the general public easy and meaningful access to our collective history. In addition to developing our own collections, we are working to promote the formation of other Internet libraries in the United States and elsewhere.

#### Find ou

- How to make a Monetary Donation to the Archive
- About our <u>announcement and discussion lists</u> on Internet libraries and movie archives as well as our <u>user forums</u>

#### Future Libraries - How People Envision Using Internet Libraries

From ephemera to artifact: Internet libraries can change the content of the Internet from ephemera to enduring artifacts of our political and cultural lives.

"I believe historians need every possible piece of paper and archived byte of digital data they can muster. The Smithsonian Institution sees the value, and has affiliated with the Archive to preserve the 1996 campaign Web sites, official and unofficial."

Dan Gillmor, computing editor, San Jose Mercury News, 1 September 1996

**Protecting our right to know:** Most states have pre-Internet sunshine laws that require public access to government documents. Yet while the Internet has generally increased public access to information, states have just begun to amend those laws to reflect today's Internet environment. According to Bill Chamberlin, director of the <u>Marion Brechner Citizen Access Project</u> at the University of Florida's College of Journalism and Communications,

such laws are being enacted "piecemeal, one state at a time," and cover information that varies widely in nature - everything from "all public records" to specialized information such as education reports and the licensing status of medical practitioners. In the meantime, while public officials are posting more information on the Internet than their state legislatures require, there's little regulatory control over exactly what is posted, when it's taken off, or how often it's updated. This leaves a gap that online libraries can help to fill.

**Exercising our "right to remember":** Without paper libraries, it would be hard to exercise our "right to remember" our political history or hold government accountable. With much of the public's business now moving from paper to digital media, Internet libraries are certain to become essential in maintaining that right. Imagine, for instance, how news coverage of an election campaign might suffer if journalists had only limited access to previous statements that candidates had made in the media.

"The Internet Archive is a service so essential that its founding is bound to be looked back on with the fondness and respect that people now have for the public libraries seeded by Andrew Carnegie a century ago.... Digitized information, especially on the Internet, has such rapid turnover these days that total loss is the norm. Civilization is developing severe amnesia as a result; indeed it may have become too amnesiac already to notice the problem properly. The Internet Archive is the beginning of a cure - the beginning of complete, detailed, accessible, searchable memory for society, and not just scholars this time, but everyone."

Stewart Brand, president, The Long Now Foundation

**Establishing Internet centers internationally:** What is a country without a memory of its cultural heritage? Internet libraries are the place to preserve the aspect of a country's heritage that exists on the Internet.

**Tracing the way our language changes:** During the late 19th century, James Murray, a professor at Oxford University, built the first edition of the *Oxford English Dictionary* by sending copies of selected books to "men of letters" who volunteered to search them for the first occurrences of words and to trace the migration of their various meanings. Internet libraries could allow linguists to automate much of this extremely labor-intensive process.

**Tracking the Web's evolution:** Historians, sociologists, and journalists could use Internet libraries to hold up a mirror to society. For example, they might ask when different ethnic groups or special interests or certain businesses became a presence on the Internet.

"We don't know where this Internet is going, and once we get there it will be very instructive to look back "

Donald Heath, president of the Internet Society in Reston, Virginia

**Reviving dead links:** A few services - such as UC Berkeley's <u>Digital Library Project</u>, the <u>Online Computer Library Center</u>, and <u>Alexa Internet</u> are starting to offer access to archived versions of Web pages when those pages have been removed from the Web. This means that if you get a "404 - Page Not Found" error, you'll still be able to find a version of the page.

**Understanding the economy:** Economists could use Archive data such as link structures - what and how many links a site contains - to investigate how the Web affects commerce.

Finding out what the Web tells us about ourselves: Researchers could use data on links and traffic to better understand human behavior and communication.

"Researchers could use the Archive's Web snapshots in combination with usage statistics to compare how people in different countries use the Web over long periods of time.... Political scientists and sociologists could use the data to study how public opinion gets formed. For example, suppose a device for increasing privacy became available: Would it change usage patterns?"

Bernardo Huberman, Xerox Palo Alto Research Center

"The Internet Archive has created a kind of test tube that allows a broad range of researchers to analyze the Web in ways that have never been possible before. What makes this type of research unique is that it often requires the fusion of traditional tools and techniques with new methods, and it results in the development of new theories, techniques, and metrics."

James Pitkow, Xerox Palo Alto Research Center

**Looking back**: With a "way-back machine" - a device that displayed the Web as it looked on a given date - historians and others would literally have a window on the past.

How would you use an Internet library?

#### Related Projects and Research

Internet libraries raise many issues in a range of areas, including archiving technology, copyright, privacy and free speech, trademark, trade secrets, import/export issues, stolen property, pornography, the question of who will have access to the libraries, and more.

Below are links to projects, resources, and institutions related to Internet libraries.

Internet Libraries and Librarianship Archiving Technology Internet Mapping Internet Statistics Copyright
Privacy and Free Speech

#### Internet Libraries and Librarianship

**Alexa Internet** has catalogued Web sites and provides this information in a free service. www.alexa.com

The American Library Association is a major trade association of American libraries. www.ala.org

The Australian National Library collects material including organizational Web sites. pandora.nla.gov.au/documents.html

The Council on Library and Information Resources works to ensure the well-being of the scholarly communication system.

www.clir.org

See its publication Why Digitize? at

www.clir.org/pubs/reports/pub80-smith/pub80.html

**The Digital Library Forum (D-Lib)** publishes an online magazine and other resources for building digital libraries. www.dlib.org

**Attorney I. Trotter Hardy** explains copyright law and examines its implications for digital materials in his paper **Internet Archives and Copyright.**<a href="mailto:copyright">copyright</a> TH.php

The Internet Public Library site has many links to online resources for the general public. www.ipl.org

**Brewster Kahle** is a founder of WAIS Inc. and Alexa Internet and chairman of the board of the Internet Archive. See his paper **The Ethics of Digital Librarianship** at <a href="ethics-bk.php">ethics bk.php</a>

**Michael Lesk** of the National Science Foundation has written extensively on digital archiving and digital libraries.

www.purl.net/NET/lesk

The Library of Congress is the national library of the United States.

**The Museum Digital Library** plans to help digitize collections and provide access to them. <u>www.digitalmuseums.org</u>

The National Archives and Records Administration oversees the management of all US federal records. It also archives federal Web sites including the <u>Clinton White House site</u>. <u>www.nara.gov</u>

The National Science Foundation Digital Library Program has funded academic research on digital libraries.

www.nsf.gov/home/crssprgm/dli/start.htm

National Technical Information Service (NTIS), U.S. Department of Commerce, Technology Administration. NTIS is an archive and distributor of scientific, technical, engineering and business related information developed by and for the federal government.

www.ntis.gov

**Network Wizards** has been tracking Internet growth for many years. <u>www.nw.com</u>

**Project Gutenberg** is making ASCII versions of classic literature openly available. <u>www.gutenberg.org</u>

The Radio and Television Archive has many links to related resources. www.rtvf.unt.edu/links/histsites.htm

**Revival of the Library of Alexandria** is a project to revive the ancient library in Egypt. <u>www.bibalex.org</u>

The Society of American Archivists is a professional association focused on ensuring the identification, preservation, and use of records of historical value.

www.archivists.org

The Royal Institute of Technology Library in Sweden is creating a system of quality-assessed information resources on the Internet for academic use. www.lib.kth.se/main/eng

The United States Government Printing Office produces and distributes information published by the US government.

www.access.qpo.qov

The University of Virginia is building a catalog of digital library activities. http://www.lib.virginia.edu/digital/

#### **Archiving Technology**

The Association for Computing Machinery (ACM) computing and public policy page includes papers and news on pending legislation on issues including universal access, copyright and intellectual property, free speech and the Internet, and privacy.

www.acm.org/serving

The Carnegie Mellon University Informedia Digital Video Library Project is studying how multimedia digital libraries can be established and used. www.informedia.cs.cmu.edu

The Intermemory Project aims to develop highly survivable and available storage systems. www.intermemory.org

The National Film Preservation Board, established by the National Film Preservation Act of 1988, works with the Library of Congress to study and implement plans for film and television preservation. The site's research page includes links to the board's 1993 film preservation study, a 1994 film preservation plan, and a 1997 television and video study. All the documents warn of the dire state of film and television preservation in the United States. <a href="Loweb.loc.gov/film/filmpres.html">Loweb.loc.gov/film/filmpres.html</a>

The National Institute of Standards and Technology (NIST) posts IEC International Standard names and symbols for prefixes for binary multiples for use in data processing and data transmission.

www.physics.nist.gov/cuu/Units/binary.html

The Text Retrieval Conference (TREC) encourages research in information retrieval from large text collections.

trec.nist.gov

#### Internet Mapping

**An Atlas of Cyberspaces** has maps and dynamic tools for visualizing Web browsing. <u>www.cybergeography.com/atlas/surf.html</u>

**The Internet Mapping Project** is a long-term project by a scientist at Bell Labs to collect routing data on the Internet.

www.cs.bell-labs.com/who/ches/map

The Matrix Information Directory Service has good maps and visualizations of the networked world.

www.mids.org

Peacock Maps has maps of Internet connectivity.

www.peacockmaps.com

#### **Internet Statistics**

**WebReference** has an Internet statistics page (publisher: Internet.com). webreference.com/internet/statistics.html

#### Copyright

The Association for Computing Machinery (ACM) copyright information page includes text of pertinent laws and pending legislation.

www.acm.org/usacm/copyright

**Tom W. Bell** teaches intellectual property and Internet law at Chapman University School of Law. <u>www.tomwbell.com</u>

His site includes a graph showing the trend of the maximum US copyright term at <a href="https://www.tomwbell.com/writings/(C)">www.tomwbell.com/writings/(C)</a> Term.html

Cornell University posts the text of copyright law at

www4.law.cornell.edu/uscode/unframed/17/107.html www4.law.cornell.edu/uscode/unframed/17/108.html

The **Digital Future Coalition** is a nonprofit working on the issues of copyright in the digital age.

The National Academy Press is the publishing arm of the national academies.

"The Digital Dilemma: Intellectual Property in the Information Age" <a href="http://www.nap.edu/html/digital\_dilemma/">http://www.nap.edu/html/digital\_dilemma/</a>

"LC21: A Digital Strategy for the Library of Congress"

www.nap.edu/books/0309071445/html

**Pamela Samuelson** is a professor in the School of Information Management and Systems at UC Berkeley.

info.berkeley.edu/~pam

Title 17 of US copyright code

www.loc.gov/copyright/title17/

**US Government Copyright Office** 

www.loc.gov/copyright

#### **Privacy and Free Speech**

The Association for Computing Machinery (ACM) free-speech information page includes the text of pertinent laws and pending legislation. www.acm.org/usacm/speech

The Association for Computing Machinery (ACM) privacy information page includes the text of congressional testimony and links to other resources.

www.acm.org/usacm/privacy

The Benton Foundation Communications Policy and Practice Program has the goal of infusing the emerging communications environment with public-interest values.

www.benton.org/cpphome.html

The Center for Democracy and Technology works to promote democratic values and constitutional liberties in the digital age.

www.cdt.org

The Computers Freedom and Privacy Conference has a site containing information on each annual conference held since 1991.

www.cfp.org

The Electronic Frontier Foundation works to protect fundamental civil liberties, including privacy and freedom of expression in the arena of computers and the Internet. <a href="https://www.eff.org">www.eff.org</a>

The Electronic Privacy Information Center, a project of the Fund for Constitutional Government, is a public-interest research center whose goal is to focus public attention on emerging civil liberties issues and to protect privacy, the First Amendment, and constitutional values.

Www.epic.org

**The Free Expression Policy Project** is a think tank on artistic and intellectual freedom at NYU's Brennan Center for Justice. Through policy research and advocacy, they explore freedom of expression issues including censorship, copyright law, media localism, and corporate media reform. www.fepproject.org

The Internet Free Expression Alliance is an information and advocacy organization focused on free speech as it relates to the Internet.

www.ifea.net

**The Internet Privacy Coalition** aims to protect privacy on the Internet by promoting the widespread availability of strong encryption and the relaxation of export controls on cryptography. <a href="https://www.privacy.org/ipc">www.privacy.org/ipc</a>

The Privacy Page includes news, alerts, and links to privacy-related resources. Related organizations include the <u>Electronic Privacy Information Center</u>, the <u>Internet Privacy Coalition</u>, and <u>Privacy International</u>.

www.privacy.org

**Privacy International** is a London-based human rights group formed as a watchdog on surveillance by governments and corporations. www.privacy.org/pi

Please suggest other pages that may be appropriate here.

#### Storage and Preservation

The Archive has two practical considerations in dealing with digital collections:

How to store massive amounts of data How to preserve the data for posterity

#### Storage

Storing the Archive's collections involves parsing, indexing, and physically encoding the data. With the Internet collections growing at exponential rates, this task poses an ongoing challenge.

Our hardware consists of PCs with clusters of IDE hard drives. Data is stored on <u>DLT tape</u> and hard drives in various appropriate formats, depending on the collection. Web data is received and stored in archive format of 100-megabyte ARC files made up of many individual files. <u>Alexa Internet</u> (currently the source of all crawls in our collections) is proposing ARC as a standard for archiving Internet objects. See Alexa for the <u>format specification</u>.

#### Preservation

Preservation is the ongoing task of permanently protecting stored resources from damage or destruction. The main issues are guarding against the consequences of accidents and data degradation and maintaining the accessibility

of data as formats become obsolete.

**Accidents:** Any medium or site used to store data is potentially vulnerable to accidents and natural disasters. Maintaining copies of the Archive  $\tilde{A}f\hat{A}^-\tilde{A},\hat{A}\chi_s$  collections at multiple sites can help alleviate this risk. Part of the collection is already handled this way, and we are proceeding as quickly as possible to do the same with the rest.

**Migration:** Over time, storage media can degrade to a point where the data becomes permanently irretrievable. Although <u>DLT tape</u> is rated to last 30 years, the industry rule of thumb is to migrate data every 10 years. We no longer use tapes for storage, however. Please take a look at <u>our page on our Petabox system</u> for more information on our storage systems.

**Data formats:** As advances are made in software applications, many data formats become obsolete. We will be collecting software and emulators that will aid future researchers, historians, and scholars in their research.

#### Find out

About our announcement and discussion lists on Internet libraries and movie archives

## Log In

### **Email address**

#### **Password**

Remember me

Forgot your password?

Don't have a virtual library card? Register for free!









### TV NEWS ARCHIVE

## **TV NEWS** ARCHIVE



QUOTES **TRENDING YESTERDAY** 



you know who are snooping on their significant other are doing it with high tech stuff? >> by high tech -- most of it is through social



FULL 🗌 🗌

About Us | Help | Terms of Service | Contact Us

Hello! The State of Ohio is participating in our eBook lending program. Browse the growing lending library of over 200,000 eBooks! Log in / Sign Up **SUBJECTS AUTHORS** ADD A BOOK LISTS RECENTLY HELP One web page for every book Show only eBooks More search options **Open Library is yours** to borrow, read & browse. Books to Read The World's classic literature at your fingertips. Over 1,000,000 free ebook titles available. Books to Borrow Here's a sample of recently returned books from the eBook lending library. **Around the Library** Here's what's happened over the last 28 days. More recent changes. 7,830,157 20,792 43,871 1,149 110,615 UNIQUE VISITORS NEW MEMBERS CATALÓG EDITS LISTS CREATED EBOOKS BORROWED **About the Project** 

Open Library is an open, editable library catalog, building towards a web page for every book ever published. More

#### **Developers**

**Latest Blog Posts** 

If you're even remotely interested in libraries or big data, we encourage

Just like Wikipedia, you can contribute new information or corrections to the catalog. You can browse by <u>subject</u>, <u>author</u> or <u>lists</u> members have created. If you love books, why not help build a library?

you to have a look around the Open Library API.

We welcome any and all patches and data re-use.

Top | Home • Add a Book • Subjects | Authors | Lists • About Us | Help • Developers

Show only eBooks

More search options

**Around** The Library Linda Yutzy updated A Place

<u>LeadSongDog</u> updated in His Heart 16 minutes ago Grammaire nationale 47 Michelle Krasowski updated /books/OL25443497M 28

<u>LeadSongDog</u> updated <u>El</u> arte de conjugar en español





Open Library is an initiative of the Internet Archive, a 501(c)(3) non-profit, building a digital library of Internet sites and other cultural artifacts in digital form. Other projects include the Wayback Machine, archive.org, pasaimages.org, archive-it.org & opencontentalliance.org.

Your use of the Open Library is subject to the Internet Archive's Terms of Use.

#### Donate

## Donate to the Internet Archive!

Help us keep the library free for millions of people by making a tax-deductible donation today. Donors will receive an email confirmation of their donation that can be used for tax records.



Brewster Kahle Founder & Digital Librarian

Hello Patron,

Every day 3 million people use our collections.

We have archived over ten petabytes (that's 10,000,000,000,000,000 bytes!) of information, including everything ever written in <u>Balinese</u>. This year we also launched our groundbreaking <u>TV News Search and Borrow service</u>, which former FCC Chairman Newton Minow said "offers citizens exceptional opportunities" to easily do their own fact checking and "to hold powerful public institutions accountable."

Your support helps us build amazing services and keep them free for people around the globe.

Please make a donation today.

### Register for a library card?

Login or Register your library card in order to become a member of the Internet Archive, so we can thank you!

### 1. Pick your donation type

One-Time Subscription

A one-time donation is a good way to support the Internet Archive's work if you don't want to commit to a monthly donation.

### 2. Pick your donation level

\$25 \$50 \$100 \$250 \$1000

Or choose your own amount.

### 3. Select a payment service

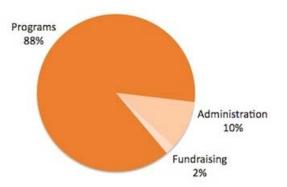








#### Where your money goes



### Want to contribute another way?

Tax ID: 94-3242767

If you'd like to contribute another way, please contact us at <a href="mailto:donations@archive.org">donations@archive.org</a>.

Or mail your donation to: Internet Archive 300 Funston Avenue San Francisco, CA 94118

# Your support is vital to us. Thank you.

Opmodeeste, Illeandeeste, la deltra en la de

## **Internet Archive Blogs**

A blog from the team at archive.org



### Authors Alliance Launch at Internet Archive, May 21

Posted on May 15, 2014 by internetarchive



Wednesday, May 21 2014 6:30 pm – 9:00 pm

The <u>Authors Alliance</u> embraces the unprecedented potential digital networks have for the creation and distribution of knowledge and culture. We represent the interests of authors who want to harness this potential to share their creations more broadly in order to serve the public good.

Unfortunately, authors face many barriers that prevent the full realization of this potential to enhance public access to knowledge and creativity. Authors who are eager to share their existing works may discover that those works are out of print, un-digitized, and subject to copyrights signed away long before the digital age. Authors who are eager to share new works may feel torn between publication outlets that maximize public access and others that restrict access but claim to provide value in terms of peer review and prestige, or even fame and fortune.

The mission of Authors Alliance is to further the public interest in facilitating widespread access to works of authorship by helping authors navigate the opportunities and challenges of the digital age. We provide information and tools designed to help authors better understand and manage key legal, technological, and institutional aspects essential to a knowledge economy of abundance. We are also a voice for authors in discussions about public and institutional policies that might promote or inhibit broad dissemination.

If you are interested in our mission, please join us at our launch, 6:30 p.m. on Wednesday May 21st at the Internet Archive in San Francisco.

#### **Recent Posts**

- Authors Alliance Launch at Internet Archive, May 21
- Wayback Machine Hits 400,000,000,000!
- Bitcoin and the Internet Archive Swag Store
- Rick Prelinger: NO MORE ROAD TRIPS! – Tuesday, May 13 at 6:30PM
- Let Our Video Go

#### **Recent Comments**

- travailler chez soi forum on Wayback Machine Hits 400,000,000,000!
- Roger Macdonald on Let Our Video Go
- Larry Goldberg on Let Our Video Go
- michelle on Wayback Machine Hits 400,000,000,000!
- green gardening tips on Wayback Machine Hits 400,000,000,000!

#### Categories

- Announcements
- Archive-It
- Audio Archive
- Books Archive
- Cool items
- Education Archive
- Event
- Image Archive
- Jobs
- Live Music Archive
- Movie Archive
- News
- Newsletter
- Open Library
- Software Archive
- Technical
- Television Archive
- tv archive
- Video Archive
- Wayback Machine

Location: Internet Archive 300 Funston Avenue San Francisco, CA

For more details and to RSVP please visit authorsalliance.eventbrite.com

The above banner was made using a photo by DAVID ILIFF, repurposed and used here under a CC-BY 2.5 license.

Posted in Announcements, Event, News | Leave a comment

### Wayback Machine Hits 400,000,000,000!

Posted on May 9, 2014 by michelle

The Wayback Machine, a digital archive of the World Wide Web, has reached a landmark with 400 billion webpages indexed. This makes it possible to surf the web as it looked anytime from late 1996 up until a few hours ago.



Let's take a trip back in time and visit some sites. Yahoo (Captured way back in Nov 28, 1996)



Geocities (Captured December 12, 1998)



#### **Archives**

Select Month

#### Meta

- Log in
- Entries RSS
- Comments RSS
- WordPress.org

There were even places to start your very own web diary way back in 1999. Diaryland.com (Captured November 27, 1999)



Mumbleboy was using Flash to push the creative limits of Web Animation (Captured August 1, 2001)



Before there was Borat, there was Mahir Cagri. This site and the track it inspired on mp3.com created quite a stir in the IDM world, with people claiming that "Mahir Cagri" was Turkish for "Effects Twin" and that the whole thing was an elaborate ruse by Richard D. James (Aphex Twin). (Captured December 29, 2004 and December 7, 2000)



Have you ever wondered what happens when the Wayback Machine archives itself? Will we fall into a search window of recursion, never to find our way out of the mirror maze again? (Captured October 22, 2008)



I guess we don't want to break our brains. Oh, well.

The Wayback Machine has had some exciting adventures over the years as it grew. Here are some highlights:

2001 - The Wayback Machine is launched. Woo hoo.

2006 – Archive-It is launched, allowing libraries that subscribe to the service to create curated collections of valuable web content.

March 25, 2009 – The Internet Archive and Sun Microsystems <u>launch a new datacenter</u> that stores the whole web archive and serves the Wayback Machine. This 3 Petabyte data center handled 500 requests per second from its home in a shipping container.

June 15th, 2011 – The <u>HTTP Archive becomes part of the Internet Archive</u>, adding data about the performance of websites to our collection of web site content.

May 28, 2012 – The Wayback Machine is <u>available in China again</u>, after being blocked for a few years without notice.

October 26, 2012 – Internet Archive makes 80 terabytes of archived web crawl data from 2011 <u>available for researchers</u>, to explore how others might be able to interact with or learn from this content.

October 2013 – New features for the Wayback Machine are launched, including the ability to see newly crawled content an hour after we get it, a "Save Page" feature so that anyone can archive a page on demand, and an effort to fix broken links on the web starting with WordPress.com and Wikipedia.org.

Also in October 2013 – The Wayback Machine <u>provides access to important Federal Government</u> sites that go dark during the Federal Government Shutdown.

We're proud of you, Wayback Machine! You've grown so big on a healthy diet of web captures, and you're growing more every day.

Posted in Announcements, News | 22 Comments

### Bitcoin and the Internet Archive Swag Store

Posted on May 8, 2014 by brewster

San Francisco Weekly said we are the <u>best Bitcoin Evangelists</u> in their BestOf section. Fun.

We now accept bitcoin at our Archive swag store. We continue

to offer bitcoins to our employees as salary, eat sushi for bitcoin next door, supported bitcoin as well as could at our credit union, have a cool honor-based bitcoin ATM (please come and use it), accept bitcoin at movies, as well as graciously accept bitcoins as donations





to keep our servers humming. (We get a few bits every day, thank you!)

#### Go Bitcoin!



Sushi for Bitcoins

Posted in Announcements | 1 Comment

# Rick Prelinger: NO MORE ROAD TRIPS! - Tuesday, May 13 at 6:30PM

Posted on May 7, 2014 by junegoldsmith

Tuesday, May 13 NO MORE ROAD TRIPS!

Internet Archive, San Francisco 6:30 reception / 7:30 screening

ADVANCE TICKET PURCHASE HIGHLY ADVISED. Ticket link here: http://www.brownpapertickets.com/event/671840

This is the second Bay Area screening of Rick Prelinger's new film, which showed last year as a work in progress at SXSW and the SF International Film Festival. It's a dream ride through 20th-century America made entirely from home movies, asking whether we've come to the end of the open road.

Have we reached "peak travel"? Can we still find fortune (and ourselves) on the highway? Are we nomads or stay-at-homes? A journey from the Atlantic Coast to California with a cast of hundreds, made from a collection of 9,000 home movies, NO MORE ROAD TRIPS? reveals hidden histories embedded in the landscape and seeks to blend the pleasures of travel with premonitions of its end. The sound track for this fully participatory film is made fresh each screening by the audience, who's encouraged to recall our shared past and predict the future.

This is a silent movie meant to be shown to viewers who ask questions, make comments, disagree with one another, and generally act like vocal sports spectators or the rowdies in the pit in front of the Elizabethan stage. A project of Creative Capital.

NO MORE ROAD TRIPS! will also be showing at SF DocFest in June: <a href="http://sfindie.com/festivals/sf-docfest/">http://sfindie.com/festivals/sf-docfest/</a>

Watch the 66-second trailer:



Posted in Announcements, News | 1 Comment

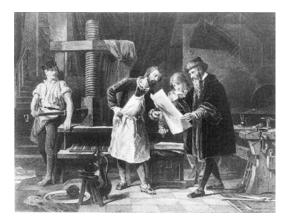
### Let Our Video Go

Posted on May 7, 2014 by Roger Macdonald



 $\hbox{UI / UX Advances in Freeing Information Enslaved by an Ancient Egyptian Model \ Or... } \\ Why Video Scrolling is so Last Millenniums$ 

In creating an open <u>digital research library of television news</u>, we have been challenged by being unable to reference a current user experience model for searching video. Conventional video search requires users to start at the beginning of video and proceed at the pace and sequencing dictated by content creators. Our service has vaulted over the confines of the linear video storytelling framework by helping users jump into content at points directly pertaining to their search. But by doing so, we have left some of our prospective users adrift, without a conceptual template to rely on. That is until this April,



Treating video as infinitely addressable data is enabling us to do an increasingly better job at getting researchers right to their points of interest. While revolutionary in its application to television news at the scale we are doing it, it does have an antecedent in a prior media revolution — the transition from the age of scrolls to printed books. Gutenberg used movable type to print identical bibles in the mid-1400's. It took a hundred

more years before detailed indexes started appearing at the end of books. The repurposing of closed captioning to facilitate deep search of video is, in some ways, as significant for television as the evolution from parchment and papyrus rolls to page numbered and indexed books.

The value of most major innovations can only be realized when people adapt their conceptual models to understand and use them. Our interface design challenge included helping users make a perceptual leap from a video experience akin to ancient Egyptians unfurling scrolls to that of library-literate modern readers, or the even more recent experience of being able to find specific Web "pages" via search engines.



Our latest interface version helps users cross the cognitive bridge from video "scrolling" through television programs to accessing them instead as digitally indexed "books" with each page comprised of 60-second video segments. We convey this visually by joining the video segments with filmstrip sprocket border graphics. Linear, like film, but also "paginated" for leaping from one search-related segment to another.



When searching inside individual broadcasts, the new interface reinforces that metaphor of content hopping by truncating presentation of interleaving media irrelevant to the search query. We present the search-relevant video segments, while still conveying the relative "distance" between each jump — again referencing the less efficient linear "scroll" experience that most still find more familiar.



The new UI has another revolutionary aspect that also hearkens back to one of the great byproducts of the library index model: serendipitous discovery of adjacent knowledge. Dan Cohen, founding Executive Director of the Digital Public Library of America recently recounted, "I know a professor who was hit on the head by a book falling off a shelf as he reached for a different one; that book ended up being a key part of his future work."



When using the new "search within" a single program feature, the browser dynamically refines the results with each character typed. As typing proceeds towards the final search term, unexpected 60-second segments and phrases arise, providing serendipitous, yet systematic choices, even while options narrow towards the intended results. These surprising occurrences suggest the diverse opportunities for inquiry afforded by the unique research library and encourage some playful exploration.

The Internet Archive is still in the early stages of helping guide online television out of its imprisonment in ancient conceptual frameworks. A bright future awaits knowledge seekers and content creators alike when digital video is optimized for systematic discovery of even short segments. New audiences and new use-cases will be joined with media that has been languishing for too long in digital tombs, mostly unseen and unheard.



At its heart, the Internet Archive is an invitation to explore and collaborate. Please, join us in evolving digital opportunities to open knowledge for the benefit of all.

Start by giving our service a whirl, find something important and quote it. I just did - <a href="https://twitter.com/r\_macdonald/status/463492832867516416">https://twitter.com/r\_macdonald/status/463492832867516416</a>

Posted in News | 5 Comments

## Announcing: A Brave New Feature for TV News V2.1

Posted on May 5, 2014 by kristen

The new TV News Archive, launched just over one month ago, was updated today with

the addition of a super new feature: **Search Inside** shows.



It sounds simple enough for those familiar with the ubiquitous keyboard shortcut Ctrl+F...but it turns out that's actually <u>only 10% of you</u>! So why use this feature when you're browsing the TV News Archive of 500,000+ US TV News Shows? Several reasons:

- 1) **More Better Context** The TV New search inside feature enables users to discover a word or combination of words within a show by highlighting the desired term in every segment where it occurs in a show. Furthermore, for every 1 minute segment where a term occurs, all accompanying closed captioning text is surfaced!
- 2) **Less Background Noise** Columns of 1 minute segments that don't contain a "search inside" term collapse so you can find exactly what you need faster.
- 3) **Remedies the "Refer Problem"** About 80% of the time a user is referred to a TV News show page from a third party search engine, the user's original search term doesn't carryover. In other words, you land on a show page with zero terms highlighted, and that's annoying. While we can't exactly solve this problem, we can prescribe medication for the pain, "search inside."

So now you know, go try it out for yourself! Here are just a couple amazing projects made possible by TV News, get inspired and show us how this tool helps you.



Why Cable TV Is Dying and Twitter is Winning | André-Pierre du Plessis, Columbia Graduate School of Journalism



Tiny Numbers | Bodo Winter, UC Merced Cognitive Sciences

— the **TV NEWS** ARCHIVE team

## The Internet Archive Declares Spacewar!

Posted on April 28, 2014 by Jason Scott

Like everything else in history, debate rages about when the "first" video game came into being. Games and demonstrations such as "Tennis for Two" (1958), "NIM" (1951) and "Mouse in the Maze" (1959), played on million dollar equipment for the amusement and experimentation of limited audiences.

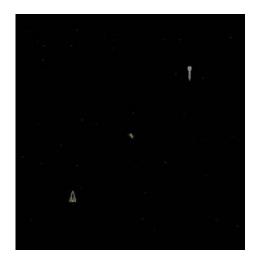


One contender in this group is "Space

War!", a 1962 collaboration of multiple students at the Massachusetts Institute of Technology. Playing off the cathode-ray tube of a Digital Equipment PDP-1 (of which less than 60 were sold), this two-player space-battle game has been lauded as a major advancement in computer gaming for over 50 years.

Now, it's possible to play it at the Internet Archive.

As part of our larger Historical Software collection, there is now an entry for Space War!



This entry covers the historical context of Space War!, and instructions for working with our in-browser emulator. The system doesn't require installed plugins (although a more powerful machine and recent browser version is suggested).

The JSMESS emulator (a conversion of the larger MESS project) also contains a real-time portrayal of the lights and switches of a Digital PDP-1, as well as links to documentation and manuals for this \$800,000 (2014 dollars) minicomputer.



You're going to need a friend to play - the game requires two human players on the same keyboard. And don't worry, everyone gets sucked into the star in the center the first few times. You've got to have your orbital dynamics down before you're truly ready to be a

Internet Archive Blogs | A blog from the team at archive.org space warrior.

With over a half-century of history behind it, *Space War!* still holds up as a great example of what would become a dominant form of media in the decades since – the space video game.

The Internet Archive continues to add more historical software frequently – bringing the computing past to the computer future. Stay tuned!

Posted in Announcements, News, Software Archive | 6 Comments

## Heartbleed bug and the Archive

Posted on April 9, 2014 by brewster

**Bottom line:** The Internet Archive is safe to use.

Internet Archive has always been interested in protecting the privacy of our patrons. We try not to record IP addresses, and when Edward Snowden showed that traffic going over the open Internet was not safe from government spying we turned on encryption by default on our web services. Unfortunately, some of the encryption software we use (along with more than half the sites on the internet) was vulnerable due to the "Heartbleed" bug; we have upgraded our software to fix this issue.

A bit more detail: A common piece of code, OpenSSL, was revealed to have a security bug that allowed anyone on the Internet to probe a vulnerable server and read a set of information that happens to be in RAM in that remote process. This could be used to read a site's "private key" which would allow a bad actor that could intercept traffic to impersonate a website via what is called a "man in the middle" attack. If a site's past encrypted traffic had been recorded, then it might be possible to go back now with the private key and see what happened in those past web sessions. If you would like a more thorough explanation of "Heartbleed" you can watch a video overview.

Some of the Internet Archive's web services did use the vulnerable version of OpenSSL up until yesterday. At this point the Internet Archive's services have been upgraded and we will be renewing our private key in case that was compromised. On some of our services we have used "perfect forward secrecy" so even if our private key had been taken, and someone had recorded past traffic, and if they cared enough to try to then discover what had been read, they would still not be able to get it. We will be implementing this on all services in the future. Qualys SSL Labs has a useful report on our site.

Never a dull day!

Posted in Announcements, News | 12 Comments

# Lost Landscapes of Oakland, movie in SF Tuesday April 8

Posted on April 3, 2014 by junegoldsmith

Tuesday, April 8, 2014 6:30 pm Reception 7:30 pm Film Internet Archive 300 Funston Ave. San Francisco, CA 94118

#### **Please RSVP here**

Join film archivist Rick Prelinger for the first-ever East Bay-focused presentation in his lauded series of 'Lost Landscapes' screenings: a montage of rediscovered and rarely-seen film clips showing the Oakland of yore, captured by amateurs, newsreel cameramen, and industrial filmmakers. Prelinger, the founder of the legendary Prelinger Archives and guest curator for the



exhibition <u>Bay Motion: Capturing San Francisco Bay on Film</u>, has become known for annual 'Lost Landscapes' screenings that have happened in San Francisco and Detroit. This program combines eclectic content with vibrant discussion and audience participation.

Please come early to reserve your seat. Seating is limited and available on a first-come first serve basis.

Posted in News | 2 Comments

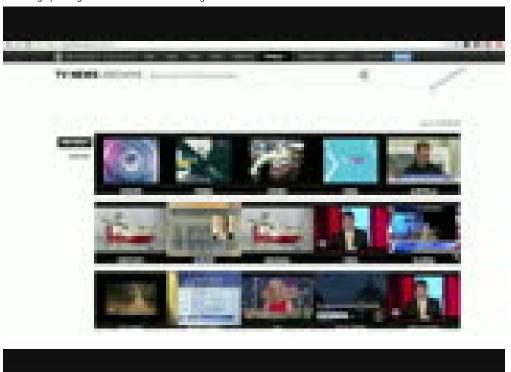
## **Introducing the New TV News Archive**

Posted on April 1, 2014 by kristen

# Announcing the launch of the fully redesigned <u>TV News</u> Archive.

This research library, originally released in September 2012, is a free service provided as a way to enhance the capabilities of journalists, scholars, teachers, librarians, civic organizations and other engaged citizens. It repurposes closed captioning to enable users to search, quote and borrow from the Internet Archive's collection of 500,000+ US TV news broadcasts aired since 2009.

The new interface has been designed to give users better access to this collection, and to provide new tools that enable users to share short clips from any broadcast and track play and share statistics of those clips over time.



Here's a quick overview of the site's features; we hope they serve you well.



#### Search transcripts of US TV news shows aired since 2009

- Search with topical terms to return shows with corresponding transcripts. Remember, you are searching the words spoken in the show.
- Use the advanced search tool (click the Q icon) to specify a network or show name, or sort your search results.
- Refer to the info panel throughout the site for details about your search results, related topics and other stats.



#### Scan and view show segments

- Shows are presented in 60 second segments, each with a video and corresponding transcript text.
- Scroll left and right to scan through segments of a show; search terms are highlighted in transcript text.
- To search within a show transcript text try Ctrl + F ( **第** + F on mac) to search inside the page. (scrollable transcripts are coming soon!)



#### Share and embed short clips (aka quotes) from a show

- Shareable quotes are limited to 60 seconds. Refine your quote selection by clicking the "Edit" button and dragging the handles.
- Your quote will be assigned a permalink. You can always come back to see it!



#### Track popularity of show quotes shared over time

- Quotes with a unique start and stop time within a show will be tracked to see how often they are re-shared or played.
- View a specific quote by saving or sharing its unique permalink, or you can browse quotes from shows on the TV News Archive site by looking for the cicon.



#### **Borrow full shows on DVD**

- Borrow shows (click the icon on any show detail page) from the Internet Archive library on a DVD-ROM for 30 days for a \$25 processing fee.
- Internet Archive does not sell or license this content. Please note that this is a
  copyrighted work and performance, copying, or sale, whether or not for profit, by the
  recipient is not authorized.



[team pressing the button to launch redesign!]

Cheers, from the TV News Team!

Posted in Announcements, Television Archive | 11 Comments

# Archive and ALA brief filed in Warrantless Cell Phone Search Case

Posted on March 11, 2014 by internetarchive

On Monday, March 10, the Internet Archive and the American Library Association with the assistance of the law firm Goodwin Procter filed a "friend of the court" brief in David Leon Riley v. State of California and United States v. Brima Wurie, two Supreme Court cases examining the constitutionality of cell phone searches after police arrests. In the amicus brief, both nonprofit organizations argue that warrantless cell phone searches violate privacy principles protected by the Fourth Amendment.

Both cases began when police officers searched the cell phones of defendants Riley and Wurie without obtaining a warrant. The searches recovered texts, videos, photos, and telephone numbers that were later used as evidence. The Supreme Court of California found the cell phone search lawful in Riley's case, but the U.S. Court of Appeals for the First Circuit, in Boston, reached the opposite conclusion and reversed Wurie's conviction.

In the brief, the Internet Archive and the American Library Association argue that reading choices are at the heart of the expectation of personal privacy guaranteed by the Fourth Amendment. Allowing police officers to rummage through the smartphones of arrestees is akin to giving government officials permission to search a person's entire library and reading history.

"Today's cell phones are much more than simple dialing systems—they are mobile libraries, holding our books, photos, banking information, favorite websites and private conversations," said Barbara Stripling, president of the American Library Association. "The Constitution does not give law enforcement free rein to search unlawfully through our private records."

"The fact that technology has made it easy to carry voluminous sensitive and personal information in our pockets does not suddenly grant law enforcement unchecked availability to it in the case of an arrest," said Brewster Kahle, founder and digital librarian of Internet Archive. "Constitutional checks are placed on the search of, for instance, a personal physical library and these checks should also apply to the comparably vast and personally sensitive stores of data held on our phones."

William Jay, Goodwin Procter partner and counsel of record on the amicus brief, added: "The Supreme Court has recognized that people don't lose all privacy under the Fourth Amendment when they're arrested. And one of the strongest privacy interests is the right not to have the government peer at what you're reading, without a good reason and a warrant. We are pleased to have the chance to represent both traditional and Internet libraries, which have a unique ability to show the Supreme Court why our electronic bookshelves deserve the same protection as our home bookshelves."

"In my experience as a former federal prosecutor, a person's smartphone is one of the things law enforcement are most eager to search after an arrest," said Goodwin Procter partner Grant Fondo, a co-author of the brief. "This is because it holds so many different types of important personal information, telling law enforcement what the arrested person has been doing over the past few weeks, months, and even years—who they have been in contact with, what they read, and where they have been. Simply because this information is now all contained in a small smartphone we carry with us, rather than at home, should not take the search of this information outside the scope of one of our most important Constitutional protections—the right to protection from warrantless searches."

Internet Archive would like to heartily thank William Jay, Grant Fondo, and Goodwin Procter for helping introduce an important library perspective as the Court considers these two cases with critical implications for civil liberties.

Posted in Announcements, News | 8 Comments

## Wayback/WABAC Movie Party, March 7th at 5pm

Posted on March 3, 2014 by internetarchive

The Internet Archive's <u>Wayback Machine</u>, launched in 2001, was named after Mr. Peabody's WABAC machine from the 1960s cartoon Rocky and Bullwinkle. This Friday we are going to celebrate our own time travel machine by going to see a movie about the original.



"Using his most ingenious invention, the WABAC machine, Mr. Peabody and his adopted boy Sherman hurtle back in time to experience worldchanging events first-hand and interact with some of the greatest characters of all time." (see imdb page)

While tracking down your old Geocities page may not have world-changing consequences, we still think it's pretty cool.

Please join us for dinner and a movie!

March 7, 2014
Dinner at 5pm
Internet Archive
300 Funston Ave
San Francisco, CA 94121
RSVP

Depart for movie around 6:15 for a 7pm show time at AMC Van Ness.

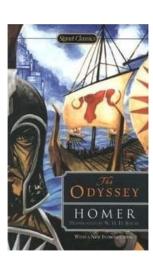
Posted in News | 3 Comments

## Popular subjects in our book collection

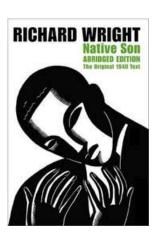
Posted on February 21, 2014 by Alexis Rossi

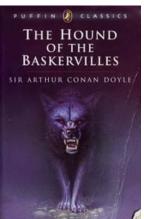
We took a leisurely stroll through half a million books today, and we noticed that lots of the books were congregating around some popular categories. This isn't an exhaustive list, we just thought it would nice to share a little of the landscape with you. Click through to download or borrow these books through our Open Library site.

- fiction
- women
- english language
- united states
- african americans
- juvenile nonfiction
- friendship
- animals
- christian life
- humor
- juvenile fiction
- world war 2
- bible
- dogs
- juvenile literature
- schools
- police
- science fiction
- romance
- science
- man-woman relationships
- mystery and detective stories or detective and mystery stories



- popular music
- travel
- indians of north america
- art
- computer programs
- nonfiction
- astronomy
- drama
- biography
- cartoons and comics





Posted in Books Archive, Open Library | Comments Off

## **New Software Collection: Making the Business Case**

Posted on February 14, 2014 by Jason Scott

The Internet Archive continues its goal of bringing the same experience of older software that we have with movies, books and audio. This newest collection, just in time for Valentine's Day (?), is called *The Business Case*, and is a continually-growing exhibit of business-related software.



Unlike the previous announced collection of entertainment software (the <u>Console Living Room</u>), these programs are all aimed at the early days of home computer ownership, when the reason for spending hundreds or thousands of dollars on these systems wasn't always very clear cut. Why drop a significant amount of money for something that beeped and made pretty pictures (or not even pretty pictures)? Well, one reason might be to write, calculate and track financial and business information, as well as utilize word processors for faster correspondence.



#### Some important facts about browsing and using this collection.

Unlike the <u>Console Living Room</u>, a lot of these programs are not self-evident. They had complicated instructions, and often utilized massive manuals and accompanying documentation, which is not available for many of the items. Others required the use of a modem or printer, which the emulator at archive.org does not currently provide – they will fail out or give errors if you try and use them.

Additionally, some of these programs are "cracks", cases where the original floppy disks of the programs have been modified to allow for easier booting, or copying. We included them to bring into sharp focus a real problem: software preservation for the computer programs not lucky enough to be games or famous is spotty at best and non-existent at worst. While the world has thousands of pages dedicated to the history of Pac-Man and Doom (many of them archived in the <a href="Wayback Machine">Wayback Machine</a>), in some cases, the only evidence online that a program ever existed is the modified-for-copying version of a spreadsheet application. In an ideal world, the academic researcher or curious onlooker could experience and understand the context of every program released, or at least get an analogue of the experience. In many cases, this just isn't possible.

Where we can, we will expand and grow this collection, as well as improve and update the entries already in the collection to reflect the part they played in history. If you are familiar with a given program, or can provide more information, contact <u>Jason Scott</u> at the archive.



Posted in News | Comments Off

## We want your old T-shirts. Really.

The Internet Archive is headquartered in a building that used to be a Christian Science church. The great room includes a gorgeous stained glass dome, a pipe organ, and graceful wooden pews. We seat 400+ people in this space to show movies and to host conferences on a regular basis.

The room is beautiful, but those pews are hard on the posterior if you plan to sit there for more than 15 minutes at a time.



The great room. Photo by Jason Scott.

So we came up with a plan - let's make some cushions! That sounds simple enough, but we are thrifty people.

We are taking old T-shirts and recycling them into cushion covers. We are looking for T-shirts from non-profits or from tech companies in particular, but we'll take whatever you've got. Any size, any color, just as long as there aren't holes in the fabric or big stains that may discourage people from sitting on that cushion.

This is where you come in! Which one of us doesn't have a bunch of old corporate swag T-shirts sitting in the back of our closet taking up space? If you're willing to part with those useless shirts, we're willing to put them to use.

Drop off your shirts in person, or send your shirts to:

Internet Archive 300 Funston Ave San Francisco, CA 94118

Turning tshirts into cushions.

Have questions? Email info@archive.org.



Your old T-shirts could make somebody's butt very happy.

Posted in News | 3 Comments

# **Software Wanted: Political TV Commercial Detection and Naming**

Posted on January 20, 2014 by brewster

Volunteers needed: We have a fabulous <u>TV collection</u>, and the US is going into an election period. We would like to pull out the TV Commercials, including the political ads, and match them with the other occurrences, and then put names on them. Then we and others can datamine and surface this information.

We hope we could find all ads so we can know when and were they ran. We would like to not just limit this to political ads because sometimes the ads are the best parts of shows, and many ads are stealthy-political.

To help in this process, we have closed caption transcripts of what is said in US TV as well as full resolution TV recordings. We also often have a rebroadcast of the same program which would likely then have different commercials. We do have to be careful with this data so, we would like to run this locally in our virtual machine "virtual reading room".

We tried the open source commercial detector included in MythTV, but it seemed to leave all the commercials in a commercial break in a block. Also it was not that reliable. It needs more work.

This is not an easy project, and do not have a budget (yet) to pay for it, unfortunately, so maybe fame and helping the open world. If you can help in this project, we would appreciate it.

Please leave a comment on this post or send a note to <u>Roger Macdonald</u>, the leader of the TV News project.

Thank you.

Posted in News | 4 Comments

# Archive Tumblr Fun: Announcing a Year of Tumblr Residencies

Posted on January 16, 2014 by internetarchive

Last year a group of inspired digital residents created fantastic tumblr's using the things they found interesting in the Internet Archive. We're proud to unveil these projects, one per week, throughout the year. They'll each be posted at the Internet Archive tumblr and then be accessible at their own URL once posted. Follow the IA tumblr to see them as the project rolls onward! So far, we've seen two projects posted.

This week's project, A History of Linux Websites, by Steven Ovadia, traces the history of Linux through the screenshots of the web sites of Linux distributions and projects. Looking at the screenshots gives viewers insights not just into the various histories of the various distributions, but also provides insight into the web design



aesthetics that guide these distributions. In many cases, the design aesthetic of the web site does not match up against the philosophy of the distribution, making for an interesting tension.



The first, Most Frequent Word Search by Jeff Thompson, is an algorithmic-curatorial project which uses the 250 most-frequent unique words in the oldest text with a date listed in Project Gutenberg – "Old Mortality, Volume 2" by Sir Walter Scott. Each word is used as a seed for a new

search into the Archive. The most common word in the resulting text is used as a new search term. The process is repeated until the search returns no results. The project features a unique original theme with click and drag functionality, allowing users to aesthetically arrange the computationally generated and randomly displayed results, if they wish to attempt to seek their own patterns.

We hope you're as excited as we are to see each project completed and unveiled after months of hard work by our digital residents. We'll see you at <a href="internetarchive.tumblr.com">internetarchive.tumblr.com</a>!

Thank you to **Ian Aleksander Adams** for making this happen.

Posted in Announcements, News | 1 Comment

## **Short Video of Brewster Kahle on Bitcoin by Forbes**

Posted on January 16, 2014 by brewster

Forbes did a followup on its "Living on Bitcoin for a Week" and interviewed Brewster Kahle, Founder of the Internet Archive and the Internet Credit Union.

http://www.forbes.com/video/3058744760001/

(on the archive)

Posted in News | Comments Off

### **Public Access to the Public Domain: Copyright Week**

Posted on January 14, 2014 by brewster

It's <u>Copyright Week</u>, and many organizations are highlighting the need to make works in the public domain readily accessible. One of the many challenges we face sounds almost paradoxical: works in the public domain are often not publicly available. The Internet Archive hosts several projects to address that concern.



<u>RECAP</u>: Created by Aaron Swartz and automated by a group at Princeton University, RECAP brings free access to some two million court documents from a million cases.

 $\underline{Google\ Books} \hbox{: Aaron Swartz collected } 900{,}000\ public domain books on Google's site; we're currently adding more.}$ 

<u>FOIA and Government Documents</u>: The Internet Archive hosts over 160,000 from <u>DocumentCloud</u>, including Freedom of Information Act and other government documents.

<u>Digitization of Public Domain Books</u>: The Internet Archive works with over 500 libraries to digitize public domain books to offer them to the world for free with no restrictions at all. We're grateful to the libraries that are funding this amazing resource.



Fedflix: This joint venture between the National Technical Information Service and Public.Resource.Org provides free access to 8,700 U.S. government training and historical films such as the film below, *Blast Measurement Group in* 

Operation Sandstone.

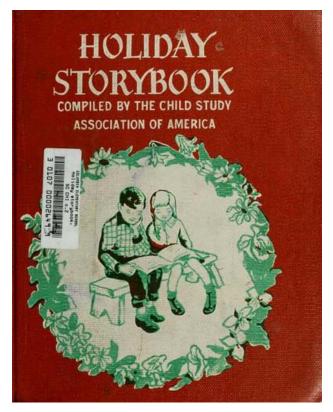


Posted in Announcements, News | 3 Comments

## Servers for the New Year: Thank you!

Posted on January 1, 2014 by brewster

Year-end donations went past our goal of \$1 million (almost \$1.3m!) — thank you all for donating. With this money we can buy the ten racks (10 petabytes,



10,000,000,000,000,000bytes) of server space to store the upcoming books music video and webpages we expect for this year. (Since we serve from a duplicate as well, we have space for about 5PB of data). We were greatly helped by a generous 3-to-1 match for the

Internet Archive Blogs | A blog from the team at archive.org contributions made.

A few stats: We received thousands of individual donations, the vast majority were under \$100, and we received 20 that were \$1000 or more. We received 16 bitcoins which translates to \$48k including the match.

The notes you left with their donations were heart warming and motivating. It is wonderful to see how many people want the full breadth of information available to everyone in the world and are willing to put their effort and money behind it. Still lots to do, and glad there is such a strong community to make it actually happen.

Universal Access to All Knowledge.

Thank you, and lets rock in 2014!

Posted in Announcements, News | 16 Comments

 $\leftarrow \mathsf{Older}\;\mathsf{posts}$ 

**Internet Archive Blogs** 

Proudly powered by WordPress.

#### **Frequently Asked Questions**

[ The Internet Archive | The Wayback Machine | Audio | Law Enforcement Requests | Live Music Archive | Texts and Books | Virtual Library Cards (AKA Accounts) | Movies | Downloading Content | Borrow from Lending Library | FreeCache | DocuComp | Uploading Content | Prelinger Movies | Search Tips | Forums | SFLan | Archive BitTorrents | Rights | Report Item | Archive-It | Equipment ]

#### Questions

#### Can I donate BitCoins?

What is the nonprofit status of the Internet Archive?
Where does its funding come from?

<u>Does the Archive issue</u> <u>grants?</u>

How do I get assistance with research? How about research about a particular book?

What statistics are available about use of Archive.org?

What's the significance of the Archive's collections?

#### The Internet Archive

#### Can I donate BitCoins?

Yes, please do. Our BitCoin address is: 17gN64BPHtxi4mEM3qWrxdwhieUvRq8R2r . Every bit helps.

#### What is the nonprofit status of the Internet Archive? Where does its funding come from?

The Internet Archive is a 501(c)(3) nonprofit organization. It receives in-kind and financial donations from a variety of sources, including, but not limited to: <u>Alexa Internet</u>, the Kahle/Austin Foundation, the Alfred P. Sloan Foundation, the William and Flora Hewlett Foundation, and <u>you</u>.

#### Does the Archive issue grants?

No; although we promote the development of other Internet libraries through <u>colloquia</u>, and other means, the Archive is not a grant-making organization.

#### How do I get assistance with research? How about research about a particular book?

The Internet Archive focuses on preservation and providing access to digital cultural artifacts. For assistance with research or appraisal, you are bound to find the information you seek elsewhere on the internet. You may wish to inquire about reference services provided by your local public library. Your area's college library may also support specialized reference librarian services. We encourage your support of your local library, and the essential services your library's professional staff can provide in person. Local libraries are still an irreplaceable resource!

#### What statistics are available about use of Archive.org?

Aggregated statistics are graphed here:

https://www.archive.org/stats

Additionally, each individual item shows a download counts are shown on the details page for individuals items, and collections pages list the most downloaded items for that collection.

#### What's the significance of the Archive's collections?

Societies have always placed importance on preserving their culture and heritage. But much early 20th-century media -- television and radio, for example -- was not saved. The Library of Alexandria -- an ancient center of learning containing a copy of every book in the world -- disappeared when it was burned to the ground.

Special projects include OpenLibrary.org (link to faq).

#### Questions

Where is the rest of the archived site? Why am I getting broken or gray images on a site?

Can I link to old pages on the Wayback Machine?

Why isn't the site I'm looking for in the archive?

What does it mean when a site's archive data has been "updated"?

Who was involved in the

## The Wayback Machine

#### Where is the rest of the archived site? Why am I getting broken or gray images on a site?

Broken images (when there is a small red "x" where the image should be) occur when the images are not available on our servers. Usually this means that we did not archive them. Gray images are the result of robots.txt exclusions. The site in question may have blocked robot access to their images directory.

You can tell if the link you are looking for is in the Wayback Machine by entering the url into the Wayback Machine search box at archive.org (http://www.archive.org/web/web.php ). Whatever archives we have are viewable in the Wayback Machine.

The archived webpages are meant to be a "snap shot" of past Internet sites. Please note that while we try to archive an entire site, this is not always possible. That is why some images or links might be missing. Additionally some sites do not archive well and we cannot fix that. There is a list of common problems that make a site difficult to archive: http://www.archive.org/about/faqs.php#12.

If you see a box with a red X or a broken image icon that means that we unfortunately do not have the images.

<u>creation of the Internet</u> <u>Archive Wayback Machine?</u>

How was the Wayback Machine made?

How large is the Wayback Machine?

How do you archive dynamic pages?

What type of machinery is used in this Internet Archive?

How can I have my site's pages excluded from the Wayback Machine?

Some sites are not available because of robots.txt or other exclusions. What does that mean?

Can I search the Archive?

Why are some sites harder to archive than others?

How do I contact the Internet Archive?

What is the Wayback Machine's Copyright Policy?

Why is the Internet Archive collecting sites from the Internet? What makes the information useful?

**Do you archive email?** Chat?

How can I get a copy of the pages on my Web site? If my site got hacked or damaged, could I get a backup from the Archive?'

Is there any personal information in these collections?

Can people download sites from the Wayback?

How do you protect my privacy if you archive my site?

What does 'failed connection' and other error messages mean?

Why are there no recent archives in the Wayback Machine?

How does the Wayback
Machine behave with
Javascript turned off?

How did I end up on the live version of a site? or I clicked on X date, but now I am on Y date, how is that possible? Why can I only see 930 out of the 2000 results?

Files over 10MB are not archived in this "snap shot" of the website.

The best way to see all the files we have archived of the site is: http://web.archive.org/\*/www.yoursite.com/\*

Please note that there is a 6 - 14 month lag time between the date a site is crawled and the date it appears in the Wayback Machine.

#### Can I link to old pages on the Wayback Machine?

Yes! The Wayback Machine is built so that it can be used and referenced. If you find an archived page that you would like to reference on your Web page or in an article, you can copy the URL. You can even use fuzzy URL matching and date specification... but that's a bit more advanced.

#### Why isn't the site I'm looking for in the archive?

Some sites may not be included because the automated crawlers were unaware of their existence at the time of the crawl. It's also possible that some sites were not archived because they were password protected, blocked by robots.txt, or otherwise inaccessible to our automated systems. Siteowners might have also requested that their sites be excluded from the Wayback Machine. When this has occurred, you will see a "blocked site error" message. When a site is excluded because of robots.txt you will see a "robots.txt query exclusion error" message.

#### What does it mean when a site's archive data has been "updated"?

When our automated systems crawl the web every few months or so, we find that only about 50% of all pages on the web have changed from our previous visit. This means that much of the content in our archive is duplicate material. If you don't see ""\*" next to an archived document, then the content on the archived page is identical to the previously archived copy.

#### Who was involved in the creation of the Internet Archive Wayback Machine?

"The original idea for the Internet Archive Wayback Machine began in 1996, when the Internet Archive first began archiving the web. Now, five years later, with over 100 terabytes and a dozen web crawls completed, the Internet Archive has made the Internet Archive Wayback Machine available to the public. The Internet Archive has relied on donations of web crawls, technology, and expertise from Alexa Internet and others. The Internet Archive Wayback Machine is owned and operated by the Internet Archive."

#### How was the Wayback Machine made?

Alexa Internet, in cooperation with the Internet Archive, has designed a three dimensional index that allows browsing of web documents over multiple time periods, and turned this unique feature into the Wayback Machine.

#### How large is the Wayback Machine?

The Internet Archive Wayback Machine contains almost 2 petabytes of data and is currently growing at a rate of 20 terabytes per month. This eclipses the amount of text contained in the world's largest libraries, including the Library of Congress.

#### How do you archive dynamic pages?

There are many different kinds of dynamic pages, some of which are easily stored in an archive and some of which fall apart completely. When a dynamic page renders standard html, the archive works beautifully. When a dynamic page contains forms, JavaScript, or other elements that require interaction with the originating host, the archive will not contain the original site's functionality.

#### What type of machinery is used in this Internet Archive?

Much of the Internet Archive is stored on hundreds of slightly modified x86 servers. The computers run on the Linux operating system. Each computer has 512Mb of memory and can hold just over 1 Terabyte of data on ATA disks. However we are developing a new way of storing our data on a smaller machine. Each machine will store 1 terabyte. For more information go to <a href="https://www.petabox.org">www.petabox.org</a>.

#### How can I have my site's pages excluded from the Wayback Machine?

You can exclude your site from display in the Wayback Machine by placing a simple robots.txt file on your Web server.

Here are <u>directions on how to automatically exclude your site</u>. If you cannot place the robots.txt file, opt not to, or have further questions, email us at info@archive.org.

If you are emailing to ask that your website not be archived, please note that you'll need to include the url (web address) in the text of your message.

# Some sites are not available because of robots.txt or other exclusions. What does that mean?

The Internet Archive follows the <u>Oakland Archive Policy</u> for Managing Removal Requests And Preserving Archival Integrity

The Standard for Robot Exclusion (SRE) is a means by which web site owners can instruct automated systems not to crawl their sites. Web site owners can specify files or directories that are disallowed from a crawl, and they can even create specific rules for different automated crawlers. All of this information is contained in a file called robots.txt. While robots.txt has been adopted as the universal standard for robot exclusion, compliance with robots.txt is strictly voluntary. In fact most web sites do not have a robots.txt file, and many web crawlers are not

Where does the name come from?

How do I cite Wayback **Machine urls in MLA** format?

For more information...

What is the Archive-It service of the Internet **Archive Wayback Machine?** 

What is the Wavback Machine? How can I get my site included in the Wayback Machine?

How can I help the Internet **Archive and the Wayback** Machine?

Do you collect all the sites on the Web?

Who has access to the collections? What about the public?

How can I get pages authenticated from the **Wayback Machine? How** can use the pages in court?

programmed to obey the instructions anyway. However, Alexa Internet, the company that crawls the web for the Internet Archive, does respect robots.txt instructions, and even does so retroactively. If a web site owner decides he / she prefers not to have a web crawler visiting his / her files and sets up robots.txt on the site, the Alexa crawlers will stop visiting those files and will make unavailable all files previously gathered from that site. This means that sometimes, while using the Internet Archive Wayback Machine, you may find a site that is unavailable due to robots.txt (you will see a "robots.txt query exclusion error" message). Sometimes a web site owner will contact us directly and ask us to stop crawling or archiving a site, and we endeavor to comply with these requests. When you come accross a "blocked site error" message, that means that a siteowner has made such a request and it has been honored.

Currently there is no way to exclude only a portion of a site, or to exclude archiving a site for a particular time period only.

When a URL has been excluded at direct owner request from being archived, that exclusion is retroactive and permanent.

#### Can I search the Archive?

Using the Internet Archive Wayback Machine, it is possible to search for the names of sites contained in the Archive (URLs) and to specify date ranges for your search. We hope to implement a full text search engine at some point in the future.

#### Why are some sites harder to archive than others?

If you look at our collection of archived sites, you will find some broken pages, missing graphics, and some sites that aren't archived at all. Here are some things that make it difficult to archive a web site:

- Robots.txt -- We respect robot exclusion headers.
- · Javascript -- Javascript elements are often hard to archive, but especially if they generate links without having the full name in the page. Plus, if javascript needs to contact the originating server in order to work, it will fail when archived.
- Server side image maps -- Like any functionality on the web, if it needs to contact the originating server in order to work, it will fail when archived.
- Unknown sites -- The archive contains crawls of the Web completed by Alexa Internet. If Alexa doesn't know about your site, it won't be archived. Use the Alexa Toolbar (available at www.alexa.com), and it will know about your page. Or you can visit Alexa's Archive Your Site page at http://pages.alexa.com/help/webmasters/index.html#crawl\_site.
- Orphan pages -- If there are no links to your pages, the robot won't find it (the robots don't enter gueries in search boxes.)

As a general rule of thumb, simple html is the easiest to archive.

#### How do I contact the Internet Archive?

All questions about the Wayback Machine, or other Internet Archive projects, should be addressed to info at archive dot org.

#### What is the Wayback Machine's Copyright Policy?

The Internet Archive respects the intellectual property rights and other proprietary rights of others. The Internet Archive may, in appropriate circumstances and at its discretion, remove certain content or disable access to content that appears to infringe the copyright or other intellectual property rights of others. If you believe that your copyright has been violated by material available through the Internet Archive, please provide the Internet Archive Copyright Agent with the following information:

- · Identification of the copyrighted work that you claim has been infringed;
- · An exact description of where the material about which you complain is located within the Internet Archive
- · Your address, telephone number, and email address;
- · A statement by you that you have a good-faith belief that the disputed use is not authorized by the copyright owner, its agent, or the law;
- · A statement by you, made under penalty of perjury, that the above information in your notice is accurate and that you are the owner of the copyright interest involved or are authorized to act on behalf of that
- Your electronic or physical signature.

Internet Archive uses the exclusion policy intended for use by both academic and non-academic digital repositories and archivists. See our full exclusion policy.

The Internet Archive Copyright Agent can be reached as follows:

Internet Archive Copyright Agent Internet Archive 300 Funston Ave. San Francisco, CA 94118 Phone: 415-561-6767

Email: info at archive dot org

Why is the Internet Archive collecting sites from the Internet? What makes the information useful?

Most societies place importance on preserving artifacts of their culture and heritage. Without such artifacts, civilization has no memory and no mechanism to learn from its successes and failures. Our culture now produces more and more artifacts in digital form. The Archive's mission is to help preserve those artifacts and create an Internet library for researchers, historians, and scholars. The Archive collaborates with institutions including the Library of Congress and the Smithsonian.

#### Do you archive email? Chat?

No, we do not collect or archive chat systems or personal email messages that have not been posted to Usenet bulletin boards or publicly accessible online message boards.

# How can I get a copy of the pages on my Web site? If my site got hacked or damaged, could I get a backup from the Archive?'

Our <u>terms of use</u> do not cover backups for the general public. However, you may use the Internet Archive Wayback Machine to locate and access archived versions of a site to which you own the rights. We can't guarantee that your site has been or will be archived. We can no longer offer the service to pack up sites that have been lost.

#### Is there any personal information in these collections?

We collect Web pages that are publicly accessible. These may include pages with personal information.

#### Can people download sites from the Wayback?

Our terms of use specify that users of the Wayback Machine are not to copy data from the collection.

#### How do you protect my privacy if you archive my site?

The Archive collects Web pages that are publicly available the same ones that you might find as you surfed around the Web. We do not archive pages that require a password to access, pages tagged for "robot exclusion" by their owners, pages that are only accessible when a person types into and sends a form, or pages on secure servers. We also provide information on removing a site from the collections. Those who use the collections must agree to certain terms of use.

Like a public library, the Archive provides free and open access to its collections to researchers, historians, and scholars. Our cultural norms have long promoted access to documents that were, but no longer are, publicly accessible.

Given the rate at which the Internet is changing the average life of a Web page is only 77 days if no effort is made to preserve it, it will be entirely and irretrievably lost. Rather than let this moment slip by, we are proceeding with documenting the growth and content of the Internet, using libraries as our model.

If you are interested in these issues, please join and contribute to our announcement and discussion lists.

#### What does 'failed connection' and other error messages mean?

Below is a list of the main error messages you will see while searching the Wayback Machine. If you see an error message that does not have the Internet Archive Wayback Machine logo in the upper left corner, you are most likely looking at an archived page or the live web.

Failed Connection: The server that the particular piece of information lives on is down. Generally these clear up within two weeks.

Robots.txt Query Exclusion: A robots.txt is something that a site owner puts on their site that keeps crawlers like our own from crawling them. The Internet Archive retroactively respects all robots.txt.

Blocked Site Error: Site owners, copyright holders and others who fit Internet Archive's exclusion policy have requested that the site be excluded from the Wayback Machine. For exclusion criteria, please see our exclusion policy (we use the same one used and developed by other digital repositories and archivists both academic and non-academic).

Path Index Error: A path index error message refers to a problem in our database wherein the information requested is not available (generally because of a machine or software issue, however each case can be different). We cannot always completely fix these errors in a timely manner.

Not in Archive: Generally this means that the site archived has a redirect on it and the site you are redirected to is not in the archive or cannot be found on the live web.

#### Why are there no recent archives in the Wayback Machine?

It generally takes 6 months or more (up to 24 months) for pages to appear in the Wayback Machine after they are collected, because of delays in transferring material to long-term storage and indexing, or the requirements of our collection partners.

In some cases, crawled content from certain projects can appear in a much shorter timeframe — as little as a few weeks from when it was crawled. Older material for the same pages and sites may still appear separately, months later.

There is no access to files before they appear in the Wayback Machine.

How does the Wayback Machine behave with Javascript turned off?

If you have Javascript turned off, images and links will be from the live web, not from our archive of old Web files.

How did I end up on the live version of a site? or I clicked on X date, but now I am on Y date, how is that possible? Why can I only see 930 out of the 2000 results?

How did I end up on the live version of a site? or I clicked on X date, but now I am on Y date, how is that possible?

Not every date for every site archived is 100% complete. When you are surfing an incomplete archived site the Wayback Machine will grab the closest available date to the one you are in for the links that are missing. In the event that we do not have the link archived at all, the Wayback Machine will look for the link on the live web and grab it if available. Pay attention to the date code embedded in the archived url. This is the list of numbers in the middle; it translates as yyyymmddhhmmss. For example in this url

http://web.archive.org/web/20000229123340/http://www.yahoo.com/ the date the site was crawled was Feb 29, 2000 at 12:33 and 40 seconds.

You can see a listing of the dates of the specific URL by replacing the date code with an asterisk (\*), ie: http://web.archive.org/\*/www.yoursite.com

Whatever archives we have are viewable in the Wayback Machine. Please note that there is a 6 - 14 month lag time between the date a site is crawled and the date it appears in the Wayback Machine.

#### Why can I only see 930 out of the 2000 results?

The list of results displayed shows the total number of pages we have for a given domain name. This includes numerous repeats as we return to sites to recrawl their content. The reported results is this total; whereas the smaller number relates to the number of unique results only.

#### Where does the name come from?

The Wayback Machine is named in reference to the famous Mr. Peabody's WABAC (pronounced way-back) machine from the Rocky and Bullwinkle cartoon show.

#### How do I cite Wayback Machine urls in MLA format?

This question is a newer one. We asked MLA to help us with how to cite an archived URL in correct format. They did say that there is no established format for resources like the Wayback Machine, but it's best to err on the side of more information. You should cite the webpage as you would normally, and then give the Wayback Machine information. They provided the following example: McDonald, R. C. "Basic Canary Care." \_Robirda Online\_. 12 Sept. 2004. 18 Dec. 2006 . \_Internet Archive\_. <

http://web.archive.org/web/20041009202820/http://www.robirda.com/cancare.html>. They added that if the date that the information was updated is missing, one can use the closest date in the Wayback Machine. Then comes the date when the page is retrieved and the original URL. Neither URL should be underlined in the bibliography itself. Thanks MLA!

#### For more information...

Check out our Wayback Machine Forum

#### What is the Archive-It service of the Internet Archive Wayback Machine?

For information on the <u>Archive-It</u> subscription service that allows institutions to build and preserve collections of born digital content, see <a href="https://www.archive.org/about/faqs.php#Archive-It">https://www.archive.org/about/faqs.php#Archive-It</a>

#### What is the Wayback Machine? How can I get my site included in the Wayback Machine?

The **Internet Archive Wayback Machine** is a service that allows people to visit archived versions of Web sites. Visitors to the Wayback Machine can type in a URL, select a date range, and then begin surfing on an archived version of the Web. Imagine surfing circa 1999 and looking at all the Y2K hype, or revisiting an older version of your favorite Web site. The Internet Archive Wayback Machine can make all of this possible.

#### How can I get my site included in the Wayback Machine?

Much of our archived web data comes from our own crawls or from Alexa Internet's crawls. Neither organization has a "crawl my site now!" submission process. Internet Archive's crawls tend to find sites that are well linked from other sites. The best way to ensure that we find your web site is to make sure it is included in online directories and that similar/related sites link to you.

Alexa Internet uses its own methods to discover sites to crawl. It may be helpful to install the free Alexa toolbar and visit the site you want crawled to make sure they know about it.

Regardless of who is crawling the site, you should ensure that your site's 'robots.txt' rules and in-page META robots directives do not tell crawlers to avoid your site.

When a site is crawled, there is usually at least a 6-month lag, and sometimes as much as a 24-month lag, between the date that web pages are crawled and when they appear in the Wayback Machine.

In some cases, crawled content from certain projects may appear in a much shorter timeframe â€" as little as a few weeks from when it was crawled. Older material for the same pages and sites may still appear separately, months later.

Yahoo is closing Geocities. Now what?

The Internet Archive has set up this page to help people submit Geocities sites for preservation: https://www.archive.org/web/geocities.php

Yahoo also provides this information: http://help.yahoo.com/l/us/yahoo/geocities/close/

#### How can I help the Internet Archive and the Wayback Machine?

The Internet Archive actively seeks donations of digital materials for preservation. If you have digital materials that may be of interest to future generations, please let us know by sending an email to info at archive dot org. The Internet Archive is also seeking additional funding to continue this important mission. You can click the donate tab above or click <a href="https://example.com/here-example.com/her

#### Do you collect all the sites on the Web?

No, we collect only publicly accessible Web pages. We do not archive pages that require a password to access, pages tagged for "robot exclusion" by their owners, pages that are only accessible when a person types into and sends a form, or pages on secure servers. If a site owner properly requests removal of a Web site through <a href="https://www.archive.org/about/exclude.php">https://www.archive.org/about/exclude.php</a>, we will exclude that site from the Wayback Machine.

#### Who has access to the collections? What about the public?

Anyone can access our collections through our website archive.org. The web archive can be searched using the Wayback Machine.

The Archive makes the collections available at no cost to researchers, historians, and scholars. At present, it takes someone with a certain level of <u>technical knowledge</u> to access collections in a way other than our website, but there is no requirement that a user be affiliated with any particular organization.

# How can I get pages authenticated from the Wayback Machine? How can use the pages in court?

The Wayback Machine tool was not designed for legal use. We do have a legal request policy found at <u>our legal page</u>. Please read through the entire policy before contacting us with your questions. We do have a <u>standard affidavit</u> as well as a <u>FAQ section for lawyers</u>. We would prefer that before you contact us for such services, you see if the other side will stipulate instead. We do not have an in-house legal staff, so this service takes away from our normal duties. Once you have read through our policy, if you still have questions, please <u>contact us</u> for more information.

#### Questions

How can I add a thumbnail image to my item's details page?

How can I get iTunes to create a new playlist when I stream MP3s?

How can I play OGG files on a Mac?

I'm having trouble with a 'blank'/corrupted ZIP file. What do I do?

How can I add a logo to the upper right corner of my collection?

How can I get my tracks to show up in the right order?

What kind of audio file should I submit?

The flash player is covering my files! How do I move it?

For more information...

#### **Audio**

#### How can I add a thumbnail image to my item's details page?

First, make sure you're logged on to archive.org with the same email address you used to upload the item.

The image you upload must be named *identifier*.jpg (where *identifier* is your item's identifier name) and you must choose file format JPEG in the metadata editor.

To upload the image:

- · Go to your item's details page
- . Click the "Edit item" link in the lower left box
- Upload the .jpg
- After a few minutes, return to your item's details page. Click "Edit item" and find the .jpg file you just uploaded
  in the list of files near the bottom of this page. Select the file format JPEG from the drop down menu, and click
  the submit button.
- Wait 5-20 minutes for your changes to show up. If you're still not seeing your new file, please try clearing your cache and viewing the page again, since you may still be looking at an old version of the page.

### How can I get iTunes to create a new playlist when I stream MP3s?

As an iTunes user, you might have noticed that iTunes loads the Archive's streaming MP3s (M3U files) into your library, and subsequentially the files get shuffled and are out of order. We have come up with a solution to this problem.

Step by step instructions:

- Download this AppleScript application.
- Copy the m3uPlayer application to a permanent location
- Choose some recording in the Archive to stream. This will cause an M3U to download to your default download folder (typically your desktop).
- Click on the downloaded M3U file, hit option-I (or option-click and select Get Info). Change "open with" from ITunes to m3uPlayer (locate it wherever you saved it)
- · Click change all so that all future M3U files will open this way

That's it! If you have trouble, post a message to this forum

Thanks to <a href="http://www.balnaves.com/archives/000092.php">http://www.balnaves.com/archives/000092.php</a> for the code, instructions, and inspiration

#### How can I play OGG files on a Mac?

On the mac, there is a free component to ogg-ify itunes. The freeware VLC Media Player will also play OGG files. http://www.macosxhints.com/article.php?story=20020424233612407

#### I'm having trouble with a 'blank'/corrupted ZIP file. What do I do?

There are a variety of problems that may be causing this. Here are a couple of the most common. If you have a Mac running OS X, the default unzip utility (Stuffit) does not deal well with those Archive ZIP files that are 'compressed on the fly'. You may see an empty directory - if so, then try downloading Zip Tools for Mac OS X and using the drag and drop software within that to unzip your download. [Make sure you save your download to your desktop before trying things on it.] If you're having any trouble with downloads timing out or being incomplete, especially on Windows, then you may be able to use download managers such as GetRight. These will restart your download if it fails. However, some 'ZIP on the fly' downloads don't play well with download managers. If you find that to be the case, the safest thing to do is to download each track individually in a download manager.

#### How can I add a logo to the upper right corner of my collection?

First, make sure you're logged on to archive.org with the same email address you used when you created your collection. Note: Images should have a height of no more that 72 pixels.

- · Go to your collection's front page
- Click the "Edit Item!" link next to your user name.
- · Click "Item Manager" near the top of the page.
- Click the "checkout --edit items files (non XML)" button in the "Edit Operations" section of the form.
- In Step 1 of 2, click the "Share" button.
- · Locate and select the image to be uploaded and click "Select".
- In Step 2 of 2 click the "Update Item!" button
- Return to collection front page and click "edit" link again
- Find logo file at bottom of page, choose "Collection Header" from the drop down list and click submit.

It might take a few minutes for the changes to appear.

#### How can I get my tracks to show up in the right order?

The most reliable way to have your tracks appear on the page in the correct order is to name the individual files with track numbers, like this:

01\_nameoffirstsong.mp3

02\_nameofsecondsong.mp3

03\_nameofthirdsong.mp3

(If you have more than 9 files you need to start numbering with 01 - not 1 - otherwise the files will go in this order: 1, 10, 11, 12, 2, 3 etc.)

If you have already created an item and you would like to change the file names to rearrange them correctly, do the following:

- 1. Click the "Edit Item!" link
- 2. Rename your original files using track numbers
- 3. Delete all "derived" files, leaving only your original files and the .xml files
- 4. Click "Edit item" > "Item Manager" and then click the "derive" button

It will take a little while for the derive to finish running, but once it does you'll have all new files, in the correct order, in both the flash player and the page itself.

#### What kind of audio file should I submit?

The archive is all about free access to information, so you should submit file formats that are easily downloadable and/or streamable for other site patrons.

We prefer that you submit the highest quality file that you have available, and then we will attempt to create smaller file sizes and formats automatically with our deriver program. We recommend that you do not attempt to do any special encoding of your files - the more settings you mess around with, the less likely our deriver code will be able to process the file

If you are submitting a Live Music Archive item, please only submit Flac or Shorten files. Even for non-LMA items, these are the best formats to use.

Whatever format you choose, please upload each file to your item individually (you can submit multiple files per item), in a non-compressed format. Uploading content in a .zip or .rar file makes your item unstreamable and significantly less accessible to others. If you upload .zip, .rar, non-audio formats (like .exe), or password-protected files, they may be removed by our moderators.

The table below describes what file formats we will attempt to derive depending on what type of file you submit.

This is automatically generated.

NOTE: inner whitespace is significant.

(\*) Some derivatives only apply to certain collections.

#### **Derivatives for Audio Items**

If your source file is format:	then we will try to derive the following formats:							
	64Kbps MP3	Checksums	Flac	Flac FingerPrint	MP3 Sample	Ogg Vorbis	PNG	VBR MP3
3GP Audio	<b>(</b> *)		†	<del> </del>	<b>(</b> *)	1	•	•
24bit Flac	<b>(</b> *)	<b>①</b>	†	<b>①</b>	<b>(</b> *)	1	•	•
64Kbps MP3				†		•	1	
96Kbps MP3	<b>(</b> *)	1		 	<b>(</b> *)	•	•	-
128Kbps MP3	<b>(</b> *)				<b>(</b> *)	1	•	•
160Kbps MP3	<b>(</b> *)				<b>(</b> *)	•	•	•
192Kbps MP3	<b>(</b> *)				<b>(</b> *)	1	•	•
256Kbps MP3	<b>(</b> *)				<b>(</b> *)	1	•	•
320Kbps MP3	<b>(</b> *)			! ! !	<b>(</b> *)	<b>①</b>	•	1
Advanced Audio Coding	<b>(</b> *)	 		 	<b>(</b> *)	•	•	•
AIFF	<b>(</b> *)	1		†	<b>(</b> *)	•	•	1
Apple Lossless Audio	<b>(</b> *)	1			<b>(</b> *)	•	•	•
Digital Theater Systems Audio	<b>(</b> *)	•	•	•	<b>(</b> *)	•	•	•
Flac	<b>(</b> *)	<b>①</b>		<b>①</b>	<b>(</b> *)	•	<b>(</b> *)	•
MIDI	<b>(</b> *)	1   				•	1	•
Ogg Vorbis	<b>(</b> *)	1 			<b>(</b> *)		<b>(</b> *)	•
Real Audio	<b>(</b> *)				<b>(</b> *)	<b>①</b>	•	•
Segment Data		i	i	<u>.                                    </u>			•	•
Shorten	<b>(</b> *)			<u> </u>	<b>(</b> *)	•	•	•
VBR MP3	<b>(</b> *)				<b>(</b> *)	•	<b>(</b> *)	1
WAVE	<b>(*</b> )	•	•	<b>①</b>	<b>(</b> *)	<b>®</b>	•	•
WebA	<b>(*</b> )			<u> </u>	<b>(</b> *)	•	•	•
Windows Media Audio	<b>(*</b> )	 		 	<b>(</b> *)	<b>①</b>	•	•

# Additional info on audio/video derivatives

### The flash player is covering my files! How do I move it?

If an item has little or no description, sometimes the flash player doesn't have enough room in the top portion of the page and covers the files below. If you don't want to add a description (which would be nice, so that people know what they're listening to), you can add extra space in the description field using paragraph tags.

- · Click the "Edit item" link in the lower left box
- Add several paragraph tags to the description field, like this:
  - >
  - >
  - >
  - <
- · Click the submit button

After 10-20 minutes, when you return to your item you should see that the files have moved down further on the page, allowing the flash player enough room at the top. Usually 4-5 tags is enough.

#### For more information...

Check out our Audio Forum

#### Questions

Does the Internet Archive release transparency reports about law enforcement requests?

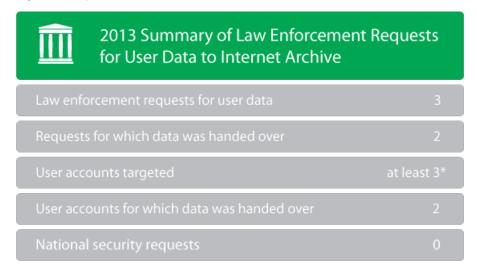
Does the Internet Archive have general guidelines for how it treats requests for non-public information about users from law enforcement?

Does the Internet Archive take a public stance on bulk surveillance by governments?

#### Law Enforcement Requests

Does the Internet Archive release transparency reports about law enforcement requests?

Yes! Starting with the report below:



"inadequate information submitted for one request such that # of accounts targeted unclear (counted as "at least 1") – user data was not provided for this request

Does the Internet Archive have general guidelines for how it treats requests for non-public information about users from law enforcement?

The Internet Archive requires appropriate legal process (i.e., subpoena, court order, or other valid process) before disclosing non-public user account information.

The Internet Archive requires a search warrant before disclosing to law enforcement the contents of non-public user communications.

The Internet Archive attempts to notify users about criminal subpoenas or other formal requests seeking their non-public data unless prohibited by law or if doing so would be futile or ineffective.

Does the Internet Archive take a public stance on bulk surveillance by governments?

Our position is that governments should limit surveillance to specific, known users for lawful purposes and not undertake bulk collection of non-public communications data.

#### Questions

A recording I uploaded and marked 'no lossy formats' had them created (mp3, ogg, m3u, etc...) . How can I remove them?

Can I upload live recordings that were broadcast on XM Radio or Sirius Satellite Radio?

What is the Live Music Archive all about?

Can I upload concert videos?

What are MD5 files?

What are FLAC files and how can I listen to them?

#### What are FFP files?

There's no setlist for this show - OR - The setlist does not match up with the number of files. Should I submit an error report?

#### **Live Music Archive**

A recording I uploaded and marked 'no lossy formats' had them created (mp3, ogg, m3u, etc...) . How can I remove them?

If you come across this situation and you are the uploader, click [edit], select the derivation option you prefer, and then 'Update'. You should see the message "Format Options Updated Successfully". Within 10 minutes the system will create a "\_rules.conf" file in the recording's folder. Then, the next time the system performs an automatic sweep looking for changes, it will notice the new rules file and remove the lossy files automatically. The sweep occurs approximately twice a day, so you should see the files removed within 12-24 hours.

If you are not the uploader, send us an email (etree at this domain) and an admin will remove them.

Can I upload live recordings that were broadcast on XM Radio or Sirius Satellite Radio?

At this point in time, Archive.org cannot host recordings that were broadcast over either of these services. Subscribers have informed us that they were required to sign a "Terms of Use" document that forbids the recording/hosting/rebroadcasting of any material received from these services. Until we hear otherwise, these recordings cannot be hosted here.

#### What is the Live Music Archive all about?

This audio archive is an online public library of live recordings available for royalty-free, no-cost public downloads. We only host material by <a href="mailto:trade-friendly">trade-friendly</a> artists: those who like the idea of noncommercial distribution of some or all of their live material. Live recordings are a part of our culture and might be lost in 100 years if they're not archived. We think music matters and want to preserve it for future generations.

The LMA draws strength from the members of <a href="extreme">etree.org</a> and other online communities of music fans devoted to providing public access to high-quality digital recordings of tradable performances. Typically, recordings are made by the fans themselves. Recordings are preserved in "Lossless" archival compression formats such as Shorten or FLAC (MP3 is not Lossless) for highest quality preservation.

How do I burn FLAC files to CD as audio tracks?

How do I burn SHN files to CD as audio tracks?

How can I add a logo to the upper right corner of my collection?

I'm an artist who would like to be included in the Archive, what do I need to do?

The progress of my upload says 'File metadata XML invalid. Waiting for user to correct.' How can I fix this?

I have more Live Music
Archive questions...who do
I ask?

I have a different source for a show that is already in the archive, should I upload it anyway?

How can I help get bands into the Live Music Archive?

When I download concerts, I constantly get disconnected before the download completes. What can I do to fix this?

What are the WAV MD5 files that are sometimes in filesets?

<u>I just uploaded a directory</u> <u>that contained WAV MD5</u> <u>checksums</u>, is that OK?

My failure email is indicating that the text file failed. What can I do?

Can bands place restrictions on material to be archived?

<u>I just uploaded a show and all the files fail the MD5</u> check, what's the deal?

Where have all the Dave Matthews Band concerts gone? Will they be back?

Why is there no Phish?
What about Widespread
Panic?

<u>I used to use a download</u> manager and now it stopped working. What's the deal?

What's the deal with magic number errors?

Do you provide an RSS feed of new updates to the LMA?

What does the 'Transferred by' field mean?

Patrons may download from the LMA with the understanding that the artists still hold their copyrights. All material is strictly noncommercial, both for access here and for any further distribution.

#### Can I upload concert videos?

At this time, video uploads are not being accepted, namely because most of the bands archived prohibit the video taping of their shows. Moreover, unlike audio, where we actually have a shot at archiving the vast majority of any given band's live concerts (in very high quality format), video is scarce and, unless made by the artist (in which case, it's typically for commercial purposes), is not of particularly good quality.

#### What are MD5 files?

MD5 files contain checksums, strings of characters used to uniquely represent a file. These checksums enable users to verify that music files downloaded correctly.

A recommended tool for creating these files is <u>MD5summer</u>. Please note that before uploading the MD5 created with this tool you should open the MD5 in a text editor and remove the top 3 lines so the first signature is now flush with the top of the file.

#### What are FLAC files and how can I listen to them?

FLAC stands for free lossless audio codec. It is an open source, lossless compression algorithm for digital music. It compresses music files to 50-60% of their original size, with no loss in quality. More FLAC information can be found on the <u>FLAC sourceforge site</u> and in <u>this etree FAQ</u>.

If you upload FLAC filesets to the LMA, please follow the <u>naming standards</u> to help the checking program here. Directories should be named with .flac16 or .flac24 suffix, not .flac. Otherwise, the program will report failures.

To listen to FLAC files:

Macintosh: Download and install Cog, a multi-format audio player.

Windows: Download and install <u>WinAmp</u>, a multi-format audio player, and then install the <u>FLAC Plugin</u> for WinAmp. If you would like to use FLAC with your Windows Media Player (WMP) download and install the <u>Directshow Filters for Ogg Vorbis</u>, <u>Speex</u>, <u>Theora and FLAC</u>. This will allow WMP to not only play .flac files but .ogg files as well.

Linux or any other UNIX-based architecture: <u>Download</u> and copy "libxmms-flac.so" to your <u>XMMS media player</u> input plugins folder.

#### What are FFP files?

FFP files contain checksums, strings of characters used to uniquely represent a FLAC file. These checksums enable users to verify which particular source a file comes from.

There's no setlist for this show -  $\sf OR$  - The setlist does not match up with the number of files. Should I submit an error report?

There has been an increasing number of shows uploaded to the Live Music collection without setlist information, or the setlist was not properly matched to the files. When you notice a recording like this, please email us (etree at this domain) **only** if you have an updated setlist, or you are able to match the files up correctly.

We would prefer that you do not submit error reports letting us know that there is no setlist - tracking down setlists for every concert and matching them up to the recordings is a monumental task that has grown beyond the capabilities of the small group of Archive.org admins. We would like fans that are familiar with each artist's material to help us with this project - in your email, please give us specific instructions on what changes to make and we will do so.

#### How do I burn FLAC files to CD as audio tracks?

You will first need to convert the FLAC files to another format that your burning program is familiar with. Windows users can use the <u>FLAC Frontend</u>, to convert FLAC files to WAV files, which are suitable for burning programs. For Macintosh OS X users, Scott Brown has created a tool called <u>xACT</u>.

### How do I burn SHN files to CD as audio tracks?

You will first need to convert the SHN files to another format that your burning program is familiar with. The following programs will convert SHN files to WAV files, which can be burned to a CD. More resources are listed in this FAQ.

Macintosh: Download and install Scott Brown's xACT.

Windows: Download and install\_Michael K. Weise's tool, mkwACT. Or, another good tool is Foobar2000 - make sure you get the "Special" version to have Shorten compatibility!

Linux or any other UNIX-based architecture: Download and install shorten.

#### How can I add a logo to the upper right corner of my collection?

First, make sure you're logged on to archive.org with the same email address you used when you created your collection. Note: Images should have a height of no more that 72 pixels. • Â Go to your collection's front page

Why don't I get an email when my uploads fail MD5 checksums?

Can I log into an FTP server to download concerts?

My in-progress upload says
'No metadata describing
files found. Waiting for user
to enter metadata' - what
do I do?

The Grateful Dead is here, when will we see Jerry Garcia recordings?

Regarding removing the lossy files ... I edited my show, checked the box to remove them and clicked update. Now when I click update again, the box is still not checked. Why?

The upload instructions require a 'FLAC Fingerprint' file with my recording - how can I create this?

I've got a great 'filler' for the recording I am about to upload to the collection should I include it?

Where can I find other recordings by [trade-friendly band] that aren't in the collection?

I tried downloading a show and I got a '403 Forbidden' page. Why?

How do I upload a show to the LMA?

<u>How do I make corrections</u> to shows?

What file formats are accepted for contributions to the Live Music Archive?

<u>l like adding concerts. Do</u> you have a preference on the way I put in information?

About Grateful Dead concerts on the Archive

What are the options for streaming a full recording?

What are the options for downloading a full recording?

Where can I see the rest of the 'Most Downloaded Items' in the Live Music Archive?

Where can I see the rest of the 'Top Batting Averages' of shows in the Live Music Archive?

For more information...

How can I add a logo to the

• Click the "Edit Item!" link next to your user name. • Click "Item Manager" near the top of the page. • Click the "checkout --edit items files (non XML)" button in the "Edit Operations" section of the form. • In Step 1 of 2, click the "Share" button. • Locate and select the image to be uploaded and click "Select". • In Step 2 of 2 click the "Update Item!" button • Return to collection front page and click "edit" link again †¢ Find logo file at bottom of page, choose "Collection Header" from the drop down list and click submit. It might take a few minutes for the changes to appear.

#### I'm an artist who would like to be included in the Archive, what do I need to do?

We'd love to have you! Just write to us at etree at archive dot org in English giving some kind of permission for us to archive your shows for public download and noncommercial, royalty-free circulation. It does not need to be a formally worded declaration, and can come from anyone you feel has the "say-so." We just need to be clear on how you feel about the project. We will put relevant quotes onto a new "collection" page (examples) for your performances, along with a link to your official website.

It is necessary for you to <a href="mailto:emailto:

You can give as much or as little scope for archiving as you like. Some bands place <u>limits</u> on what can be hosted, and we can accomodate those. Archive Curators, volunteer fans who have proven to be in line with the spirit of this archive, will attempt to screen contributions for OK'ed material only.

At the same time you give the go-ahead, feel free to pass along any notes or policy links on your general taping/trading stance as well. You don't need to have a formal written or posted policy before inclusion, but we'd like to know how you feel about the topic.

Besides fans' sending their copies of your shows, you can also <u>prepare</u> and <u>upload</u> your own live recordings to the Archive, if you like. In fact, if you'd like to limit your material to selected contributions from you only, please just let us know.

If you have any questions about the project, please ask us anytime at etree at archive dot org.

# The progress of my upload says 'File metadata XML invalid. Waiting for user to correct.' How can I fix this?

This is typically caused by illegal symbols being used somewhere in the information that was put into one of the forms submitted with the show (either the import form or "File Options"). Double check that the only characters being used are those visible on a standard English-language 104 key keyboard. More information and a few examples are here.

If you have trouble finding the cause, please post to the forum for help. An admin will have to resubmit the recording for another try, so please send an email including a link to the recording to etree AT archive DOT org if you believe you have cleared the issue.

More information on what XML files are and how they are created can be read here.

#### I have more Live Music Archive questions...who do I ask?

Feel free to email etree at archive dot org with any questions, and we'll do our best to post the answers here as soon as possible. Also, the <u>message board</u> is a great resource; with so many kind, knowledgable folks out there, you can often get a speedy answer to your question.

#### I have a different source for a show that is already in the archive, should I upload it anyway?

Yes! In keeping with the nature of this Archive, it is appropriate for multiple sources of the same show to be available for download. When you upload the new source, be sure to name the source in the show's top level folder to avoid confusion. Some bands do place <a href="limits">limits</a> on the types of sources allowed (such as soundboard recordings), so please <a href="check the policy">check the policy</a> for any given band.

#### How can I help get bands into the Live Music Archive?

If you know of a <u>trade-friendly</u> live-performing band that is a good candidate for the Archive, you can initiate contact. Some tips and letter templates can be found <u>here</u>. When you write, make it clear you are asking about the Live Music Archive at archive.org. Don't just ask about their general taping/trading stance. We want bands to know what's up.

Next, follow up with a message to etree at archive dot org. Mention when you tried to contact the band and what contact point you used. These are important in order to update our contact records. Admins will update the contact status in an announcement forum about Pending Bands based on the message you send us.

If you receive a reply from the band, positive **or** <u>negative</u>, send a complete copy of the email, complete with its sender's address/brief header info, to etree at archive dot org. It's a good idea to send a copy of what you asked them as well (if not quoted in the reply), since it will give context to the answer. We need to have full info in hand in order to set up the band appropriately in the Archive, and we may need to contact them for followup questions.

If you are hesitant to make contact yourself, you can mention the band to Archive admins (send email to etree at archive dot org) and they can try a contact as time permits. To help out, supply any contact or policy info you may

upper right corner of my collection?

How are download counts calculated?

Why are there no shows by band X?

What is the status of band X for the Archive?

already know about the band.

# When I download concerts, I constantly get disconnected before the download completes. What can I do to fix this?

Most web browsers now support robust http downloading. For questions, see the support website for your browser.

#### What are the WAV MD5 files that are sometimes in filesets?

MD5 checksums files are not exclusive to SHN files. An MD5 checksum can be used to ensure the accuracy of any data file (e.g. .doc, .mp3, .mpeg). Some seeders produce MD5 checksums for their WAV files, as well as for their SHN files. This is just an extra level of confirm to ensure exact copies of the original WAV files are being burned from the SHN files. Checking a WAV file with a MD5 cheksum is no different than checking a SHN file. If you use mkwACT, you can just right click on the wav MD5 and choose "verify."

#### I just uploaded a directory that contained WAV MD5 checksums, is that OK?

The WAV MD5 checksums are ignored by our robot and will not cause problems for your recording.

#### My failure email is indicating that the text file failed. What can I do?

Unlike FLAC or SHN, text files do not translate identically from 1 platform to another. Since the archive.org servers run Unix, text files created on other Operating Systems will fail their MD5check. We recommend uploaders remove any text files from their MD5's if they are having this problem.

#### Can bands place restrictions on material to be archived?

Yes. Each band can tailor the extent of their permission to the Archive. We quote the band's wishes in the Rights section of the band's <u>Collection page</u>. <u>Here are some examples</u> of special restrictions bands have requested. We point out different cases in a band's policy information using a shorthand "<u>Limited Flag</u>" tag.

We have a contribution system set up to accommodate individual bands' requirements. During the upload process, contributors are urged to double check the band's policy notes at different stages. Archive Curators, volunteer fans who have proven to be in line with the spirit of this archive, will attempt to screen contributions for OK'ed material only. In addition, access to a particular item can be removed if it becomes restricted later (for example, a date newly chosen for commercial release must be removed under some band's policies).

Bands, please contact us at etree at archive dot org anytime to let us know how we can work with you to make things happen.

#### I just uploaded a show and all the files fail the MD5 check, what's the deal?

Please be sure that if you are choosing any upload format, you are uploading the files in "binary" mode. If you try to upload .shn or .flac files in "ASCII" mode the files will fail the MD5 check. ASCII is the standard format for encoding plain text files (actually a subset of binary), while binary is used to encode almost all other types of files. More information on binary vs. ASCII can be found <a href="here">here</a>.

If this does not solve the problem, be sure that all the file names in the MD5 file match the .shn file names. Be aware that the UNIX system the Internet Archive runs on is case-sensitive.

If you upload FLAC filesets to the LMA, please follow the <u>naming standards</u> to help the checking program here. Directories should be named with .flac16 or .flac24 suffix, not .flac. Otherwise, the program will report failures.

#### Where have all the Dave Matthews Band concerts gone? Will they be back?

At the request of the band's management and as a result of the band's 2003 policy change, Dave Matthews Band concerts (as well as Dave Matthews solo concerts and Dave and Tim shows) have been removed from the Internet Archive. We're very sorry about this unfortunate turn of events but feel like it is important to honor the wishes of the band and its management.

For more information and discussion see this post: http://www.archive.org/iathreads/post-view.php?id=3670

#### Why is there no Phish? What about Widespread Panic?

Phish has decided not to participate in the Archive at this point in time

Similarly, Widespread Panic has opted out of the project for the time being. They were last contacted on 11/9/2004.

#### I used to use a download manager and now it stopped working. What's the deal?

Download managers increase your download speed by connecting to the server multiple times. Doing this does not significantly increase download speeds but dramatically hurts the performance of the server. If you wish to use queue to download from the HTTP servers, be sure you set your download program to only use <u>one connection</u> at a time.

#### What's the deal with magic number errors?

If you get a magic number error when listening to or decoding a SHN file, the SHN file is most likely corrupt. First, make sure the SHN file passes MD5 verification; if it does not, redownload the file. If the file passes MD5

verification and you are still getting the magic number error, leave am error report via the show details page noting the magic number error and which track the error occurs on. Hopefully others who have download the show will confirm or deny the error. If the error occurs for all downloaders, the seeder will be contacted to provide a new, uncorrupted track. Please note that there is nothing the Internet Archive administrators can do about a magic number error, because the only solution to the error is re-encoding the SHN file from the original WAV file.

#### Do you provide an RSS feed of new updates to the LMA?

Indeed! The URL of the feed is http://www.archive.org/services/collection-rss.php? mediatype=etree&collection=etree You can plug this into a front end like AmphetaDesk (available at: http://www.amphetadesk.com)

#### What does the 'Transferred by' field mean?

This field indicates the person who did the original DAT/MD/Cassette to WAV conversion. Also, note that in the case of recordings made directly to laptops there is no transfer.

#### Why don't I get an email when my uploads fail MD5 checksums?

The system currently only sends emails when MD5 files are included. This means that, if you're uploading FLAC files, you still need to generate and include an MD5 file if you want to receive informational emails about the failures.

A recommended tool for creating these files is MD5summer. Please note that before uploading the MD5 created with this tool you should open the MD5 in a text editor and remove the top 3 lines so the first signature is now flush with the top of the file.

#### Can I log into an FTP server to download concerts?

Update (2009April): To allow us more flexibility on access, we are discontinuing FTP read access. HTTP read access (as in downloading through your web browser), remains more popular with users, and shall continue.

For more information, please see the discussion forum:

http://www.archive.org/iathreads/post-view.php?id=240921

# My in-progress upload says 'No metadata describing files found. Waiting for user to enter metadata' - what do I do?

There are 2 XML files that get created during the import of any recording in the collection:

showfolder\_meta.xml showfolder\_files.xml

The first file gets created when you submit the import form to the collection. If that file does not exist, you can create it by editing the details page and clicking Update.

The second file gets created by filling out File Options. Just click the link on the left side of the details page and fill out the form as accurately as you can.

If either of these files are missing, your Contribution may give you this message. Please note that once the files get created, it takes 5-10 minutes before the system notices them and moves on to the next stage.

#### The Grateful Dead is here, when will we see Jerry Garcia recordings?

The taping policy of the Grateful Dead does not extend to recordings of Jerry Garcia's other lineups. Jerry's solo work is controlled by his estate. Representatives have said No to the idea of hosting shows in the Live Music Archive.

Regarding removing the lossy files ... I edited my show, checked the box to remove them and clicked update. Now when I click update again, the box is still not checked. Why?

It takes 2-10 minutes for your checking of that box to 'stick' ... see this discussion board post: <a href="http://www.archive.org/iathreads/post-view.php?id=22816">http://www.archive.org/iathreads/post-view.php?id=22816</a> for an explanation of why.

# The upload instructions require a 'FLAC Fingerprint' file with my recording - how can I create this?

#### In Windows:

- 1. Open FLAC Frontend
- 2. Drag all of the FLAC files of your recording into Flac Frontend window. (you can also use the "add" button to do this)
- 3. Click the "Fingerprint" button.
- 4. Save the fingerprint file with a name like this: bandYYYY-MM-DD.ffp

# I've got a great 'filler' for the recording I am about to upload to the collection - should I include it?

A 'filler' is music from a different performance in addition to the main recording, typically used to fill up extra space on a CD. Sometimes the filler is a different artist, other times it is the same artist, but a different show and date.

While this is convenient for burning full CD's, it is not appropriate to include fillers on recordings here in the collection since they get filed under the artist and date of main performance. Please only include the performance for the artist and date you are importing. Fillers should be filed under their own entries elsewhere in the collection.

#### Where can I find other recordings by [trade-friendly band] that aren't in the collection?

If the artist is OK with Internet trading, you may be able to find downloadable recordings through <a href="http://bt.etree.org">http://bt.etree.org</a>. Also, check <a href="http://db.etree.org">http://db.etree.org</a> to find people who have copies of shows and who may be willing to trade. Etree.org has additional trading forums at <a href="http://forums.etree.org">http://forums.etree.org</a> Lastly, you can check out a band's own fan forums and mailing lists. Good luck!

In contrast, the Live Music Archive forum at the Internet Archive is *not* a good place to post about trades, or to ask for shows that are not yet archived here, whether or not the band presently has a section here. Moderators may delete these posts. More posting etiquette tips for that forum are <u>here</u>.

#### I tried downloading a show and I got a '403 Forbidden' page. Why?

As part of the new (as of May 2007) QA/QC checks that the archive conducts on shows that are uploaded, more refined checks are conducted on shows. For more detail, see this forum post: <a href="http://www.archive.org/iathreads/post-view.php?id=124098">http://www.archive.org/iathreads/post-view.php?id=124098</a> What happens though, when a show either fails it's md5 check, it's internal flac checksum check, or is missing an info.txt file, every non .xml file in the show fileset (the flac files, the mp3's, etc) all become non-downloadable. If you try and click any of the music files, you will be taken to a webpage titled "403 Forbidden" that will say: "Forbidden You don't have permission to access "ARCHIVE.ORG\_Server/show\_location/file" (specific to your show file) on this server. \*\*\*\* What this means is that the uploader has a problem with their show files, and as a measure to 'stop the spread' of bad files, the system is preventing people from downloading until the uploader contacts the archive to fix the show. If you as a user find a show that has the above problem, please check back later and once the uploader has fixed the problem, the show will be downloadable as normal

#### How do I upload a show to the LMA?

As of 5/2006, the upload method has changed significantly. Here is a walkthrough in PDF with screenshots. Another text description is here.

Before uploading any show, read the band's policy notes for this site. Many artists place <u>limitations</u> on their material here, and info is often updated. Please do not upload shows for any band that does not yet have a <u>curator-created collection page</u> here, even if you know the band has recently emailed their permission. Advance attempts may significantly complicate or delay the curators' setup process for the band.

Next, be sure that you are logged in as an Internet Archive member. Have the fileset on your computer already, <u>correctly prepared</u> and <u>correctly named</u>. Files **must** be in <u>lossless format</u> (.flac or .shn), from *lossless* parent source material; we will optionally create the extra "lossy derivative" copies (.mp3, .ogg) onsite. Prepare to <u>create an item</u>, following example tips <u>here</u> or <u>here</u>.

#### How do I make corrections to shows?

Sometimes people make typos or other mistakes on uploads, or leave gaps in info that can be filled in later. You can help supply good information for archived items. Here is the current best method to submit corrections:

If you uploaded the show, you can make the changes to the details page yourself. Make sure you are logged in as the user who uploaded the show and go to the details page of the show you are trying edit. Click on the "edit" link next to the band name at the top of the details page and you will be able to edit the show details including venue, location, source, setlist, etc. Be aware that editing these fields will only change the show details, not the files themselves.

5/2006 update: If you uploaded the item and would like to replace or add to files within your item, under the current system this can be done without reuploading the entire fileset. More description may follow; meanwhile there is a walkthrough as a Word document with screenshots. Specifically to fix your items derived between 5/11-22/2006 that sound too fast in the onsite flash player (chipmunk problem), see this PDF document with screenshots.

If you did not upload the show, please email the admins (etree at this domain), and state precisely what the problem with that particular show is. If the problem is a missing setlist, please see this <u>FAQ</u>). If there are one or more missing or broken files that you can provide, please re-upload and re-import the entire show under a new directory name, and then email us a link to the old, broken show, asking for that show to be removed.

#### What file formats are accepted for contributions to the Live Music Archive?

Currently, the Live Music Archive will only accept audio files in either of two lossless formats: FLAC (.flac) or Shorten (.shn). Please Note that MKW files (.mkw) are \*NOT\* an acceptable file format for your contributions because they lack cross-platform compatibility (Mac users are unable to play or decode MKW files)

In addition, please do not upload the lossy files (MP3 or OGG) next to your FLAC or SHN format files - the Archive <u>creates</u> those files automatically, provided that the contributor agrees to having them available. This ensures that all the files here have uniform quality options selected.

Please follow etree.org's <u>Seeding Guidelines</u> when preparing your contributions for addition to the collection. Pay particular attention to the <u>Naming Standards</u> section. A well-named identifier helps patrons find your show in our large collection. A well-named set of files allows files to be listed in the proper order at the site, and allows patrons to listen to them in playlists and burn them to CD in the proper order, too.

#### I like adding concerts. Do you have a preference on the way I put in information?

First of all - thank you so much for contributing to the Archive. Yes, here are some guidelines that will help us maintain good records for each concert.

- Do not include HTML in the source and lineage fields.
- Do not repeat information in the notes fields (such as source information, or number of discs). Only include information in the notes fields that is not already in any other field.
- If at all possible, keep absolutely nothing but song names in the setlist (even things like disc splits, set splits, etc. should not be in this field). If possible, putting all song names on one line, separated by commas is wonderful.
- Do not fill in unknown field with questions marks or N/A just leave them blank. The exception to this guideline is the venue, setlist and source fields (which are mandatory) in the event that this information is not known, simply write "unknown".

Once again, thank you so much!

#### About Grateful Dead concerts on the Archive

<u>Audience-made</u> Grateful Dead concert recordings are available as <u>downloads</u> while available soundboards are accessible in <u>streaming format</u> only.

The Grateful Dead is being separated from the <u>Live Music Archive</u> into its own <u>collection</u> (with its own <u>forum</u>) to avoid confusion about lossless availability. The metadata and reviews for shows and recordings, even those not available for regular download, will remain available for those who maintain direct links. No filesets have been deleted from the Archive; certain items are simply not public now. Prior to our completing the changes, <u>text files</u> are easily referenced at a separate <u>database</u>.

At this time, the Grateful Dead collection is not open to public uploads. The <u>Grateful Dead Internet Archive Project</u> (GDIAP) will continue its direct management of this collection for the time being.

As far as we know, there has been no change to standard GD fan trading. It is common for bands to have policies that differ between fan trading, versus archiving here.

#### What are the options for streaming a full recording?

Hi-Fi: An MP3 playlist, readable by most players, that has the addresses of MP3 files encoded with a variable bit rate.

**Lo-Fi:** An MP3 playlist, readable by most players, that has the addresses of MP3 files encoded with at a constant bit rate of 64 kilobits per second. These files are ideal for users with slower Internet connections.

#### What are the options for downloading a full recording?

<u>Update 5/2006:</u> Please note that due to a major system transition, many items' ZIP files (for their "Lossless" links) have been <u>deliberately disabled</u> for the time being. Engineers are still working on the best method for the new system.

**Lossless:** A ZIP file containing Shorten files or Flac files. Unlike formats like MP3, lossless formats are true to the original - there is no degradation in quality.

Hi-Fi: A ZIP file containing MP3 files encoded with a variable bit rate to deliver high quality at roughly 160kilobits per second.

Lo-Fi: A ZIP file containing MP3 files encoded at a constant bit rate of 64 kilobits per second. These files are ideal for users with slower Internet connections.

**Other Web Options:** All files are displayed as individual links on any item's details page. Web-based download managers can be set up to download all the files you want from the page, as a group. For <u>Firefox</u>, the extension <u>DownThemAll</u> is a popular option.

**BitTorrent:** Some Items that are downloadable via HTTP are also downloadable via a BitTorrent client; these items show a 'Torrent' link next to the 'HTTP' download link. (To trigger creation of a BitTorrent file for an item in the LMA that does not yet have one, write a review for it, e.g. "Make me a Torrent!"). *Note: only items downloadable via HTTP can be downloaded via BitTorrent.* 

#### Where can I see the rest of the 'Most Downloaded Items' in the Live Music Archive?

To view the entire Live Music Archive (everything in the "etree collection") sorted by 'Most Downloaded Items' go to this link: <a href="http://www.archive.org/search.php?query=collection%3Aetree&sort=-%2Fmetadata%2Fdownloads">http://www.archive.org/search.php?query=collection%3Aetree&sort=-%2Fmetadata%2Fdownloads</a>

And here's one that lists everything but the Grateful Dead (like the one on the LMA front page): <a href="http://www.archive.org/search.php?">http://www.archive.org/search.php?</a>

 $\underline{\text{query=collection}\%3Aetree\%20AND\%20NOT\%20collection\%3AGratefulDead\&sort=-\%2Fmetadata\%2Fdownloads}$ 

#### Where can I see the rest of the 'Top Batting Averages' of shows in the Live Music Archive?

To view the entire Live Music Archive sorted by 'Batting Average' go to this link: <a href="http://www.archive.org/search.php?query=collection%3Aetree&sort=-%2Fmetadata%2Fndba">http://www.archive.org/search.php?query=collection%3Aetree&sort=-%2Fmetadata%2Fndba</a>

#### For more information...

Check out our Live Music Archive Forum

#### How can I add a logo to the upper right corner of my collection?

Please email the logo to the admin email address (etree at this domain). Images should have a height of no more than 100 pixels, and be no wider than 200 pixels.

#### How are download counts calculated?

Downloads are calculated per item page, per IP address, per day. If you stream a show today, that's one download. If you view the txt file tomorrow, that's another download. If you download every file from a show's page the next day, that counts as one more download. If you download the same file a thousand times the day after that, that still only counts as one more download.

#### Why are there no shows by band X?

We'd like to make sure that a <u>trade-friendly</u> band would not mind having their shows in the Archive for public download. The best way for us to find out is by getting permission from a band representative or by the band's having an explicit policy that covers this type of site. If there are no shows by the band, either we don't have enough of this information to go forward with archiving, they have declined participation, or we are ready to accept shows but no one has uploaded anything yet. (Also, see the <u>band status FAQ</u>).

Trade-unfriendly bands will not be found in the Archive, nor will otherwise trade-friendly bands who have declined to have material archived here.

Bands, see other relevant FAQs here and here. Patrons, see more about how you can help here.

#### What is the status of band X for the Archive?

<u>5/2006, significant site changes in progress</u>: Formerly, you could check on the status of a band relative to the Archive on the <u>Trade-Friendly Band Information</u> page, which is no longer updated. This FAQ question has been updated for the new-system presentation of info. We have 3 categories:

<u>May be Archived</u>- Band sections have been activated by Archive admins. Shows can be hosted here to the extent permitted by the band. <u>Click on the band name</u> and then through to their Policy Notes link to see what <u>limits</u> they may have placed on taping, trading or archiving.

<u>Pending</u>- When a patron sends us information about having contacted an additional trade-friendly band, the new band is considered to be "Pending". Admins will update <u>notes</u> we keep on the band based on the information that people send to etree at archive dot org. (Sensitive parts of the info- such as email addresses used- will <u>not</u> be posted in the public notes.)

Important: Under the new system, we cannot create a "collection page" for the band name unless and until we know that the band May Be Archived. Further, no shows may be uploaded for any band in advance of a band section's activation. Under the new system, there is no temporary "upload area" to store filesets for bands whose sections are not prepared yet. Please send shows for bands on the active list only.

<u>Opted Out-</u> Some bands that may be otherwise trade-friendly may have explicitly said, "No, thanks" to our project. We respect their wishes. We still keep notes of their taping/trading policies for reference.

If your favorite band name is not in any of these 3 categories, there are several possible reasons: They may not be trade-friendly in the first place. No one may have contacted them yet. Someone who contacted them may not have informed us yet. The band may not have written us back yet. If a band did write to us, we may not have had a chance to activate a section yet, or we may not have received enough information back from them to setup their section. In some cases, we may not have received the email successfully, so that a resend may be necessary.

Bands, see other relevant FAQs here and here. Patrons, see more about how you can help here.

#### Questions

How do I report that something's wrong with a book?

How do I read the books in other formats, like ePub, Mobi, DJVU?

How do I view the PDF books?

What is the directory structure for the texts?

How do you remove line breaks from the Gutenberg texts?

What is the best way to link

#### **Texts and Books**

#### How do I report that something's wrong with a book?

If you see an error with a book digitized by the Internet Archive, we'd appreciate knowing about it!

Please send an email with the URL (web address) of the book, and description of the problem, to info -at- archive.org

In some cases, you may know of alternate information about a book that is supplemental to the library bibliographic record. (For example, a new, more modern transliteration of an author's name.)

To share additional information like the above, you may wish to post it using the option to write a review of a book. Your additional information will then be available for everyone to see.

#### How do I read the books in other formats, like ePub, Mobi, DJVU?

ePub is an open textual format (not images of pages). Many readers are becoming available. A free one is from Adobe.

#### to a book?

Can I volunteer for the book project?

I see some books from a series, but not all. How can Laccess the rest?

For more information...

What is a book identifier? How is it generated?

I'd like to upload a book.
What format should it be in?
How do you do your
sponsored scanning for
Contributing Libraries?

What equipment does the Bookmobile use to print and bind books?

What is OpenLibrary? How can I make my book available via OpenLibrary.org?

Mobi is a proprietary textual format from Amazon supported on the Kindle.

DJVU is an open format for scanned documents with free readers for windows, mac os-x, linux. It is compact, searchable, good looking, and open format.

#### How do I view the PDF books?

Please see https://www.archive.org/about/fags.php#62.

#### What is the directory structure for the texts?

Note re the instructions below:

- "XXXX" stands for a 4-digit sequence number, starting with 0000.
- What you're uploading is technically considered "processed" images, not "original" ones, even though they are in fact the originals, because archive.org processors wouldn't be doing any rotating or cropping.
- The zip or tar has to be built from the parent directory, so that the directory name is included as part of the filename of each file stored in the zip/tar.

In order to store all the texts that the archive has, and will eventually acquire, the directory structure is:

IDENTIFIER/IDENTIFIER.extension (tif, djvu, pdf)

IDENTIFIER: Unique in Archive's collection, alphanumeric (URL safe), this is the original name adopted by the originating collection (alphanumeric characters and \_-. Best if from 5 to 80 characters). One format is [title:8-16][vol:2][author:4][scanninglocation:0-4]

#### EXTENSIONS:

- If the original files are tif files, then:
- IDENTIFIER\_orig.tif: All the original tiffs are stored in the form of multi page tiff. Demoware windows viewer Informatik Image Viewer. If it goes over 2GB, then it is stored as a tar of singlepage tifs the directory named IDENTIFIER\_orig\_tif/IDENTIFIER\_orig\_XXXX.tif resulting in a file called IDENTIFIER\_orig\_tif.tar
- IDENTIFIER.tif: All the cleaned up tifs (usually cropped, despeckled, deskewed) are stored in the form of multi page tiffs. If it goes over 2GB, then it is stored as a tar of a directory named ./IDENTIFIER\_tif/IDENTIFIER\_XXXX.tif resulting in a file called IDENTIFIER\_tif.tar
- If the original files are JPEG JP2 or CR2 files, then:
- All the original jpg files are used to make a zip file named IDENTIFIER\_orig\_jpg.zip where the names of the pages in the zipped directory are IDENTIFIER\_orig\_jpg/IDENTIFIER\_orig\_XXXX.jpg. If the resulting file is greater than 2GB (thus breaking the zip format until zip64 is common), then the file will be in tar format named IDENTIFIER\_orig\_jpg.tar . If the originals are jp2 or cr2 files, then substitute these extentions above.
- Similarly all the processed jpg files (cropped and deskewed) are used to make a zip file named IDENTIFIER\_jpg.zip where the names of the pages in the zipped directory are IDENTIFIER\_jpg/IDENTIFIER\_XXXX.jpg. If the resulting file is greater than 2GB (thus breaking the zip format until zip64 is common), then the file will be in tar format named IDENTIFIER\_jpg.tar
- In the case where there is a small jpg version of the files for on-screen access then a similar naming convention is used from the \_orig.jpg version above, but with \_200KB resulting in a file named IDENTIFIER\_200KB\_jpg.zip where the names of the pages in the zipped directory are IDENTIFIER\_200KB\_jpg/IDENTIFIER\_200KB\_XXXX.jpg. An equivalent version can be done with other sizes and different formats such as jp2.
- IDENTIFIER.djvu: A nifty open scanned book format created by AT&T Labs and enhanced by LizardTech.com enabling compression and ease of reprinting. This file will also be ocr'd to make the text searchable.( /djvu/bin/documenttodjvu --filelist.txt temp.djvu, /djvu/bin --ocr aatttt.djvu)
- IDENTIFIER\_djvu.xml this is an xml version of the OCR output which has the word positions (as a bounding box). this is used for building the djvu file, and is used for searching the flip books, and maybe constructing a searchable pdf in the future.
- IDENTIFIER.pdf: Adobe acrobat format that is derived from the .tif file if present.
- IDENTIFIER.txt.tar.gz or .art.tar.gz: If there are OCR'ed text files associated with each page, these are tarred and gzipped in txt format or art which is sakhr format.
- IDENTIFIER\_cover.doc or .sxw:

cover of the book, some in legal and some letter. doc is Microsoft Word, and sxw is OpenOffice.

- IDENTIFIER\_xxxx\_bookplate.jp2 or .jpg: is the file that has a bookplate that acknowledges those behind creating the digital version. xxxx is the page that it will replace in the access formats.
- IDENTIFIER\_meta.xml: This has the catalog data (title, author, publisher, copyright information) and information about the book found while scanning (size, who scanned it) stored in a dublincore-like XML format.
- IDENTIFIER\_meta.mrc: This will be the MARC (Machine Readable Cataloging) records for the book which provides the mechanism by which computers exchange, use and interpret bibliographic information and its data elements make up the foundation of most library catalogs used today.
- · IDENTIFIER\_marc.xml: marcxml format of marc record
- IDENTIFIER\_metasource.xml: where the metadata information came from (metadata about the metadata :) ).

LEGACY FORMATS: This could be OTIFF | PTIFF | TXT.

- OTIFF: These are the original tiff images of the scans of the books. (to create multipage tifs we used a unix util: tiffcp OTIFF/\*.tif aaattt\_orig.tif)
- · PTIFF: These are processed images (cropped,desgewed,depeckled) from the originaltiffs.

- TXT: These are the text files that have been created by doing Optical Character Recognition (OCR) on the tiff images.
- \* We plan to eventually remove OTIFF|PTIFF|TXT directories.

#### How do you remove line breaks from the Gutenberg texts?

In Word use find and replace 3 times:

Step 1. Find two paragraph markers - ^p^p

Replace with a neutral character ~ or # or @

Step 2. Find one para markers - ^p

Replace with a single space

(This might take about 10-15 minutes on large files)

Step 3. Put 2 para markers back in - find ~

Replace ^p^p

#### What is the best way to link to a book?

Every book in the Archive has an identifier. For example, RomeoAndJuliet. To link to the book, you should use the following URL:

http://www.archive.org/download/RomeoAndJuliet

#### Can I volunteer for the book project?

Volunteers are welcome to come to our San Francisco location! We need your help to scan books! Please contact info at archive.org for more information.

#### I see some books from a series, but not all. How can I access the rest?

Many contributing libraries work with the Internet Archive to scan and provide online access to books.

To ask about whether there are plans to include additional volumes, or other particular books, you can contact the Contributing Library.

You may wish to also consult http://www.archive.org/about/fags.php#195 and http://openlibrary.org/bpl

#### For more information...

Check out our **Text Forum** 

and have you seen OpenLibrary.org, a new beta project of Archive.org?

#### What is a book identifier? How is it generated?

For all items at archive.org, the "identifier" is a unique sequence of letters (with numbers also permitted) that is the basic unit of identification of an item. It travels with the digital object, and is involved in all ways of accessing or otherwise referring to an item.

You see the identifier at the end of an archive.org URL (web address).

For this URL: http://www.archive.org/details/lifeworksofabrah112linc the identifier is "lifeworksofabrah112linc".

For sponsored scanned books, the Internet Archive uses a custom algorithm to generate each book identifier.

Example: hereismytitle00auth

Using this algorithm, up to 16 characters are pulled from the 245 field in the MARC record (MARC is a library catalog record format), and these make up the first part of the identifier.

Then, whatever volume information the loader indicates shows up immediately after that (for monographs this will usually read 00). And then the first 4 letters of the creator are pulled from the MARC 100 field.

The algorithm also has rules that pull out any articles or punctuation to decrease the chances of duplicating an identifier.

If a duplicate identifier is generated, the person loading the book record at the beginning of the digitization process is notified, and manually edits it to make it unique.

# I'd like to upload a book. What format should it be in? How do you do your sponsored scanning for Contributing Libraries?

Probably the simplest way to contribute a text item currently is as a pdf. That way, the entire set of images can be submitted as a single file, and there are no special naming requirements, beyond ending the filename with ".pdf". If the pdf has no hidden text layer (i.e., isn't searchable), then after doing OCR, Archive.org creates a second pdf with a text layer.

Items can also be submitted as a stack of image files, one image per page. The files can be in JPEG2000, JPG, or TIFF format. We plan to provide a more flexible intake procedure, but at present, there are rather strict requirements for how the files in an image stack are to be named, and the stack needs to be packed into a single .zip or .tar file before submission.

When Archive.org scans a book for a Contributing Library, we use the custom-engineered "Scribe" workstation, but for many materials, adequate images can be made with off-the-shelf scanners or good-quality digital cameras. For best results, use the highest resolution your device is capable of. Most images we process were produced at a resolution of 300-600 ppi.

#### How do you do your sponsored scanning for Contributing Libraries?

The Smithsonian Institution shares this video about the scanning Archive.org does to help make more of their Libraries' materials accessible:

Smithsonian Institution Libraries: Creating the Digital Library (video)

#### One Do It Yourself approach can be found here:

http://www.instructables.com/id/DIY-High-Speed-Book-Scanner-from-Trash-and-Cheap-C/http://www.instructables.com/id/SGP6LHRFTM72YMN/

This \$300 book-scanning machine is somewhat similar to the Scribe machine used by Archive.org, which also uses open source software for processing book images.

## The open source image processing software used by Archive.org:

http://sourceforge.net/projects/scribesw/

Discussion as development proceeded is in the reviews of <a href="https://www.archive.org/details/thelatchkey01millarch/">https://www.archive.org/details/thelatchkey01millarch/</a>

You may wish to also consult <a href="https://www.archive.org/about/fags.php#140">https://www.archive.org/about/fags.php#140</a>

#### For more on uploading, see

https://www.archive.org/about/faqs.php#Uploading Content

#### What equipment does the Bookmobile use to print and bind books?

You can find a list of all the hardware and software used in the bookmobile here: https://www.archive.org/texts/bookmobile-in\_it.php

You can also see a movie of a book being made here: https://www.archive.org/details/HowToMakeABookmov

#### What is the status of the Internet Bookmobile?

Internet Archive's Internet Bookmobile is currently out of commission.

#### What is OpenLibrary? How can I make my book available via OpenLibrary.org?

The Open Library is a project of the Internet Archive (archive.org), a non-profit organization in San Francisco, guided by the goal of universal access to human knowledge. Our small team is working to create a web page for every book ever published, at openlibrary.org.

Some facts about Open Library you might like to know:

- You are free to edit/correct any errors or omissions you see on openlibrary.org it's an open, editable wiki. (Just look for the "EDIT" button.)
- We serve a catalog some 23 million books, but not the books themselves.
- We don't buy or sell books
- We have no way of putting you in touch with authors or publishers
- · Our team isn't able to help you do research on titles you find in Open Library

There is more information on the Open Library site itself:

About OpenLibrary.org http://openlibrary.org/about

Frequently Asked Questions <a href="http://openlibrary.org/about/fag">http://openlibrary.org/about/fag</a>

Developer Center

http://openlibrary.org/about/tech

Many authors write in to ask how they can make their book available as a free download via OpenLibrary.org. Here's one option:

Since OpenLibrary.org is a user-editable project, you can sign in to OpenLibrary.org to create a page for your

book. You can upload the book to Archive.org (see information above), and link to the copy you upload to Archive.org.

You have the option of choosing a particular Creative Commons license for your work, or making a custom statement on what specifically people can or can't do with your item. Remember that if you wish people to contact you regarding use permissions, you'll need to provide contact information, such as a mailing address or website. Some uploaders choose to include this information in the description field.

#### Questions

What happens if my email address changes? How can I change my email address?

How can I remove my account?

If I remove my account, will my items also be removed from the Archive?

I forgot my password, what can I do?

When I attempt to log in using my username and password, I am told that the username or password is invalid. What could be wrong?

What is the difference between a virtual library card and an account?

How do I change my password?

How do I change my screen name?

What happens to my forum posts and movie, software, audio, and book reviews when I change my screen name?

What is an Open ID? Do I have to register for one to use Archive.org?

My account is locked. What can I do?

#### **Virtual Library Cards (AKA Accounts)**

#### What happens if my email address changes? How can I change my email address?

You can use this form to change your email address.

However, be aware that if you change the email address for your account, you will no longer be able to "edit" files posted from your old email address. If you would like to have your items' ownership transferred to a new email address, send an email to info AT archive DOT org from your OLD email address (the one you want to get rid of that's how we know you own the items) and tell us which address you'd like to change it to.

## How can I remove my account?

You can use this form to remove your account.

#### If I remove my account, will my items also be removed from the Archive?

No, your items will stay on archive.org once you delete your account. If you would like your items removed, please contact us at info AT archive DOT org.

#### I forgot my password, what can I do?

As long as you remember the email address which you originally used when signing up for your virtual library card, you can use this form to have your password emailed to you. Bear in mind that your password will be sent in clear text, which means that anyone who views the email (or anyone with sophisticated "packet sniffing" software) can obtain your password. For this reason you should return to the Internet Archive website once you have your old password and change it to something new.

When I attempt to log in using my username and password, I am told that the username or password is invalid. What could be wrong?

There are several things to keep in mind when you encounter this error.

- Your username is your email address, not your screen name. Make sure you enter the same email address that you supplied when signing up for your virtual library card.
- Your password is case-sensitive. Check to see if the CAPS-LOCK key is engaged (typically a light would be illuminated on your keyboard).
- You might have forgotten your password. If you think this is the case, you can have your password emailed to you here

## What is the difference between a virtual library card and an account?

These two terms are used interchangably.

## How do I change my password?

You can use this form to change your password.

#### How do I change my screen name?

You can use this form to change your screen name.

What happens to my forum posts and movie, software, audio, and book reviews when I change my screen name?

Your old reviews and posts will be updated with your new screen name.

## What is an Open ID? Do I have to register for one to use Archive.org?

For what an Open ID is and how you can use it, see <a href="http://openid.net">http://openid.net</a>

An Open ID is not required to obtain a library card (account) for Archive.org

#### My account is locked. What can I do?

It is likely that your account was locked because you uploaded multiple items that seemed to have rights issues or the content you uploaded was inappropriate for the Archive. If you do have rights to the content you uploaded and you believe it is appropriate for Internet Archive, please contact us with your thoughts at info AT archive DOT org.

## Questions

What software can play the downloaded movies?

Can I use these movies in FinalCutPro -- in the Quicktime format?

Sometimes when I play a movie, the video is choppy or very pixelated. Why is that?

Who owns the rights to these movies?

Is there a discussion list about the movies?

Are there other similar archives on the Web?

What are those animations associated with each movie and how did you make them?

Can I stream the movies?

**Encoding Parameters** 

What is an editable file?

Can I upload this movie?

What kind of movie file should I submit?

How can I embed a flash player with my movie on my web page?

For more information...

How can I add a logo to the upper right corner of my collection?

How do I make DVD's from Internet Archive movies?

How can I make a DVD using linux?

Why do I get errors when I try to play a movie?

#### Movies

#### What software can play the downloaded movies?

<u>VLC Media Player</u> is the most versatile player we've found for playing the wide variety of movies found in the Archive. And, it's free! We also recommend MPlayer.

For Windows:

MPEG1 (VCD) most players;

MPEG2 (DVD) freeware <u>VLC</u>, shareware player from <a href="http://www.elecard.com">http://www.elecard.com</a>, or for-pay quicktime6 plugin: <a href="http://www.apple.com/quicktime/products/mpeg2playback/">http://www.apple.com/quicktime/products/mpeg2playback/</a>;

MPEG4 quicktime6 from www.apple.com or VLC . Latest flash plugin for browsers.

For Mac OSX and 9:

MPEG1 (VCD) most players;

MPEG2 (DVD) freeware VLC ( <a href="http://www.videolan.org/">http://www.videolan.org/</a>) the for-pay quicktime6 add-on (see <a href="http://www.apple.com/quicktime/products/mpeg2playback/">http://www.apple.com/quicktime/products/mpeg2playback/</a>).

MPEG-4 Quicktime6. Latest flash plugin for browsers.

Some Mac users have written to us suggesting MPlayer (OS X), BBDEMUX, and MPEG2DECX -- free on www.versiontracker.com.

For more details, troubleshooting, and how to play movies on other operating systems, see this how-to page.

#### Can I use these movies in FinalCutPro -- in the Quicktime format?

You can Re-encode Mpeg2 movies to quicktime for FinalCut Pro using Cleaner5.0.2 using the following settings. There is no de-interlacing, so you don't lose anything. The files increase in size 10 fold, so make sure you have enough HD space. This procedure gives you quicktime movies suitable for use with final cut.

Cleaner 5 -- if you don't have 5.0.2, you can download.0.2 from the terran.com site.

- output > quicktime, .mov
- tracks > process everything
- image > image size constrain to 720\*480, display size normal, do not deinterlace, field dominance-SHIFT DOWN
- encode > apple DV-ntsc codec, millions of colors, spatial quality 100%, frame rate, same as source
- Audio > we're still not sure about which is best. start with mono, 48kb, experiment.

Some have had good results with their decoder cards. compare a few films done both ways on a good monitor with scopes and see which method is best.

If you still have trouble, post your question on our discussion list (<u>moviearchive-subscribe@yahoogroups.com</u>) or write to us at info at archive dot org.

-- NEW -- One of the simplest ways to transcode movies from MPEG-2 to DV format for editing is to use the freeware utility MPEG Streamclip (Mac OS X and Windows) available at squared5.com. It offers many settings and maintains video/audio sync.

## Sometimes when I play a movie, the video is choppy or very pixelated. Why is that?

Try downloading the movie to your computer and watching it locally. Sometimes choppiness occurs when we can't stream it to you quickly enough (because your connection is slow or our servers are overloaded).

If you're watching an MPEG-4 that we derived from an original MPEG-2, we first reduce its size to 320 x 240 - a quarter of the resolution of NTSC video. We then translate it at 350 kbps, which is really borderline for that resolution. You see errors occasionally because there simply isn't enough bandwidth available, so the MPEG-4 encoder either drops frames - resulting in jerky or choppy motion - or drops macro blocks - resulting in blurred or pixelated video. That is the price we pay for the small file size - 80 MB for a 1/2-hour clip is really very small in the digital video world. If this is the case, download the original MPEG-2 to solve the problem.

## Who owns the rights to these movies?

This will vary from movie to movie.

Many of the movies and collections are licensed with Creative Commons Licenses. Uploaders may designate whether or not an item has a CC License. If they do so, the Creative Commons logo will appear on the left hand side of the movie's detail page. Click on this logo to see details about the specific type of license that the uploader has assigned to the movie. Archive.org cannot guarantee the accuracy of uploader-provided information.

Some films may have the contact information listed for the filmmaker. If the information is provided, feel free to contact the filmmaker or organization the film comes from.

## Is there a discussion list about the movies?

Yes â€" our list is about both movie content and technical issues. You can subscribe at moviearchivesubscribe@yahoogroups.com.

#### Are there other similar archives on the Web?

There are many sites that allow users to upload videos, but most of them only display very low quality video and/or do not let you download the videos.

As far as we know, this is the only site that presents high-quality downloadable movie data files with such liberal use restrictions. See the <u>Links page</u> at Prelinger Archives for a number of sites that may be useful to researchers or those seeking specific films or footage.

#### What are those animations associated with each movie and how did you make them?

The animations on the details pages and on the browse pages are animated GIF files. In most cases, still shots from each minute of the program were grabbed and saved as JPG files (these are the thumbnails which you can reach by clicking on the "View thumbnails" links). Then a tool called ImageMagick was used to create the animated GIF files from the JPGs.

We try to create an animated gif for every movie when it is uploaded (it may take a while to appear), but there are some file formats and/or encoding settings that make this difficult. If an animated gif hasn't appeared for your item by the day after you uploaded it, we probably couldn't make one for your item.

#### Can I stream the movies?

There are several programs you can use to stream movies in the Archive. Because we allow users to upload video files in any format, the same player will not always work for every single file, so it's a good idea to have a couple of programs available that you can try. Also, some files simply can't be streamed. Usually, this happens when the program that created the video file uses a codec that our software doesn't understand. So if you click on a stream link and get an "unsupported media" sort of error, use the download links instead.

Here are some free players that might come in handy:

#### Quicktime

If you have Quicktime installed, many mp4 streaming movies will play right in your browser window just by clicking a stream (or download) link. Make sure you have the latest version so that you can play the widest array of files.

#### **VLC Media Plaver**

Open your VLC Media Player and go to File > Open Network Stream. Click the File tab and enter the **download** link of the file you want to watch. Yes, this seems backward, but it works!

So, if you were trying to stream the movie Duck and Cover found at http://www.archive.org/details/DuckandC1951 you would:

Use this URL:

http://www.archive.org/download/DuckandC1951/DuckandC1951\_256kb.mp4

NOT this URL:

http://www.archive.org/stream/DuckandC1951/DuckandC1951\_256kb.mp4

VLC will stream mp4, avi, mpg and other file formats, so it is quite useful for viewing the majority of the files in the archive.

## Real Player

You can use Real Player to stream Real Media files.

We support two bitrates: 32Kbps-192Kbps for modem and ISDN users plus 256Kbps-450Kbps for DSL and cable-modem users.

#### **Encoding Parameters**

We attempt DVD, VCD, and MP4 streaming for broadband. We want these parameters to easily work with low-end video editors.

MPEG-2, DVD -- 720x480 or 702x480 interlaced. With a system header on each pack to be compatible with DVD. (Prelinger movies are 1/2 D1 352x480 29.97 fps which causes some players to make them look skinny)

MPEG-1, VCD -- Video Resolution SIF (352 x 288 PAL, 352x240 NTSC)

Framerate 29.7 or 25 for PAL

Video Compression MPEG-1

Video Bitrate Up to 1151 kbps constant bitrate (CBR)

Audio 224 kbit/sec MPEG-1 Layer2

Stereo 44.1khz

Created with ffmpeg.

MPEG-4 -- 512Kbps h.264 VBR 320x240 video with 64Kbps AAC audio. Hinted for streaming. Created with ffmpeg and mp4creator.

#### What is an editable file?

An editable file is a file which can be downloaded and used in an editing program. The MPEG-4 are the highest bitrate versions we could do with the linux mpeg-2 to mpeg-4 conversion tools we use. These files can be read directly into FinalCut-Pro from Apple, and can be converted to mov using Quicktime-pro and read directly into iMovie from Apple.

## Can I upload this movie?

You may upload movies that you own the copyright to, or that are in the public domain.

We are not copyright lawyers, and copyright is a tricky business, so you may want to consult a copyright researcher to

clear material before you use it. You may also want to check this list of movies that one of our volunteers has already researched.

Here is some general information on the subject that may help you decide if your movie is okay to upload. The information below applies to films produced in the United States only.

1) Is there a copyright notice visible in the film? It is usually visible with the title or at the end of the film.

If the work was made in 1923 or earlier, it is probably public domain and can be uploaded. **NOTE!** Restored versions of the film or new soundtracks for silent films can have more recent copyrights that are still valid - usually a copyright notice for a new soundtrack or restoration will appear in the film.

For works made from 1923 to 1949, post a question to the movie forum on this site before you upload. The copyright could have been renewed and there isn't a way online to check a film's copyright status.

For works made from 1950 to 1963, you can check the title at the Library of Congress Copyright Database for copyright renewals: <a href="http://www.copyright.gov/records/cohm.html">http://www.copyright.gov/records/cohm.html</a>. This will list copyright renewals for most films.

If the copyright notice is 1964 or later, the copyright is probably still valid and the film should not be uploaded unless you are the copyright holder.

- 2) Is the copyright notice in the correct format? It needs to state three things the word 'copyright' or the copyright symbol or '(c)', the year and who owns the copyright? If it is missing one of those elements or if there is no notice, it could be public domain. If you aren't sure, please post a question to the movie forum on this site.
- 3) Is the film foreign (not from the U.S.)? Foreign titles might not have a copyright notice, but still may be copyrighted in their country of origin. Traditionally the U.S. wouldn't recognize the copyright of a foreign film unless it was registered in the U.S. That has recently changed with the GATT treaty. Many foreign works had their copyrights restored. Please post a question to the movie forum on this site about these films before you upload.

#### What kind of movie file should I submit?

The archive is all about free access to information, so you should submit file formats that are easily downloadable and/or streamable for other site patrons.

We prefer that you submit the highest quality format that you have available, and then we will attempt to create smaller file sizes and formats automatically with our deriver program. MPEG2 files are the easiest file type for us to deal with. We recommend that you do not attempt to do any special encoding of your files - the more settings you mess around with, the less likely our deriver code will be able to process the file.

Whatever format you choose, please upload each file to your item individually, in a non-compressed format. Uploading content in a .zip or .rar file makes your item unstreamable and significantly less accessible to others. If you upload .zip, .rar, non-video formats (like .exe), or password-protected files, they may be removed by our moderators.

The table below describes what file formats we will attempt to derive depending on what type of file you submit.

This is automatically generated.

NOTE: inner whitespace is significant.

(\*) Some derivatives only apply to certain collections.

## **Derivatives for Movies Items**

If your source		then we will try to derive the following formats:							
file is format:	Animated GIF	Cinepack	h.264	h.264 720P	MP3	MPEG2	Ogg Video	SubRip	Thumbnail
3GP	•	1	<b>3</b>			<b>3</b> (*)	<b>(</b> *)	-	<b>3</b>
56Kb QuickTime	•		<b>3</b>			<b>(</b> *)	<b>3</b> (*)	<b>₽</b>	<b>⊕</b>
64Kb MPEG4	•	1				<b>3</b> (*)	<b>(</b> *)	•	<b>□</b>
64Kb QuickTime	•		<b>3</b>			<b>3</b> (*)	<b>?</b> (*)	•	<b>⊕</b>
256Kb MPEG4	•					₹(*)	<b>(</b> *)	•	-
256Kb QuickTime	•		<b>3</b>			<b>(*</b> )	<b>?</b> (*)	•	•
Cinepack	•	 	•	<b>(*</b> )		<b>(</b> *)	<b>3</b> (*)	-	<b>3</b>
DivX	•	1	<b>3</b>	<b>3</b> (*)		<b>(</b> *)	<b>3</b> (*)	-	
DV Video	•	1	<b>3</b>	<b>(</b> *)		<b>(</b> *)	<b>(</b> *)	- 💀	
Flash Video	•	!	<b>3</b>	<b>(*</b> )		<b>(*</b> )	<b>(*</b> )	-	•
									†

h.264								- ₹3	
h.264 HD	-		•			<b>(</b> *)	<b>(</b> *)	•	- 💀
h.264 MPEG4	•		•	<b>3</b> (*)		<b>(*</b> )	<b>(</b> *)	<b>3</b>	- 🚭
h.264/MPEG2- TS	3	 	3	<b>3</b> (*)	<b>(*</b> )	<b>(*</b> )	<b>3</b> (*)	<b>3</b>	3
ISO Image	-		•		 	<b>(*</b> )	<b>(*</b> )	- □	- 💀
IV50	-	1	•	<b>?</b> (*)	       	<b>(*</b> )	(*)	<b>₩</b>	- 🚱
Matroska	•	1	•	<b>?</b> (*)	 	<b>(*</b> )	<b>(</b> *)	- □	- 💀
Motion JPEG	-		•	<b>?</b> (*)	       	<b>(*</b> )	<b>(</b> *)	•	- 💀
					1	1			

It's really easy to embed our flash player with your movie into your web site. To do so, go to the item page for the movie you want to embed. Then click the flash player as if to watch the movie. When you do, you'll see a small question mark beneath the player. Click on this and you'll get the instructions and code you need to embed the movie

#### For more information...

into your web page.

Check out our Moving Images Forum

## How can I add a logo to the upper right corner of my collection?

First, make sure you're logged on to archive.org with the same email address you used when you created your collection. Note: Images should have a height of no more that 72 pixels.  $\hat{a} \in \hat{A}$  Go to your collection's front page  $\hat{a} \in \hat{A}$  Click the "Edit Item!" link next to your user name.  $\hat{a} \in \hat{A}$  Click "Item Manager" near the top of the page.  $\hat{a} \in \hat{A}$  Click the "checkout --edit items files (non XML)" button in the "Edit Operations" section of the form.  $\hat{a} \in \hat{A}$  In Step 1 of 2, click the "Share" button.  $\hat{a} \in \hat{A}$  Locate and select the image to be uploaded and click "Select".  $\hat{a} \in \hat{A}$  In Step 2 of 2 click the "Update Item!" button  $\hat{a} \in \hat{A}$  Return to collection front page and click "edit" link again  $\hat{a} \in \hat{A}$  Find logo file at bottom of page, choose "Collection Header" from the drop down list and click submit. It might take a few minutes for the changes to appear.

#### How do I make DVD's from Internet Archive movies?

Please read this forum posting about how to create DVDs from many of the movies found in the Archive: <a href="https://www.archive.org/iathreads/post-view.php?id=26467">https://www.archive.org/iathreads/post-view.php?id=26467</a>. If you have further information to add, please <a href="mailto:emailto:

#### How can I make a DVD using linux?

An Archive user sent in the following instructions for creating DVDs on a linux system:

To do this under linux from the command line: This requires a few common programs. Using any modern package distribution of linux installing these should be quite simple.

- mplayer (http://www.mplayerhq.hu/)
- transcode (http://www.transcoding.org)
- mjpeqtools (http://mjpeg.sourceforge.net/)
- dvdauthor (http://dvdauthor.sourceforge.net/)
- The first command copies just the video out of input.mpeg and produces output.video: mplayer input.mpeg -dumpstream -dumpfile /dev/stdout | tcextract -t vob -a 0 -x mpeg2 > output.video
- The second command copies just the audio out of input.mpeg and produces output.audio: mplayer input.mpeg -aid 128 -dumpaudio -dumpfile output.audio
- The third command combines the video and audio back together again in a format ready for dvdauthor:
  - mplex -f 8 -V -o complete.vob output.video output.audio
- 4. This step creates the dvd structure. Create a new file with any text editor with the following:

The chapters line lists the points to include chapter marks on the DVD for jump navigation.

Now let dvdauthor create our dvd: dvdauthor -x dvdauthor.xml

Done! You should now have a folder called "DVD\_folder" with your movie. You can create an ISO or BIN image with mkisofs:

#### mkisofs -dvd-video -V "Movie Title" -o movie.iso DVD\_folder/

You can play movie.iso in most any video player or burn it to a DVD: growisofs -speed=16 -dvd-compat -Z /dev/dvd=movie.iso

If you just want to burn the film to a DVD you do not have to create the movie.iso image file: growisofs -speed=16 -dvd-video -dvd-compat -V "Movie Title" -Z /dev/dvd DVD\_folder/

#### Why do I get errors when I try to play a movie?

The best all-around, free player is <u>VLC Media Player</u> - it handles most of the movie files you will find on this site. If you're seeing errors when you try to play movies, please try downloading VLC and using that instead. This clears up many people's problems.

Here are some other possible problems:

- 1. There is heavy traffic to our site. If you experience a delay, please try again later or at a different time of day.
- 2. You're behind a firewall and the firewall software is attempting to modify incoming bits. Contact your network or firewall administrator.
- 3. Your Internet connection went down or timed out. Check with your ISP or network administrator to see if there's a special policy about keeping a connection live.
- 4. If your browser seems to hang after a "100% downloaded" message, check to see that you have sufficient hard-disk and TMP disk space. Rebooting the system sometimes helps.
- 5. You are trying to play an MPEG-2 file on a platform other than Windows or Linux. At present, you need VLC (<a href="http://www.videolan.org">http://www.videolan.org</a> ) or the for-pay quicktime6 add-on to play MPEG-2 files on the Macintosh. Please contact us at info at archive dot org if you have information about other players that work on platforms other than Windows.
- 6. 2. Your player tried to stream the movie, and it isn't streamable. Download the movie first, and then play it. (Right-click > Save As)
- 7. 3. Some conflict exists between your computer's configuration and the player you're using. Unfortunately, because PCs can be set up in so many different ways and because different standards exist for playing video, finding a player that will work is a hit-and-miss process. Try Rod Hewitt's evaluations of a number of players.

If you still have trouble, post your question to the moving images forum.

## Questions

## Can I download files via

What are some good FTP clients?

How do I download files?

## **Downloading Content**

#### Can I download files via FTP?

Update (2009April): To allow us more flexibility on access, we are discontinuing FTP read access. HTTP read access (as in downloading through your web browser), remains more popular with users, and shall continue.

For more information, please see the discussion forum:

https://www.archive.org/iathreads/post-view.php?id=240921

## What are some good FTP clients?

Update (2009April): Please note that to allow more flexibility on access, we are discontinuing FTP read access. HTTP read access (as in downloading through your web browser), remains more popular with users, and shall continue.

FTP can yet be very useful for your uploads.

Here are a few FTP clients that users found to work well:

## For Windows Users

- Filezilla (support open source!)
- SmartFTP
- FTP Commander

## For Mac Users

- Filezilla (support open source!)
- Cyberduck (support open source!)
- Transmit
- Fetch
- Interarchy

## How do I download files?

To download the files on a PC, right click the link to the file, and select "Save Target As" or "Save Link As" (or something similar depending on which browser you're using).

On the Macintosh, hold the button down while the mouse is over the link, and when the menu comes up, select "Save Target As".

Update (2012July): some Internet Archive items may be downloaded via the BitTorrent protocol using the link **Torrent** on the item's webpage. Download via BitTorrent requires an up-to-date BitTorrent client, see the FAQ on

#### Questions

What books can I borrow? How can I find them?

Which reading devices can be used to read the eBooks borrowed through archive.org?

How many books can I check out at once?

How can I see which books I've checked out?

Can I put a library book on hold?

Where do I get Adobe Digital Editions?

How do I authorize Adobe
Digital Editions? Who is my
ebook vendor?

What about using ereaders?

Can I read or borrow books on my Kindle?

How does borrowing a book work through archive.org?

Can I borrow books on my lpad or Android tablet?

Can I return a library book early?

## Borrow from Lending Library

#### What books can I borrow? How can I find them?

The easiest way to find books to borrow is to jump straight to the <u>Lending Library</u> which shows works which have editions that are available through the Internet Archive.

#### Which reading devices can be used to read the eBooks borrowed through archive.org?

Internet Archive offers borrowable books in BookReader, <u>PDF</u> and <u>ePub</u> formats. BookReader editions may be read online immediately in any web browser. Downloadable eBooks are readable in Adobe Digital Editions and some other software platforms. <u>Here is a list of supported devices on Adobe's website</u>. ADE also provides support for <u>Sony's Reader</u>.

#### How many books can I check out at once?

You can borrow 5 books at a time from archive.org. Each loan will expire after 2 weeks and will automatically "return" at the end of that time period.

#### How can I see which books I've checked out?

There's a page under your archive.org Account which displays all the books you've checked out at any one time - <a href="https://archive.org/account/loans.php">https://archive.org/account/loans.php</a>. Additionally you can see your loan history by going to <a href="https://archive.org/account/your Account page">https://archive.org/account/your Account page</a> and clicking the "Profile" link.

## Can I put a library book on hold?

Not at this time but we hope to add this feature in the near future.

#### Where do I get Adobe Digital Editions?

You can <u>download Adobe Digital Editions</u> from adobe.com. It's free. If you are using a device that can not run Adobe Digital Editions, you still need an Adobe account. <u>You can get one online here</u>. <u>An older version of Adobe Digital Editions can be found at this link</u>.

#### How do I authorize Adobe Digital Editions? Who is my ebook vendor?

The first time you run Adobe Digital Editions, it will prompt you for authorization. This is completely optional and is not linked to your archive.org ID. If you do not want to set up an Adobe ID, check the box in the lower left where it says "I want to Authorize my computer without an ID" and click Authorize.

If you do want to set up an ID, click the "create an Adobe ID" link next to the eBook vendor line (which should remain set on "Adobe ID"). You can authorize your computer at a later date by going under the Help menu of ADE and selecting the "Authorize computer..." option.



#### What about using ereaders?

Regardless of which ereader you have, you can read archive.org eBooks online in your browser with our

BookReader. Many devices support PDF files, which can be downloaded from archive.org. Below are some tips for using some popular ereader devices. Feel free to send your feedback and questions to info@archive.org.

#### Can I read or borrow books on my Kindle?

The procedure varies depending what model Kindle you have.

If you have a Kindle Fire, you will need to "sideload" an Adobe Digital Editions compatible application such as Overdrive Media Console to borrow modern ebooks. Here is a handout from one of our partner libraries explaining the process.

For older non-Fire Kindles, you can only read Classic Ebooks not borrow Lending Library books.

#### How does borrowing a book work through archive.org?

The Internet Archive and participating libraries have selected digitized books from their collections that are available to be borrowed by one patron at a time from anywhere in the world for free. These books are in BookReader, PDF and ePub formats (and <u>Daisy</u> for the print disabled). You can choose which format you prefer as you complete the borrowing process.

BookReader editions may be read online immediately in your web browser. No special software is required.

Other Internet Archive loans are managed through <u>Adobe Digital Editions</u>, which you may need to download to manage your library of borrowed books.

#### How do I get set up to borrow books through archive.org?

Follow these steps:

- 1. Sign up for an archive.org account
- 2. Some ebooks require Adobe Digital Editions (This is where you can read the books you've borrowed, manage your current loans, or return books).
- 3. Get an Adobe.com account (If you create an Adobe account, you can access your library from a variety of locations. If not, your loans will be tethered to a specific computer or device.)
- 4. Find a book to borrow
- 5. If a BookReader edition is available, you can read it instantly online in your web browser. Other formats will require that you download a file and open it in Adobe Digital Editions

#### Can I borrow books on my Ipad or Android tablet?

Yes! You can read our books using our BookReader via your browser or by using a reader app like Bluefire Reader or Overdrive Media Console (iPad) or Aldiko Book Reader or Overdrive Media Console (Android tablet). For more information on Bluefire, go to their site at <u>bluefirereader.com</u>. Before you start, register an Adobe ID. You'll need to do this once. <u>If you don't have one, create one at this page</u>.

Here are some step-by-step instructions on using Overdrive Media Console:

- 1. Make sure you have downloaded and installed the free app "Overdrive Media Console" on to your iPad
- 2. Find a book you'd like to borrow; feel free to try a sample book that is small such as this one
- 3. Click on the "ebook" link under the "borrow" heading on the right
- 4. Log in if you have not logged in to archive.org
- 5. Choose one of the download options. Please note: Overdrive Media Console can not read PDFs.

Here are step-by-step instructions for Aldiko Reader:

- 1. Download and install Aldiko Book Reader from Google Play Store.
- 2. Open Aldiko, Select Other Catalogs under the Get Books section of the menu.
- 3. Select My Catalogs at the top and tap New Catalog on the green bar at the top.
- 4. Create an entry for the archive.org using openlibrary.org for the URL. Tap on the library and sign in.
- 5. When you have found a book you like, check it out. When the next screen comes up, select the pdf or epub version. You will then be prompted to enter your Adobe id and password. Your book will then download into Aldiko and you can open it and read it at your leisure.

The only downside to this process is that books can not be returned early via non-Adobe applications, so you'll just have to let them expire or we can return them early if you need to free up space on your loans list.

#### How do I borrow books to read on my Nook?

You will need Adobe Digital Editions (ADE) to use your Nook. Once you have ADE follow these instructions:

- 1. Quit Digital Editions, if it's running
- 2. Plug in the Nook, and start ADE
- 3. ADE should recognize the Nook, and offer to associate with it. Make sure you can see the Nook under 'Bookshelves' on the left. Ok!
- 4. Go to the Lending Library and borrow a book in pdf or epub format.
- 5. If ADE is working properly, you should see your book!
- 6. Next, go to 'Library View' in ADE in the upper left.
- 7. In the Library View, drag your new book over to the Nook icon under 'Bookshelves.'
- 8. Quit ADE and eject your Nook.

To read on the Nook:

- 1. Go to your Library (on a Nook Color, do this by touching the bottom of the touchscreen)
- 2. Go to 'my files' at the top and open 'Digital Editions'
- 3. Open your book! (if it says 'sorry, can't open this book', try again.)

To return your book early so that others can borrow it:

- 1. Quit ADE if it's running
- 2. Plug in your Nook and start ADE
- 3. Open 'Library View' and click 'All Items' on the left
- 4. On your book icon, there's a drop down menu (a little triangle) in the upper left select 'Return Borrowed Item'
- 5. Open the Nook, in the bookshelf area on the left.
- 6. On your book icon select 'Return Borrowed Item'.
- 7. Your book should now be available to borrow again!

If you run into trouble, <u>here's a forum</u> on the Barnes and Noble site about how to get ADE working with the Nook.

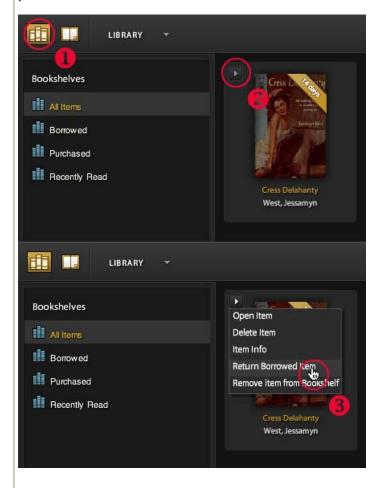
Here are instructions on how to do this from Barnes and Noble.

## Can I return a library book early?

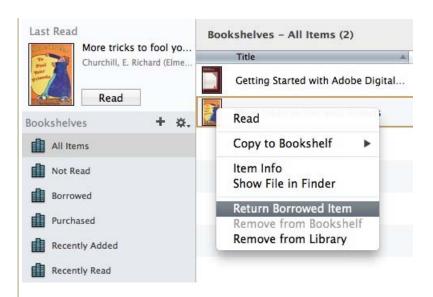
Yes, usually. If you borrowed a BookReader edition, simply return it from your Loans page.

If you downloaded another type of ebook, you'll need to do that through Adobe Digital Editions. If you checked out your book with other software like Overdrive Media Console or Bluefire Reader, you will not be able to return your book early.

In Adobe Digital Editions, look for your "library". That's the book spines icon in the top left corner of the application (1). Once you're in your library, click on the menu for book you'd like to return which is behind the tiny triangle that appears by the book cover (2) and select "Return Borrowed Item" from the menu (3). This image will show you where to look.



You may also be able to right-click on your item and select "Return Borrowed Item" from the contextual menu. Here is a screenshot of this option.



If you used other software to access your book, you may not be able to return it early but the item will be automatically returned at the end of the loan period. Please contact us if you are having trouble returning your items.

## Questions

Why not Squid or mod proxy?

Why FreeCache?

Why not BitTorrent?

What files are being served by FreeCache?

What's a good download manager?

## FreeCache

#### Why not Squid or mod\_proxy?

Both Squid and mod\_proxy are great for reducing the load on web servers, and we encourage everybody to use them. The disadvantage of these caching proxies are that they only work "vertically", i.e., they reduce the bandwidth downstream from the originating web site to the users' browsers. That web site still gets 1 download per (non-cascading) proxy. The FreeCache system works more "horizontally", i.e., FreeCaches fill themselves up from neighboring FreeCaches if at all possible. Hence, the load on the originating web site is much lower. FreeCache and caching proxies are complementary technologies. Both can be used to reduce the impact on web sites.

#### Why FreeCache?

FreeCache is a demand-driven, distributed caching system. Cooperating caches exchange files without burdening the original site too much.

## Why not BitTorrent?

BitTorrent is good and similar to FreeCache in that it balances download "horizontally". BitTorrent uses other BitTorrent clients for this balancing; these clients often become un-available after a particular file is not popular anymore. The FreeCache system utilizes permanent FreeCaches that don't go away (although particular files get flushed out after a while). Unlike BitTorrent, the FreeCache system is transparent to the end-user. No new client or server software is required, and the files do not need to be converted. To offer a file via the FreeCache system, all you need to do is prefix the URL with http://freecache.org/

#### What files are being served by FreeCache?

FreeCache can only serve files that are on a web site. If the link to a file on that web site goes away, so will the file in the FreeCaches. Also, there is a minimum size requirement. We don't bother with files smaller than 5MB, as the saved bandwidth does not outweigh the protocol overhead in those cases.

## What's a good download manager?

We like <u>wget</u>, because you can tell it to play nice and go slow. It's highly configurable and very powerful. Wget runs on all Unix platforms (incl. Mac OS X), and it comes standard with <u>Cygwin</u> on Windows. If you prefer something graphical, <u>Mozilla</u>'s built-in download manager works fine.

## Questions

## What is DocuComp?

What do I need I to know to use DocuComp in the WayBack Machine?

What Archive Pages are comparable?

Why should I compare

## DocuComp

## What is DocuComp?

DocuComp is a sophisticated technology that compares inserted, deleted, replaced and moved text and content in Web pages. It's patented algorithm has been specially designed and licensed for use in the Wayback Machine.

## What do I need I to know to use DocuComp in the WayBack Machine?

You only need to know the basic functions of the Wayback Machine. Begin by typing an URL into the Wayback Machine and hit the 'Take Me Back' button. Once you've found your choices on the results page, click the 'Compare Archive Pages' button in the upper right hand corner of the page. The reloaded page will have a series

results of past Web pages?

How are images compared?

Some images are missing in my comparison?

Certain links or actions are not working in the comparison results?

**How can I report problems?** 

<u>Guidelines for Press,</u> <u>Magazines and General</u> <u>Media</u>

Where can I find out more about DocuComp?

Can I copy and use my results?

of check-boxes before each page date. Check any two dates and select the 'Compare two dates' button in the upper left-hand corner of the screen. The system is designed to automatically generate results for any URL's indexed by the Wayback Machine.

#### What Archive Pages are comparable?

You can compare any two pages from the Archive's library dating from 1996 to the present (approximately 55 billion pages).

#### Why should I compare results of past Web pages?

Access to the Archive's Collections is provided at no cost to you and is granted for scholarship and research purposes only. The DocuComp feature is intended to provide interesting insight into how content on pages in every field-- from the government to entertainment to business sites-- changes over time.

#### How are images compared?

When compared pages contain different images, only the new (or latest) set of images is shown. Images that were either changed or removed are not displayed in the comparison results.

#### Some images are missing in my comparison?

In certain cases, images within the Web pages are not available. Not all images are archived nor are retrievable from the original site. If they no longer exist on the original site then the images will not be available and not displayed within the archived pages.

#### Certain links or actions are not working in the comparison results?

Links to other pages may not be live if those pages (or links) no longer exist and are not in the archive library. Also, javascript enabled links and actions are disabled in the comparison results to prevent errant scripts from being run.

#### How can I report problems?

After comparing two pages, the upper frame on the results page includes a hyperlink to report results which return any page faults. By clicking this hyperlink, an automatic error report is generated to both the Internet Archive webmaster and DocuComp's technical team. If you wish, there is an additional help screen to describe the issue. Please keep in mind that with over two billion pages to index and compare, not all being created alike; some pages will differ greatly and not have a common frame of reference to effectively compare.

#### Guidelines for Press, Magazines and General Media

DocuComp is a registered trademark of Advanced Software, Inc. Please contact the company at (866) 329-7480 or <a href="mailto:info@docucomp.com">info@docucomp.com</a> for background information on the company's history, technology data, or to schedule executive interviews.

## Where can I find out more about DocuComp?

Please visit the <a href="https://www.docucomp.com">www.docucomp.com</a> site. DocuComp is a widely-used technology that is licensed by it's parent company, Advanced Software, into many of the software products and content management systems available today. Formerly a standalone application for Advanced Software, the company now focuses exclusively on licensing the DocuComp technology and patent to software vendors.

#### Can I copy and use my results?

The results of any comparison done on the Internet Archive site are governed by the terms of use listed at: <a href="https://www.archive.org/about/terms.php">https://www.archive.org/about/terms.php</a>. Additionally, any use of the DocuComp trademark or logo without express written permission by Advanced Software, Inc and any of it's affiliates is prohibited by law.

## Questions

How can I add my music, movies, or text?

How does the Share button work?

I want to add LOTS of individual items to the archive, how do i do that?

How can I report an error for my item?

How can I make changes to my item?

Can you tell me a bit more about choosing a license?

## **Uploading Content**

## How can I add my music, movies, or text?

You may contribute content to the Internet Archive if it's in the public domain or if you own the rights to it. If you own the rights, we recommend that you choose a <u>Creative Commons license</u> for it so that others will know how they may (or may not) use it. You can choose a type of Creative Commons license during your upload process.

Please note that if you wish to be contacted with inquiries regarding your item, you'll need to supply public contact information. Some chose to provide a web address, mailing address, or other means of contact in the description text for the item.

See also https://www.archive.org/about/faqs.php#Rights

You can contribute movies, audios, or books to the archive through the upload tool. Click the "Upload" button near the upper right-hand corner of the site, or click <a href="https://example.com/here">here</a>.

For books, please see <a href="https://www.archive.org/about/faqs.php#195">https://www.archive.org/about/faqs.php#195</a>

How should I name the files for movies I upload?

During upload, I get an error message about 'illegal characters' or 'file name prohibited.' What does this mean?

What kinds of formats do you want me to use for uploading?

How should I name the audio files I upload?

How can I take my files off the site?

What is the relationship between Internet Archive and OurMedia?

What languages are supported by Archive.org? How can I use accented or special characters in my title or description?

I just uploaded my files, and I got an error message that says there's a problem with my metadata - but I haven't added any metadata yet!

#### How does the Share button work?

This exciting new uploading feature is a beta release. This means that it's currently under development, and we've made this early release because it improves the upload process and we can't wait for you to start working with it!

To use the new beta uploader:

- First click the "Upload" button near the upper right-hand corner of the site, or click here.
- Now you can see the Share button.
- Click the **Share** button to browse for the media you want to upload. You can select more than one file, or you can click the Share button again to select additional files.
- Archive.org will automatically detect which media collection (movies, audio, texts, or other) your item belongs to, according to the type of the first uploaded file.
- · You also have the option to click the link to change the file type if needed.
- As the file(s) upload, enter the information about your file in the given fields.
- When everything is complete, click the "Share my File(s)" button at the bottom of the page to create your item page on Archive.org.

## You can track the progress of your items in our catalog.

We accept audio, video, and text files.

## I want to add LOTS of individual items to the archive, how do i do that?

If you have a large collection of related items in single media type, like a radio show for example, please contact the Internet Archive. You can email our collections staff at info at archive.org. Please put start your subject line with "Collections:".

Be sure to include the details of your collection; we want to know how many items you have, what format they are in as well as any general information you can give us about the collection.

In general, collection pages are created once the number of uploaded items has reached 50 or more.

#### How can I report an error for my item?

First, we recommend that you search the Forums. Many common problems have already been answered there, and you'll have an answer much more quickly.

If that doesn't work, you can email info at archive.org. Be sure to include a link to your item's details page. Report the details about the problem you are experiencing - the more details you provide, the more readily we can help you.

## How can I make changes to my item?

If you want to **change your item's metadata** (like title, description, file formats and titles, running time, language, etc.), **or change the files in your item** (remove files, upload new/more files, rename files, etc.), you can do this using **the new "Edit Item!" link**. Here's how:

- · Make sure you're logged in with the account you used to upload the item
- •
- Go to your item's details page
- Click the "Edit item" link in the lower left box.
- Select the "change the information" link

Your changes will appear in 20-30 minutes.

If you have uploaded new files and you want us to make derivative files (smaller, more compressed versions), you will need to do one more thing.

- · Click "Edit item"
- Select the "change the information" link
- · Click "Item Manager"
- Click the "derive" button

## How can I take my files off the site?

http://www.archive.org/about/faqs.php#264

If you would like us to take down an item you have posted, please send an email to info [AT] archive [DOT] org. Please include the exact URLs of the items. Your email must come from the same email address you used to upload the item. This is the only way we can tell that you are the owner of the item.

## Can you tell me a bit more about choosing a license?

From the <u>Creative Commons</u> website: "Creative Commons licenses help you share your work but while keeping your copyright. Other people can copy and distribute your work, but only on certain conditions."

You can choose a license to associate with your contribution and this license will be linked to when users see the details page.

## How should I name the files for movies I upload?

Take for example a movie called My Home Video. The identifier (AKA base name) for this movie should be something like MyHomeVideo. The naming convention for the files depends on the encoding.

MPEG-2:

MyHomeVideo.mpeg

MPEG-1:

MyHomeVideo.mpg

DivX:

MyHomeVideo.avi

QuickTime:

MyHomeVideo.mov

Windows Media: MyHomeVideo.wmv

Real Media: MyHomeVideo.rm

MPEG-4:

MyHomeVideo.mp4

If you know the bitrate of the encoding (for QuickTime, Windows Media, Real Media, or MPEG-4), please include in the file name as such (using 64 as the bitrate and QuickTime as the format, for example):

MyHomeVideo\_64kb.mov

# During upload, I get an error message about 'illegal characters' or 'file name prohibited.' What does this mean?

The folder or files that you are attempting to upload have characters in the name that cause problems with the system - so we have designated them "illegal". This includes the following characters in the name:

```
*(){}[]/\$%@#^&|<>'~`!?+
```

In addition, files and folders may not have spaces in their names.

You will need to remove any of these illegal characters by renaming the file(s) in order for the system to accept your contribution.

#### What kinds of formats do you want me to use for uploading?

The Internet Archive strives to archive content in open formats that are friendly to long-term storage and access. In addition to affecting long-term storage and access, giving us media in these formats will assure that they are accessible now, since many problems with long-term accessibility such as DRM and propriatary codecs also cause problems today.

However, if you have content that is not available in an open/recommended format (see below), we will still happily archive it. Our systems are not tied to specific media formats and in fact are capable of archiving any type of digital data that can be represented as a file.

Format Recommendations:

We encourage users making contributions to the Archive to create as high quality versions of their media as possible. As we know access is important and not everyone has a high speed connection, we will take these archivable copies and create much smaller version for users with slow connections. Remember, a WAV file may seem big, but it won't be in 5 years. Further, you can always make lower quality files (e.g. mp3s) from higher quality files, but cannot go the other way.

For video we typically recommend MPEG2 (DVD quality), or if you do not have MPEG2, MPEG1 or MPEG4.

For audio we recommend WAV or FLAC (preferably 24 bit).

For text we recommend plain text, xml, or pdfs.

## How should I name the audio files I upload?

Take, for example, an audio called My Music. The identifier for this audio should be something like MyMusic. The naming convention for the files depends on the encoding.

MP3:

MyMusic.mp3

WAVE:

MyMusic.wav

Flac:

MyMusic.flac

Shorten: MyMusic.shn

Ogg Vorbis:

MyMusic.ogg

Windows:

MyMusic.wma

Real Media: MyMusic.ra

If you know the bitrate of the encoding, please include it in the file name. For example:

MyMusic\_64kb.mp3

#### How can I take my files off the site?

If you would like us to take down an item you have posted, please send an email to info [AT] archive [DOT] org. Please include the exact URLs of the items. Your email **must** come from the same email address you used to upload the item.

#### What is the relationship between Internet Archive and OurMedia?

The OurMedia collection on archive.org can be found at <a href="http://www.archive.org/details/ourmedia">http://www.archive.org/details/ourmedia</a>. Users can upload to this section directly from the OurMedia site on <a href="https://www.archive.org/details/ourmedia">https://www.archive.org/details/ourmedia</a>. Users can upload to this section directly from the OurMedia site on <a href="https://www.archive.org/details/ourmedia">https://www.archive.org/details/ourmedia</a>. Users can upload to this section directly from the OurMedia site on <a href="https://www.archive.org/details/ourmedia">https://www.archive.org/details/ourmedia</a>. Users can upload to this section directly from the OurMedia site on <a href="https://www.archive.org/details/ourmedia">https://www.archive.org/details/ourmedia</a>. Users can upload to this section directly from the OurMedia site on <a href="https://www.archive.org/details/ourmedia">https://www.archive.org/details/ourmedia</a>. Users can upload to this section directly from the OurMedia, please contact them <a href="https://www.archive.org/details/ourmedia">https://www.archive.org/details/ourmedia</a>. Users can upload to this section of the ourmedia of the ourme

What languages are supported by Archive.org? How can I use accented or special characters in my title or description?

#### What languages are supported by Archive.org?

Archive.org supports all metadata about items in just about any language so long as the characters are UTF8 encoded.

(1) example of language:korean

https://www.archive.org/details/Shall\_We\_Protest\_the\_Candlelight\_Documentary-iso

(2) example of language: Arabic

https://www.archive.org/details/ktb\_tragm\_rgal\_pdfbook\_ara

#### Filename support:

#### Support for Filenames is limited to pretty basic ASCII characters, like

A-Z

a-z

0-9

-

-

١.

Additional character support for filenames is not an area under development at this time.

#### How can I use accented or special characters in my title or description?

You can use accented and other special characters in your item text and file titles, but you need to make sure you use the xml-safe code for those characters instead of typing them directly into the forms.

Typing accented characters directly into forms can break the xml for your item, making your files unavailable through the site.

Instead, you'll want to use a special code to represent those letters. There are some examples in the table below, but you can find a complete listing of these codes on <a href="http://en.wikipedia.org/wiki/List\_of\_XML">http://en.wikipedia.org/wiki/List\_of\_XML</a> and <a href="http://en.wiki/List\_of\_XML">http://en.wiki/List\_of\_XML</a> and <a href="http://e

Here are some common accented and special characters and what you should replace them with:

To Make This Character	Replace It With This Code
&	&
à	à
À	À
á	á
Á	Á
è	è
È	È
é	é
É	É
ñ	ñ

Ñ ||Ñ

So to write the word cafî you would actually write café - you replace the letter î with the code é

There are many, many more codes than the ones listed above, of course. You can find more at <a href="http://en.wikipedia.org/wiki/List\_of\_XML\_and\_HTML\_character\_entity\_references">http://en.wikipedia.org/wiki/List\_of\_XML\_and\_HTML\_character\_entity\_references</a>.

I just uploaded my files, and I got an error message that says there's a problem with my metadata - but I haven't added any metadata yet!

When you create an item, we "check out" a directory for you to upload files into. When you're done uploading, you "check in" the directory (by cicking a link on the check out page, or clicking the "click here when done" icon).

Checking in an item lets us know you're done uploading, and the first thing we do is back up your files to a second server (so we'll have two copies of everything). Sometimes, when it's taking longer than usual to complete this backup, you'll get an error message that says there's a problem with your metadata. If you wait a little while (usually just a few minutes, but occasionally longer), you should be able to continue the upload process without any trouble.

If you uploaded metadata with your files, or you've gotten this error **after** you've added metadata (title, description, file titles, etc.) then you may have a problem. Usually an item breaks because you used <u>special characters</u> that broke the xml files for your item. Please feel free to use the link on the error page to report the problem to us and we'll try to help you fix it.

#### Questions

How did you digitize the films?

Do I need to credit the Internet Archive and Prelinger Archives when I reuse these movies?

Do I need to inform the Internet Archive and/or Prelinger Archives when I reuse these movies?

How can I get access to these movies on videotape or film?

An article on re-coding Prelinger Archive films to SVCD so you can watch them on your DVD player.

What parameters were used when making the Real Media files on the website?

Are there restrictions on the use of the Prelinger Films?

Can you point me to resources on the history of ephemeral films?

Why are there very few post-1964 movies in the Prelinger collection?

For more information...

## **Prelinger Movies**

#### How did you digitize the films?

The <u>Prelinger Archives</u> films are held in original film form (35mm, 16mm, 8mm, Super 8mm, and various obsolete formats like 28mm and 9.5mm). Films were first transferred to Betacam SP videotape, a widely used analog broadcast video standard, on telecine machines manufactured by Rank Cintel or Bosch. The film-to-tape transfer process is not a real-time process: It requires inspection of the film, repair of any physical damage, and supervision by a skilled operator who manipulates color, contrast, speed, and video controls.

The videotape masters created in the film-to-tape transfer suite were digitized in 2001-2003 at Prelinger Archives in New York City using an encoding workstation built by Rod Hewitt. The workstation is a 550 MHz PC with a FutureTel NS320 MPEG encoder card. Custom software, also written by Rod Hewitt, drove the Betacam SP playback deck and managed the encoding process. The files were uploaded to hard disk through the courtesy of Flycode, Inc.

More recently, Prelinger films have been digitized and uploaded by Skip Elsheimer at AV Geeks.

The files were encoded at constant bitrates ranging from 2.75 Mbps to 3.5 Mbps. Most were encoded at 480 x 480 pixels (2/3 D1) or 368 x 480 (roughly 1/2 D1). The encoder drops horizontal pixels during the digitizing process, which during decoding are interpolated by the decoder to produce a 720 x 480 picture. (Rod Hewitt's site Coolstf shows examples of an image before and after this process.) Picture quality is equal to or better than most direct broadcast satellite television. Audio was encoded at MPEG-1 Level 2, generally at 112 kbps. Both the MPEG-2 and MPEG-4 movies have mono audio tracks.

To convert the MPEG-2 video to MPEG-4, we used a program called FlasK MPEG. This is an MPEG-1/2 to AVI conversion tool that reads the source MPEG-2 and outputs an AVI file containing the video in MPEG-4 format and audio in uncompressed PCM format. We then use a program called Virtual Dub that recompresses the audio using the MPEG-1 Level 3 (MP3) format. This process is automated by the software that runs the system.

## Do I need to credit the Internet Archive and Prelinger Archives when I reuse these movies?

We ask that you credit us as a source of archival material, in order to help make others aware of this site. We suggest the following forms of credit:

Archival footage supplied by the Internet Moving Images Archive (at archive.org) in association with Prelinger Archives

or

Archival footage supplied by the Internet Moving Images Archive (at archive.org)

or

"Archival footage supplied by archive.org"

# Do I need to inform the Internet Archive and/or Prelinger Archives when I reuse these movies?

No. However, we would very much like to know how you have used this material, and we'd be thrilled to see what you've made with it. This may well help us improve this site. Please consider sending us a copy of your production (postal mail only), and let us know whether we can call attention to it on the site. Our address is:

Rick Prelinger PO Box 590622 San Francisco, CA 94159 United States

#### How can I get access to these movies on videotape or film?

Access to the movies stored on this site in videotape or film form is available to commercial users through <u>Archive Films</u>, representing Prelinger Archives for stock footage sales. Please contact Archive Films directly:

Archive Films/Archive Photos

75 Varick Street New York, NY 10013

- United States +1 (646) 613-4100 (voice)
- +1 (646) 613-4140 (fax)
- +1 (800) 876-5115 (toll free in the US) sales@archivefilms.com

Please visit us at <a href="https://www.prelinger.com/prelarch.html">www.prelinger.com/prelarch.html</a> for more information on access to these and similar films. Prelinger Archives regrets that it cannot generally provide access to movies stored on this Web site in other ways than through the site itself. We recognize that circumstances may arise when such access should be granted, and we welcome email requests. Please address them to <a href="https://www.recommons.org/re

The Internet Archive does not provide access to these films other than through this site.

An article on re-coding Prelinger Archive films to SVCD so you can watch them on your DVD player.

See archived version of www.moviebone.com/

What parameters were used when making the Real Media files on the website?

Rod Hewitt posted some very useful information here

#### Are there restrictions on the use of the Prelinger Films?

There are no restrictions. You are warmly encouraged to download, use and reproduce these films in whole or in part, in any medium or market throughout the world. You are also warmly encouraged to share, exchange, redistribute, transfer and copy these films, and especially encouraged to do so for free.

Any derivative works that you produce using these films are yours to perform, publish, reproduce, sell, or distribute in any way you wish without any limitations.

Descriptions, synopses, shotlists and other metadata provided by Prelinger Archives to this site are copyrighted jointly by Prelinger Archives and Getty Images. They may be quoted, excerpted or reproduced for educational, scholarly, nonprofit or archival purposes, but may not be reproduced for commercial purposes of any kind without permission.

If you require a written license agreement or need access to stock footage in a physical format (such as videotape or a higher-quality digital file), please contact <u>Getty Images</u>. The Internet Archive does not furnish written license agreements, nor does it comment on the rights status of a given film above and beyond the Creative Commons license.

We would appreciate attribution or credit whenever possible, but do not require it.

Can you point me to resources on the history of ephemeral films?

See the bibliography and links to other resources at <a href="www.prelinger.com/ephemeral.html">www.prelinger.com/ephemeral.html</a>.

#### Why are there very few post-1964 movies in the Prelinger collection?

Largely because of copyright law. While a high percentage of ephemeral films were never originally copyrighted or (if initially copyrighted) never had their copyrights properly renewed, copyright laws still protect most moving image works produced in the United States from 1964 to the present. Since the Prelinger collection on this site exists to supply material to users without most rights restrictions, every title has been checked for copyright status. Those titles that either are copyrighted or whose status is in question have not been made available. For information on recent changes in copyright law, see the circular <u>Duration of Copyright</u> (in <u>PDF format</u>) published by the Library of Congress

For more information...

Check out our Prelinger Archives Forum

#### Questions

Can I see a list of the most downloaded movies?

Can I see a list of the most downloaded audio files?

#### **Search Tips**

## Can I see a list of the most downloaded movies?

Every collection within Moving Images has a "Most Downloaded" list in the right-hand column of the page. However, if you'd like to see a complete list of all of our most downloaded movies, <u>click here</u>.

Can I see a list of the most downloaded audio files?

Can I search by Creative Commons License?

Every collection within Audio has a "Most Downloaded" list in the right-hand column of the page. However, if you'd like to see a complete list of all of our most downloaded audio items, click one of the links below:

- · All Audio Items (not including Live Music Archive).
- ALL Live Music Archive concerts
- · LMA concerts (without the Grateful Dead)
- Grateful Dead only

#### Can I search by Creative Commons License?

Yes, you can. But it's a little complicated.

Here's how to break it down. See the license types at <u>creative commons</u>. When you want to find all of the items assigned a certain license by an uploading party, you'll plug their abbreviation for it into this search query:

#### /metadata/licenseurl:http\*abbreviation/\*

So if you're looking for Attribution Non-commercial No Derivatives (by-nc-nd), you'd put this in the search box: <a href="mailto://metadata/licenseurl:http\*by-nc-nd/">metadata/licenseurl:http\*by-nc-nd/</a>\* And you'd get about 33,000 items back.

If you want to use this in combination with other queries, like "I want by-nc-nd items about dogs" you'd do this: /metadata/licenseurl:http\*by-nc-nd/\* AND dog And you'd get 195 items. The AND tells the search engine all the items returned should have that license AND they should contain the word dog. AND has to be in all caps.

Just to make it easier, here are the basic searches:

- Public Domain
- Attribution Non-commercial No Derivatives (by-nc-nd)
- Attribution Non-commercial Share Alike (by-nc-sa)
- Attribution Non-commercial (by-nc)
- Attribution No Derivatives (by-nd)
- Attribution Share Alike (by-sa)
- Attribution (by)

## Questions

How can I make links clickable in my posts?

How can I format text in my posts

How do I subscribe/unsubscribe to a forum email list?

#### **Forums**

#### How can I make links clickable in my posts?

You may have noticed that some posts have highlighted links in them. Internet Archive forums permit the use of HTML codes. Suppose you want to make a link to the Internet Archive home page, one that looks like this: <a href="http://www.archive.org">Internet Archive home page</a>. To do this, you would enter the following HTML code: <a href="http://www.archive.org">Internet Archive home page</a>.

## How can I format text in my posts

Since the Internet Archive forum system accepts HTML codes, you can make text bold, italic, underlined, or even colored by using normal HTML codes. See <a href="WebMonkey">WebMonkey</a> for a list of HTML codes.

## How do I subscribe/unsubscribe to a forum email list?

Next to all forums, you will see a small envelope. When logged in, you can click on this envelope which will allow you to subscribe or unsubscribe to any forum.

## Questions

How can I connect to SFLan?

What about IP addresses?

<u>I still have more questions</u>, what should I do?

I live at 123 Main St at Crossing; do I have line of sight access to a node?

What is the cost of a node?

How can I get a node?

If I get a node, can my neighbors connect also?

What is included in the node?

## **SFLan**

## How can I connect to SFLan?

With a laptop: Be in the vicinity of a SFLan node. Associate with it: The SSID is sflanNN, where NN is the number of node, e.g. sflan13. No WEP. You'll get an IP number assigned via DHCP. With a house: Contact us at info at archive dot org. (Please include your address and a phone number.) Find out if you have line of sight to another SFLan node, buy a node, and we'll put it on your roof.

#### What about IP addresses?

SFLan uses real, routable IP addresses. These are usally given out dynically via DHCP. The nodes themselves use static addresses. We can also assign static addresses for servers. For the techies: We use tunneling, layer 2 and layer 3 bridging in parts on the network to make it all appear as a "flat" LAN. There are pros and cons about this approach. It has worked best for us so far. However, it is a moving target, and might change in the future.

## I still have more questions, what should I do?

SFLan is a work in progress. If you have more questions, try the SFLan forum. If you still need help, write to info at archive dot org.

#### I live at 123 Main St at Crossing; do I have line of sight access to a node?

You can try netstumbler or kismet to look for a SFLan ssid.

What are the power requirements of a node?

What are the connection characteristics of the network?

What is the percentage of uptime?

#### What is the cost of a node?

The nodes cost \$1100, which includes the price of parts and installation. Discounts are potentially available depending on the location.

#### How can I get a node?

Send an email with your name, exact address and phone number to info at archive dot org. Be sure to write "SFLan node" (or something similar) in the subject line. The information will be passed on to our fantastic installation team who will contact you.

## If I get a node, can my neighbors connect also?

Yes, a SFLan node can connect your neighbors and co-condo association members.

#### What is included in the node?

Most of our nodes are composed of two radios, but some have three. The components are in a weather tight box with a four foot coax cable and two antennas attached. The whole unit is mounted on your roof (generally) on a pole. There is a picture of our lovely 5'3" spokesmodel holding one here: http://www.archive.org/iathreads/uploaded-files/AstridB-PICT0017.JPG

## What are the power requirements of a node?

A node takes on average 5 watts.

#### What are the connection characteristics of the network?

There are no average characteristics, but 2MBs shared among 20 or so people would be an example.

## What is the percentage of uptime?

SFLan is an experimental network, so the uptime varies. Right now uptime averages around 90% or more.

## Questions

<u>How do I find Torrents on</u> the Archive?

Can I download only part of an item using an Archive BitTorrent?

My Torrent download never completes?

My Torrent download never starts?

How do I tell if a Torrent is being seeded?

**Does the Internet Archive** run trackers?

How do I use Torrents to upload to archive.org?

How is the Internet Archive using BitTorrent?

How to prevent an Archive Torrent from being made

Why is the Torrent link for an Item lined out (Torrent)?

What are peers, seeds, leechers, and snatches?

## **Archive BitTorrents**

#### How do I find Torrents on the Archive?

You can search and browse all our Torrents on the <u>Torrents collection homepage</u> (or one of the media-specific subcollections).

To narrow your own Search or Advanced Search query, add *format:"Archive BitTorrent"* to your search terms, e.g. <a href="https://archive.org/search.php?query='scifi AND mediatype:audio AND format:"Archive BitTorrent".</a>

The most popular and recent Torrents are available on each tracker's hotlists, e.g. bt1.archive.org Hot List.

## Can I download only part of an item using an Archive BitTorrent?

Yes, almost all contemporary BitTorrent clients allow you to select which files included in the Torrent are downloaded. And even when you download only one or some files, you get the speed advantages of using the format.

Many show a list of the files contained in the Torrent, and both folders and individual files can be selected or deselected both before, and during, download.

It is recommend, in fact, that you deselect the top-level directory within the Torrent named .\_\_\_\_padding\_file if there is one, as this contains unnecessary (empty) Internet Archive padding files.

#### My Torrent download never completes?

Most likely, you have an out-of-date Torrent for the Item you are trying to download. The first thing to try is redownloading the Items' Torrent, and trying again.

Torrents for Items on the Internet Archive can become obsolete when the Item the Torrent is for changes. In that case, some or (more rarely) all of the files within the Torrent will fail to download completely.

This is because our Torrents rely heavily on webseeding (download directly from our servers, when no peers have the files you are seeking). When files on our servers have changed since the Torrent was made, they will not match expected 'piece hashes'; some BitTorrent clients (e.g. Transmission) will attempt to redownload file pieces from changed files over and over, forever, assuming there was an error in transmission, when in fact the file has changed.

Torrents that never download at all most likely are the result of a different problem, lack of client support for Getright-style webseeding.

## My Torrent download never starts?

It's worth mentioning that <u>some BitTorrent clients take a very long time to begin downloading</u> <u>when relying on webseeding</u> (a common requirement when using Archive BitTorrents). At times downloads can take upwards of several minutes to start.

We're not sure exactly why; we suspect those clients exhaust all other options, such as DHT, before falling back on webseeds. (We have observed this behavior with Transmission.)

If you download an up-to-date (current) Torrent from the Archive, and it loads into your BitTorrent client, but download <u>never</u> begins, the most likely cause is that you are using a BitTorrent client that does not support Getright-style webseeding.

Our Torrents rely heavily on webseeding (download directly from our servers, when no peers have the files you are seeking). Some BitTorrent clients (e.g. rTorrent) do not support Getright-style webseeding, and will not be able to download un-seeded Internet Archive Torrents.

At the moment, the only solution to this problem is to use a different client.

Another possibility is that your Torrent file is out of date, because the Item has moved to a new server, and your client does not support redirection of our canonical webseeding URL (and no tracked or discoverable peers are seeding the Torrent).

In this case, the problem can be solved by re-downloading the Torrent file.

#### How do I tell if a Torrent is being seeded?

Current seed and leech counts are displayed for each Archive Torrent on the relevant Item details pages, in parenthesis next to the *Torrent* link. These values are cached for five minutes or so, and because clients do not always update our trackers regularly, they may be somewhat out of date.

The number of seeders is shown first, and the number of leechers (downloaders without the complete Torrent) second. The seeder number includes 'webseeds,' however, which are only usable by BitTorrent clients which support Getright-style webseeding.

## Does the Internet Archive run trackers?

Yes, Internet Archive torrents are tracked by <a href="btt:btt.archive.org">bt1.archive.org</a> and <a href="btt:btt.archive.org">bt2.archive.org</a>.

We are using opentracker, which has proven to be highly scalable.

Our trackers are closed (they track our only own torrents).

#### How do I use Torrents to upload to archive.org?

Retrieval of Torrents is not the best solution for uploading unless you already have an existing mechanism for creating and seeding Torrents.

This capability is not intended as an alternative to our uploader. It merely enables the Archive to capture material already being distributed via BitTorrent.

Torrent retrieval by the Archive works like this:

If a valid .torrent file is uploaded (e.g. through our Uploader) into an item, when that item is derived, we will instantiate a BitTorrent client (Transmission) and attempt to retrieve the Torrent. If the Torrent is successfully retrieved, its contents will be added to the item. 'Valid' in this case means, well-formed and seeded.

Our client will attempt to scrape any listed trackers to find seeding peers, but will also attempt to find peers via DHT and can fall back on Getright-style webseeding when possible.

The Torrent file itself is leeched only long enough to retrieve the file; we do not seed the Torrent after retrieval.

However, all items contents, including those retrieved through this method, are made available via the item's own Archive Torrent. (Because it contains additional contents, this Archive Torrent will, alas, have a different infohash from the original Torrent. So uploading a Torrent to the Archive does not make us a seeder of it.)

Bonus feature: if you have only a magnet link, and not a Torrent file, you can create a dummy .torrent file by pasting that magnet link into a text file and naming it foo.torrent.

If you upload this dummy Torrent file, we'll detect that you gave us a magnet link and take care of the rest.

## How is the Internet Archive using BitTorrent?

Downloading Internet Archive Content

As of summer 2012, the Internet Archive is beta-testing the distribution of our public collections via the BitTorrent protocol (as a supplement to traditional HTTP download).

Currently over <u>1.4 million Archive Items</u> are available via the BitTorrent protocol, comprising almost a petabyte of public domain materials.

As testing continues, more and more content will be made available through Torrents. For the details, see the related FAQ, <u>Details of Archive-made Torrents</u>.

BitTorrent download requires an up-to-date BitTorrent client.

For general information on the BitTorrent protocol, see Wikipedia or BitTorrent.com.

Uploading BitTorrents to the Internet Archive

Starting in 2011, the Internet Archive began automatically retrieving BitTorrent files uploaded into most Community collections.

Uploading a Torrent provides a convenient way to upload many files or large contents, provided seeds (including webseeds) are available for the Torrent.

## How to prevent an Archive Torrent from being made

Internet Archive BitTorrents are automatically made for community-contributed items in many collections, and automatically updated when item contents or metadata change.

If you prefer that your item **not** have an Archive Torrent made for it; or that items within a collection you maintain do not, you can prevent Torrents from being made by including the following metadata tag in your item:

#### noarchivetorrent=true

Note: adding this tag does not remove existing Torrents, those must be removed using the Item Manager item file management tool.

For instructions on how to edit an item or collection's metadata, see the FAQ <u>Uploading Content</u>.

#### Why is the Torrent link for an Item lined out (Torrent)?

While an Item is being updated, its Torrent link is temporarily disabled and shown as Torrent.

Changes to an item usually render any existing Archive BitTorrent for it obsolete. Attempts to download obsolete Archive Torrents will usually fail, as described here: My Torrent download never completes?. (Technically, the problem is that when files within an Item change, they can no longer download correctly via webseeding because the piece hashes for updated files change).

The Torrent link will return to normal when the Item finishes updating and the torrent is updated. The Torrent link may be unavailable for a few minutes or a few hours depending on the size of the Item and how busy the Archive processing cluster is (in very rare cases, it might be disabled for a day or more).

Note: obsolete torrents will continue to be tracked by Archive trackers for some time, but will only be retrievable when seeded by peers who have downloaded the referenced version of the item.

#### What are peers, seeds, leechers, and snatches?

BitTorrent is a peer-to-peer file-sharing protocol facilitated by centralized trackers. The Internet Archive runs several BitTorrent trackers to allow for peer discovery.

Archive trackers track (**but do not log or otherwise record**) which peers have pieces of which Torrents; real-time statistics are summarized on <u>tracker hotlists</u> for each of our Trackers.

Internet Archive tracker statistics of interest include:

- Peers: the total number of clients known by the tracker to have pieces of a Torrent, i.e. the sum of seeds and leechers.
- Seeds: the number of clients known by the tracker to have *all* of the pieces of a Torrent available, i.e. those which have downloaded the entire Torrent but remain online.
- Leechers: the number of clients known by the tracker to have *some* of the pieces of a Torrent available, i.e. those currently downloading the Torrent.
- Snatches: the number of clients known by the tracker to have downloaded a given Torrent, but which are not currently seeding it.

Note: Internet Archive seeder and peer counts include webseeds; these seeds are available only when using clients that support Getright-style webseeding.

## Questions

What is non-Commercial Use?

How can I contact the person / group who uploaded an item?

Can I use this \_\_\_\_for\_\_\_

## **Rights**

#### What is non-Commercial Use?

What is non-Commercial Use? Please see https://www.archive.org/iathreads/post-view.php?id=111591

A link the Terms of Use for Archive.org is at the bottom of each page.

## How can I contact the person / group who uploaded an item?

Internet Archive is unable to release any contact information for patrons. However, it may be worth your while to post a review for the item in question - this automatically contacts the uploader's account, notifying them that their upload has been reviewed. You could pose queries/requests for information therein.

#### Can I use this \_\_\_ for \_\_\_?

Internet Archive does not itself seek to limit use of its digital materials. However, we cannot give ironclad guarantees as to the copyright status of items in our Collections and cannot guarantee information posted on

items' details or collection pages regarding copyright or other intellectual property rights. Our terms of use (https://www.archive.org/about/terms.php) require that users make use of Internet Archive's Collections at their own risk and ensure that such use is non-infringing and in accordance with all applicable laws.

The person who uploads an item often provides information related to use rights, either by way of directly entering it in the description field or by selection of a Creative Commons license. The latter, if included by the uploader, will be viewable via a **Creative Commons** logo on the details page, which serves as a link to a description of the specific type of license that the uploader has assigned.

One way to attempt to contact an uploader about information that they have posted is to post a review to the item.

The Internet Archive follows the <u>Oakland Archive Policy</u> for Managing Removal Requests And Preserving Archival Integrity.

You may also find these resources helpful:

#### **CreativeCommons.org**

Chilling Effects Clearinghouse Chilling Effects Clearinghouse

**Electronic Frontier Foundation <u>Electronic Frontier Foundation</u>** 

Please see also:

Who owns the rights to these movies?

https://www.archive.org/about/faqs.php#49

Are there restrictions on the use of the Prelinger Films?

https://www.archive.org/about/faqs.php#197

Can I search Archive.org by Creative Commons License?

https://www.archive.org/about/faqs.php#263

## Questions

There's a problem with the item -- what next?

How can I take my file off the site?

How do I report that there's an issue with an item?

How do I report that something's wrong with a book?

#### Report Item

#### There's a problem with the item -- what next?

Some changes to our system, to individual items, or to collections can take a day to appear on Archive.org. If you're experiencing a problem with an item, we recommend trying again after a day. Often the issue will then have already been resolved.

#### How can I take my file off the site?

If you would like us to take down an item that you have uploaded, please send an email to info -at- archive.org

Please note that you need to include the URL (web address) of the item.

Your email must come from the same email address you used to upload the item. This is the only way we can tell that you are the owner of the item.

As always, if you write in, please be sure any spam filter you have is set to accept email from @archive.org.

Please see also the further resources at https://www.archive.org/about/fags.php#Uploading\_Content

#### How do I report that there's an issue with an item?

The Internet Archive (Archive.org) is a nonprofit library that preserves digital cultural artifacts, and provides online access to over a million users a day with the goal of universal access to all knowledge.

To report an item which violates the Internet Archive's <u>Terms of Use</u>, please send an email **with the URL (web address) of the item** to info -at- archive.org

The Internet Archive follows the <u>Qakland Archive Policy</u> for Managing Removal Requests And Preserving Archival Integrity. (When reviewing the Oakland Archive Policy, please note that information about requests coming from webmasters is information to assist with archived websites in particular.)

For more information, see <a href="https://www.archive.org/about/fags.php#Rights">https://www.archive.org/about/fags.php#Rights</a>.

## How do I report that something's wrong with a book?

If you see an error with a book that the Internet Archive has digitized, we'd appreciate knowing about it!

Please send an email with the URL (web address) of the book, and description of the problem, to info -at-archive.org

In some cases, you may know of *alternate* information about a book that is supplemental to the library bibliographic record. (For example, a new, more modern transliteration of an author's name.)

To share additional information like this, you may wish to post it using the option to write a review of a book.

For more information on the Internet Archive's sponsored scanning, please see <a href="https://www.archive.org/about/fags.php#Texts">https://www.archive.org/about/fags.php#Texts</a> and Books

For more information on books that users upload, or for information on how to upload your own, please see <a href="https://www.archive.org/about/fags.php#Texts">https://www.archive.org/about/fags.php#Texts</a> and Books

#### Questions

#### What is Archive-It?

#### **Archive-It**

## What is Archive-It?

Archive-It is a subscription service that allows institutions to build and preserve collections of born digital content. Through the user-friendly web application, Archive-It partners can harvest, catalog, manage, and browse their archived collections. Collections are hosted at the Internet Archive data center and are accessible to the public with full-text search.

## Why would I subscribe to Archive-It instead of using the Wayback machine at Internet Archive?

Partners to this service can create distinct Web archives called "collections", containing only the born digital content they are interested in harvesting, at whatever frequency suits their needs. All collections are full-text searchable. The collections created with Archive-It can be cataloged with metadata and managed directly by the partner. The Archive-It service maintains a minimum of two copies of each collection online, a primary and a back-up copy.

#### How frequently can I archive Web sites?

Archive-It is very flexible: you can harvest material from the Web using ten different frequencies, from daily to annually. Partners can select different crawl frequencies for each chosen URL. Additionally, your institution can also chose to start a crawl "on demand" in the case of an unforeseen spontaneous or historic event.

## Who gets access to the collections created in Archive-It?

By default, all collections are available for public access from the main page at <a href="www.archive-it.org">www.archive-it.org</a>. However, a partner can choose to have their collection(s) made private by special arrangement.

#### How can I search the collections?

Archive-It provides full text search capability for all public collections. You can also browse by URL from the list provided for each collection. The public can browse and search collections by partner type or collection from www.archive-it.org.

#### What types of institutions can subscribe to Archive-It?

Archive-It is designed to fit the needs of many types of organizations. The 190+ partners include state archives and libraries, university libraries, federal institutions, non government non profits, museums, art libraries, and local city governments.

## Who decides which content to archive in Archive-It?

Partners develop their own collections and have complete control over which content to archive within those collections.

#### Where is the data stored for Archive-It collections?

All data created using the Archive-It service is hosted and stored by the Internet Archive. We store two copies online and are working with partners to have redundant copies in other locations. Partners can also request a copy of their data for local use and preservation to be shipped either on a hard drive or over the internet.

## Questions

What equipment does the Internet Archive use? What APIs?

#### **Equipment**

## What equipment does the Internet Archive use? What APIs?

Storage systems used by the Internet Archive:

- Large Scale Data Repository: Petabox <a href="http://www.petabox.org">http://www.petabox.org</a>
- Datacenter in a shipping container -- Internet Archive launch with Sun

Equipment and software used in the Internet Archive's scanning and OCR services for Contributing Libraries

• The Scribe system

Documents describing how to use Archive software and services, maintain "special" servers, and so on. Includes our API to archive.org services using JSON format.

https://www.archive.org/help

AQ Forum ⊠ RSS			New Po
Subject	Poster	Replies	Date
Create Collection?	UMass Boston Global Library	0	May 14, 2014 11:15p
Create Collection?	UMass Boston Global Library	1	May 14, 2014 11:15p
Re: Create Collection?	Jeff Kaplan	0	May 15, 2014 11:32a
D3 tag images in derive	Hungerburg	0	May 11, 2014 6:15ar
D3 tag images in derive	<u>Hungerburg</u>	0	May 11, 2014 6:15an
Nhy was my account locked up today?	Archival Benedictus Patris	1	May 9, 2014 5:03pm
Re: Why was my account locked up today?	Jeff Kaplan	1	May 10, 2014 11:47a
Re: Why was my account locked up today?	BenjaminS.T.	0	May 10, 2014 2:45pr
How to delete old documents	Alexandra Aubertin	0	May 9, 2014 11:07ar
How to delete old documents	Alexandra Aubertin	1	May 9, 2014 11:07ar
Re: How to delete old documents	Jeff Kaplan	1	May 9, 2014 2:53pm
Re: How to delete old documents	<u>dreken</u>	0	May 16, 2014 9:39ar
Bug in etree entry processing	Hungerburg	1	May 4, 2014 6:37am
Re: Bug in etree entry processing	Jeff Kaplan	0	May 4, 2014 1:12pm
<u>Naybackup.pl</u>	<u>nivai</u>	1	May 4, 2014 5:47am
Re: Waybackup.pl	Jeff Kaplan	1	May 4, 2014 1:06pm
Re: Waybackup.pl	<u>nivai</u>	1	May 4, 2014 1:14pm
Re: Waybackup.pl	<u>Jeff Kaplan</u>	0	May 4, 2014 1:38pm
old nhl fansites questions	davebeni	0	Apr 27, 2014 12:18p
<u>Delete</u>	SPETTRO rec	1	Apr 25, 2014 3:37an
Re: Delete	<u>Jeff Kaplan</u>	0	Apr 25, 2014 11:53a
Jpload date is not displayed with collections indexes	rwinkel	0	Apr 19, 2014 11:09a
Fech issue - Can't access the site	<u>Friendoftapers</u>	2	Apr 19, 2014 9:17an
Re: Tech issue - Can't access the site	Jeff Kaplan	0	Apr 19, 2014 12:48p
Re: Tech issue - Can't access the site	tracey pooh	0	Apr 20, 2014 10:46a
No bookreader URL created?	DigitalCommonsFraminghamStateUniversity	1	Apr 15, 2014 9:58an
Re: No bookreader URL created?	Jeff Kaplan	0	Apr 15, 2014 1:55pn
Content doesn't match	pappypgh	0	Apr 7, 2014 7:43am
Please delete	Tritonair	1	Apr 7, 2014 5:17am
Re: Please delete	Jeff Kaplan	0	Apr 7, 2014 8:19pm
How to Convert PST to EML	mexdisuza	0	Apr 2, 2014 9:11pm
Why Community book not completed schedule task	Jayanta Nath	1	Apr 2, 2014 1:42pm
Re: Why Community book not completed schedule task	Jayanta Nath	1	Apr 2, 2014 1:40pm
Re: Why Community book not completed schedule task	Jeff Kaplan	1	Apr 3, 2014 10:30an
Re: Why Community book not completed schedule task	Jayanta Nath	0	Apr 3, 2014 9:16pm
There are many bugs such as "1000."	Tsukasa Kuwabara Ph.D.	0	Apr 2, 2014 1:24am
Spam item	Phredi Jay	0	Apr 1, 2014 9:49pm
Please delete the old page with error as sent in mail	bh12	1	Apr 1, 2014 9.49pm Apr 1, 2014 12:16pm
. •		1	
Re: Please delete the old page with error as sent in mail	<u>bh12</u>		Apr 1, 2014 12:17pn
Re: Please delete the old page with error as sent in mail	<u>bh12</u>	0	Apr 1, 2014 12:07pn
Delete corrup items thanks	enrique689	0	Mar 26, 2014 6:46ar

requently Asked Questions			
PLEASE REMOVE ALL SITES FROM ROBERTO PATRON	pleaseremove	0	Mar 24, 2014 1:57pm
I Have Uploads That I Wish To DELETE	Laudanum Productions	0	Mar 24, 2014 10:26an
Please delete the link	Leonov I.V.	1	Mar 23, 2014 8:22pm
Re: Please delete the link	Jeff Kaplan	0	Mar 23, 2014 9:24pm
Link to a Band already on archive?	<u>BrenchCT</u>	2	Mar 19, 2014 8:43am
Re: Link to a Band already on archive?	vapors	1	Mar 19, 2014 9:25am
Re: Link to a Band already on archive?	<u>BrenchCT</u>	0	Mar 19, 2014 10:22an
Re: Link to a Band already on archive?	Jeff Kaplan	1	Mar 19, 2014 6:49pm
Re: Link to a Band already on archive?	<u>BrenchCT</u>	1	Mar 20, 2014 5:00am
Re: Link to a Band already on archive?	Jeff Kaplan	2	Mar 20, 2014 6:25am
Re: Link to a Band already on archive?	<u>BrenchCT</u>	0	Mar 21, 2014 5:35am
Re: Link to a Band already on archive?	<u>BrenchCT</u>	1	Mar 21, 2014 5:35am
Re: Link to a Band already on archive?	vapors	0	Mar 23, 2014 9:34am
Please delete my items	<u>HBCEU</u>	1	Mar 13, 2014 11:57pn
Re: Please delete my items	Jeff Kaplan	2	Mar 11, 2014 6:45am
Re: Please delete my items	<u>HBCEU</u>	0	Mar 12, 2014 12:46an
Re: Please delete my items	<u>HBCEU</u>	0	Mar 13, 2014 11:55pm
Please Delete Items	<u>otterman</u>	0	Mar 13, 2014 7:06pm
Compression/deduplication	<u>EchoBrightstorm</u>	1	Mar 12, 2014 8:44am
Re: Compression/deduplication	Jeff Kaplan	1	Mar 12, 2014 11:27ar
Re: Compression/deduplication	<u>EchoBrightstorm</u>	0	Mar 13, 2014 6:44pm
HTML code	<u>Irishenchik</u>	0	Mar 10, 2014 11:11pr
HTML code	<u>Irishenchik</u>	0	Mar 10, 2014 11:11pr
Deletion Request	sethian	1	Mar 3, 2014 7:06pm
Re: Deletion Request	Jeff Kaplan	0	Mar 8, 2014 12:58pm
Please delete item	<u>icacreno</u>	1	Mar 3, 2014 3:00pm
Re: Please delete item	Jeff Kaplan	0	Mar 8, 2014 12:56pm
Please delete item	<u>otterman</u>	1	Mar 3, 2014 6:10am
Re: Please delete item	Jeff Kaplan	0	Mar 8, 2014 12:55pm
Please remove	<u>ihtltd</u>	0	Feb 28, 2014 2:35pm
Do websites record history of visiting even in the past?	<u>legithc</u>	0	Feb 28, 2014 1:34pm
Delete multiple items + 1 request of information	<u>otterman</u>	1	Feb 28, 2014 7:49am
Re: Delete multiple items + 1 request of information	Jeff Kaplan	0	Feb 28, 2014 8:41am
please delete	Deathsoundbat Recordings	1	Feb 27, 2014 9:57am
Re: please delete	Jeff Kaplan	2	Feb 27, 2014 10:10ar
Re: please delete	Deathsoundbat Recordings	0	Mar 30, 2014 5:49am
Re: please delete	Deathsoundbat Recordings	1	Mar 30, 2014 5:49am
Re: please delete	Jeff Kaplan	0	Mar 30, 2014 7:34am
Wayback: How to deal with redirects	Samuel Bronson	0	Feb 27, 2014 9:16am
download video	Sblum4	0	Feb 21, 2014 1:25pm
Please delete	<u>TempSky</u>	0	Feb 18, 2014 5:33pm
is there a way to make a video stream-only?	<u>fabGear</u>	0	Feb 18, 2014 2:33pm
e-mail privacy?	<u>fabGear</u>	0	Feb 18, 2014 2:24pm
Please remove this archive	archiveint	1	Feb 17, 2014 12:29a
Re: Please remove this archive	Jeff Kaplan	0	Feb 17, 2014 9:54am
Can I pay to have more archives for my domains?	charles@dwhs.net	0	Feb 14, 2014 3:29pm
Please delete this item	Ezeguiel Garzon	1	Feb 11, 2014 12:21ar
rease delete triis item	<u> </u>		

e Frequently Asked Questions						
Re: Please delete this item	Ezequiel Garzon	0	Feb 11, 2014 12:41am			
Please delite the paige	Adamyauhen	0	Feb 10, 2014 11:29pm			
Excluded?	ralphus44	0	Feb 10, 2014 4:26pm			
The Mary Lee Taylor Program? Where did it go?	<u>cutifulvwc</u>	0	Feb 10, 2014 12:18pm			
OGG video file with wrong extension - fixable?	Almansi	1	Feb 10, 2014 9:19am			
Re: OGG video file with wrong extension - fixable?	Jeff Kaplan	1	Feb 10, 2014 12:48pm			
Re: OGG video file with wrong extension - fixable?	<u>Almansi</u>	1	Feb 10, 2014 1:35pm			
Re: OGG video file with wrong extension - fixable?	Almansi	0	Feb 10, 2014 3:01pm			
Please Delete Item	<u>otterman</u>	1	Feb 10, 2014 5:43am			
Re: Please Delete Item	Jeff Kaplan	1	Feb 10, 2014 8:53am			
Re: Please Delete Item	<u>otterman</u>	1	Feb 10, 2014 10:28am			
Re: Please Delete Item	Jeff Kaplan	0	Feb 10, 2014 10:35am			
delete this item please	<u>jed.tv</u>	1	Feb 4, 2014 4:58pm			
Re: delete this item please	Jeff Kaplan	1	Feb 4, 2014 8:59pm			
Re: delete this item please	<u>jed.tv</u>	0	Feb 5, 2014 4:23pm			
Delete this item please.	<u>AminCells</u>	0	Feb 4, 2014 3:51pm			
new copies - could I order ?	mteppone	0	Feb 4, 2014 12:16am			
Self-splitting of pages by OCR engine	Alex.brollo	1	Feb 3, 2014 2:59pm			
Re: Self-splitting of pages by OCR engine	Jeff Kaplan	1	Feb 3, 2014 3:46pm			
Re: Self-splitting of pages by OCR engine	Alex.brollo	0	Feb 3, 2014 10:13pm			
Check for hash (md5 or sha1) to search item or verify S3 upload	Nemo_bis	1	Feb 2, 2014 4:17am			
Re: Check for hash (md5 or sha1) to search item or verify S3 upload	Jeff Kaplan	1	Feb 2, 2014 9:48am			
Re: Check for hash (md5 or sha1) to search item or verify S3 upload	Nemo bis	0	Feb 2, 2014 10:27am			
Please Delete	beachdude1789	0	Jan 31, 2014 6:32am			
Flagging an item as spam.	Sfan00	0	Jan 30, 2014 12:53pm			
Please delete/rename	rangerdangerpodcast	1	Jan 27, 2014 3:45pm			
Re: Please delete/rename	Jeff Kaplan	1	Jan 27, 2014 4:55pm			
Re: Please delete/rename	FaithBridge Presbyterian Church	1	Apr 21, 2014 2:22pm			
Re: Please delete/rename	Jeff Kaplan	0	Apr 23, 2014 10:21am			
I need to change Community Media to Community Audio	<u>otterman</u>	0	Jan 27, 2014 2:42pm			
How to change title from Community Media to Community Audio	<u>otterman</u>	0	Jan 27, 2014 2:38pm			
How to change title from Community Media to Community Audio	<u>otterman</u>	1	Jan 27, 2014 2:38pm			
Re: How to change title from Community Media to Community  Audio	Jeff Kaplan	0	Jan 27, 2014 4:45pm			
How to correct an error that identifies the collection a file is in	Greybelt	1	Jan 26, 2014 7:05pm			
Re: How to correct an error that identifies the collection a file is in	Jeff Kaplan	1	Jan 27, 2014 7:13am			
Re: How to correct an error that identifies the collection a file is in	Greybelt	0	Jan 27, 2014 7:20am			
This URL has been excluded from the Wayback Machine	francescoGiroldini	0	Jan 22, 2014 6:09pm			
<u>View more forum posts</u>						

Terms of Use (10 Mar 2001)

Universal access to all knowledge

Donate | Store | Blog | FAQ | Jobs | Volunteer Positions | Contact | Bios | Forums | Projects | Terms, Privacy, & Copyright

Search:

All Media Types

Advanced Search

Anonymous User (login or join us)

Upload

## News [more]

How Brewster Kahle is using open-source principles to build affordable housing for non-profit workers

Someone in San Francisco is digitizing 40,000 homemade VHS tapes

How to preserve the webâ €<sup>™</sup>s past for the future

Down the memory hole

A New Map Reveals the Geography of American TV News

**Brewster Kahle** 

**Banking with Bitcoin** 

**Internet Archive** 

Bit rot: The Internet never forgets, or does it?

Flowers for Bitcoin: A Large Exchange Sputters, but Digital Currency Stays Afloat in San Francisco

## Job Opportunities at the Internet Archive

#### UK Regional Digitization Manager

#### Goal

To set up and manage a professional, high quality regional digitization Scanning Centre at the Wellcome Trust. The UK Regional Digitization Manager (UK-RDM) should be capable of leading the team to process non-digital items into digital items at targeted rates, targeted gross margins and acceptable quality levels, while ensuring the project timeline is met.

#### **Duties**

Overall responsibility for the Scanning Centre rests with the UK-RDM. He/she will be charged with balancing quality scanning against measured output. He/she will also, maintain a positive, professional work environment compatible with the work and cultural environment the Scanning Centre is based in. He/she will work closely with his/her management to be responsive to the needs of the Partner library(ies); balanced against the goals and needs of the Internet Archive. He/she will have hiring/firing responsibilities contingent upon the guidelines set out by his/her Supervisor.

## Specifics:

- Maintain and ensure all Internet Archive rules and governance, governmental, and appropriate host library guidelines are followed.
- Interview, hire and train staff capable of performing all the required duties inside the centre which include scanning at both a high level of quality and at a target rate;
- The UK-RDM will also comply with stated guides lines put in place by his/her management for expenses, HR related items, and partner relations. The UK-RDM will not sign any legal documents or make changes to the library partner-Internet Archive specs without consulting his/her supervisor
- · Good understanding of latest web framework technologies and aspects of web technology and protocols
- Create a positive work environment that balances individualism with teamwork and has the expectation of continuous improvement.
- Coordinate the shipping and receiving of shipments from participating institutions outside of the Scanning Centre
- Establish and maintain good relations with the applicable library hosts and partners.
- Follow existing processes and procedures as outlined by the Internet Archive engineering and operations
  management. This will follow, as appropriate, elements of LEAN manufacturing.
- Provide clear and consistent communication to his/her management on issues that will impact cost, productivity, and quality or impact Partner Library relations.
- · Maintain scanning equipment in accordance with preventative maintenance schedules.
- Develop specific processes and procedures as is necessary to catalog, digitize and republish non-digital items at a consistent rate.
- Care for the non-digital items! Customize check in/checkout procedures for those in accordance with Partner Library.
- · Provide feedback to engineering team as is necessary on problems or cost reduction opportunities.
- Assist in identifying and obtaining future or new digitizing opportunities.
- At all times, be aware, that, he/she will be the main "face†of the Internet Archive and as such will
  conduct him/herself and manage his/her team accordingly.
- And take on other tasks or projects as requested by his/her management.

## To apply:

Please send your resume and cover letter to <a href="jobs@archive.org">jobs@archive.org</a> with the subject line "UK Regional Digitization Manager" The Archive thanks all applicants for their interest, but advises that only those selected for an interview will be contacted. No phone calls please! We are an equal opportunity employer.

#### **About the Internet Archive**

Internet Archive is a 501(c)(3) non-profit library founded in 1996. Our motto is Universal Access to All Knowledge. We collect web sites, books, audio, videos, software, and other types of media and make them available to the world for free.

## **Wayback Machine Senior Engineer**

The Internet Archive's Wayback Machine is the world's largest public archive of historical web sites. Have you ever wanted to work with 400 billion things at once? Would you like to serve 1,500 requests per second? How about having your service referred to regularly in news articles and blog posts across the web? You can work on a challenging and popular project and help the world at the same time.

We are looking for a smart, collaborative and resourceful engineer to help develop the next version of the Wayback Machine. We are also looking for someone who wants to dive in and help us figure out better processes, which may include code review, technical oversight and pair programming. The ideal candidate will possess a desire to work collaboratively with a small internal team and a large, vocal and active user community; demonstrating independence, creativity, initiative and technological savvy, in addition to being a great programmer/architect.

The Ideal Candidate will have:

- · 2-3 years work experience in Python, or similar
- · Experience working in linux environment
- Familiarity with Java (current deployment is written in Java)
- Good understanding of latest web framework technologies and aspects of web technology and protocols
- · Flexibility and a sense of humor
- · BS Computer Science, or equivalent work experience

#### Bonus points for:

- Experience with web crawlers and/or applications designed to display archived web content (especially server-side apps)
- · Cluster computing experience
- · Open source practices experience

#### To apply:

Please send your resume and cover letter to <a href="jobs@archive.org">jobs@archive.org</a> with the subject line "Wayback Machine Senior Engineer." The Archive thanks all applicants for their interest, but advises that only those selected for an interview will be contacted. No phone calls please! We are an equal opportunity employer.

## **About the Internet Archive**

Internet Archive is a 501(c)(3) non-profit library founded in 1996. Our motto is Universal Access to All Knowledge. We collect web sites, books, audio, videos, software, and other types of media and make them available to the world for free.

## **Software Project Engineer**

#### Goal

Our non-profit mission at the Internet Archive is to create a digital library of internet sites and other cultural artifacts in digital form. This is to provide free access to researchers, historians, scholars and the general public.

## **Duties**

The duties of this position are to support a global Books digitization division that works with items born digital and items not born digital. The software and technical support of this position would include:

- 4,000+ eBooks/week that are digitized, uploaded and processed from 30+ centers located on 4 continents.
   Keeping this pipeline working and efficient.
- 2. During any given month, there are 20 million items downloaded from our web sites that rank in the top 200 global web sites. How to learn from the user behavior and help keep this number growing.
- 3. There is over 1 Petabyte of data to manage. The questions we are asking are: is it in the right format, does it have the right features and contemporary tools for discovery and analysis and so on.
- 4. The type of digital data is changing and is not related to just books or printed material. As such the successful engineer will be part of an expanding universe of content that will be captured, posted and shared.
- A diverse, dedicated staff that can range from 75-300 people depending on contracts, funding or commitments. This person will need to field answers to questions and solve problems that pop up as part of the operation.

#### **Reporting Structure**

The Software Project Engineer reports to the Global Director of Books The Software Project Engineer will work closely with the Process Manager who will help define, detail and concept the needs of the user community. The Software Project Engineer will work closely with the technical team that supports the server infrastructure; the audio/video/TV and other media content forms and the web team.

## **Specifics**

- 1. Programming A wide variety of software languages are used inside the Internet Archive. PHP and JavaScript are the most common followed by Python. Other programming languages will be required as is necessary. Web app UI design experience is a plus. Experience working and creating API's is a plus
- Problem solving A creative, flexible approach that combines teamwork with individualism will be expected. Quick, functional solutions are the norm versus complex, elegant designs
- 3. Code There is a large code base that needs to be maintained, improved where necessary and rewritten as appropriate. A bug tracking system is employed that will help the software engineer know where to focus his/her efforts.
- 4. Type of problems These can range from crisis (a production center is down) to planned improvements that will improve quality or reduce cost. A Process Manager will assist the Software Project Engineer to strike the correct balance of support
- This individual will need to provide provide clear and consistent communication to his management on issues that will impact cost, productivity, quality or impact Partner Library relations

6. At all times, be aware, that, the position will be part of the culture of the Books Division and a part of headquarters staff. Attitude, positive energy and creative force will be vital to not only his/her personal success, but also the contribution to the overall team and support of the non-profit mission.

#### **Experience and Characteristics**

- Proven, successful experience working in an Internet non-profit environment would be helpful, but not required
- 2. Comfortable in a project based, decentralized work environment.
- 3. Exposure or knowledge of library file structures (i.e. MARC, Dublin Core, Mets) or media formats such as audio, video or TV would be a plus.
- 4. Experience with programming embedded devices (i.e. Cameras)
- 5. Experience with GUI development for user interfaces.
- 6. Experience with large (billions) of files and a wide variety of file formats a plus.
- 7. Personality wise; good cheer, being a team player, conscientious and a hard-worker will help this person be more successful and accelerate their inclusion in the team (think of a start up environment, but not quite the same killer hours.)

#### Location

300 Funston Street San Francisco, Ca. 94118

#### Contact

jobs@archive.org

#### Include

- 1. Cover letter why do you want to join our team?
- 2. Resume
- 3. Salary history

## Web Application/Software Developer for Archive-It

The Internet Archive is looking for a smart, collaborative and resourceful engineer to develop the next generation of the Archive-It service, a web based application used by libraries and archives around the world. Archive-It is a self-sustaining subscription service first launched in 2006 and widely considered to be the market leader since its' inception. www.archiveit.org

The Internet Archive is a digital public library founded in 1996 and has the largest publicly available web archive in existence, archive.org.

Our current system is primarily Java based and we are looking to help build the next-generation of Archive-It using the latest web technologies. We are also looking for someone who wants to dive in and help us figure out better processes, which may include code review, technical oversight and pair programming.

The ideal candidate will possess a desire to work collaboratively with a small internal team and a large, vocal and active user community; demonstrating independence, creativity, initiative and technological savvy, in addition to being a great programmer/architect.

## The Ideal Candidate will have:

- 2-3 years work experience in Java and/or Python
- Experience with Hadoop, specifically HBase and Pig
- Experience developing web application database back-end (SQL or NoSQL).
- Good understanding of latest web framework technologies and aspects of web technology and protocols
- Flexibility and a sense of humor
- BS Computer Science, or equivalent work experience

## Bonus points for:

- Experience with web crawlers and/or applications designed to display archived web content (especially serverside apps)
- Open source practices experience
- · Experience building out a mobile platform

To apply:

Please send your resume and cover letter to kristine at archive dot org with the subject line "Web App Developer Archive-It".

The Archive thanks all applicants for their interest, but advises that only those selected for an interview will be contacted. No phone calls please!

We are an equal opportunity employer.

Terms of Use (10 Mar 2001)

Donate | Store | Blog | FAQ | Jobs | Volunteer Positions | Contact | Bios | Forums | Projects | Terms, Privacy, & Copyright

Search:

All Media Types

Q Advanced Search

Anonymous User (login or join us)

Upload

## News [more]

How Brewster Kahle is using open-source principles to build affordable housing for non-profit workers

Someone in San Francisco is digitizing 40,000 homemade VHS tapes

How to preserve the webâ €™s past for the future

Down the memory hole

A New Map Reveals the Geography of American TV News

**Brewster Kahle** 

**Banking with Bitcoin** 

**Internet Archive** 

Bit rot: The Internet never forgets, or does it?

Flowers for Bitcoin: A Large Exchange Sputters, but Digital Currency Stays Afloat in San Francisco

## Volunteer Positions

#### Event Volunteer

#### **Event Volunteer**

Would you like to help the Internet Archive out with some of our events?

We host around 12 events a year and are looking for ushers to help welcome, seat guests and collect their admission tickets.

After everyone is seated, you and a guest, are more then welcome to stay for the event for free! After volunteering with us for 6 events - you get a Internet Archive sweatshirt.

If you are interested, please contact

june@archive.org

#### Volunteer VHS/CD burner

#### Volunteer VHS/CD burner

#### About the Internet Archive

The Internet Archive is a non-profit that was founded to build an Internet library. Its purposes include offering permanent access for researchers, historians, scholars, people with disabilities, and the general public to historical collections, which exist in digital format. Founded in 1996 and located in San Francisco, the Archive has been receiving data donations from Alexa Internet and others. In late 1999, the organization started to grow to include more well-rounded collections. Now the Internet Archive includes texts, audio, moving images, and software, as well as archived web pages in our collections, and provides specialized services for adaptive reading and information access for the blind and other persons with disabilities.

Under the direction of the Director of Administration, the Volunteer VHS/CD burner is responsible for:

- putting tapes into vcrs, putting dvds into dvd burners and operating the machines in a gentle and organized way
- · verifying that the right video and audio are going to the right pieces of equipment
- checking video and audio quality, and solving simple problems (cleaning tape?, unplugged cable?)
- running the consumer-type dvd recorder & vcrs to copy tapes onto dvd per the documented methods
- $\bullet\,$  making sure the equipment and media are handled in a gentle & preserving way
- keeping track of which media (tapes, dvds etc.) are where they are in the workflow
- taking instructions from technically minded people and understanding (and integrating) them in a direct & also conceptual manner.

#### Skills:

- · Learn the approved method
- Master all methods of Quality Assurance involved in the process in order to assure the creation of an accurate product
- Learn the various problems one can run across while working on collections, in order to bring them to the attention of the supervisor
- Treat the equipment with utmost respect and care during the process

#### **Education and Experience**

- · Bachelors degree
- Knowledge of customer service principles and practices
- Knowledge of relevant computer applications
- · Knowledge of administrative procedures
- Basic IT knowledge

## **Key Competencies**

- · Interpersonal skills
- · Communication skills verbal and written
- · Listening skills
- Problem analysis and problem-solving
- · Attention to detail and accuracy
- Customer service orientation

- Adaptability
- Initiative
- · Stress tolerance

#### Commitment

- This volunteer position is for a min of 3 months, 10 hours a week
- The Internet Archive is open Monday Friday, 9:00am to 5:00pm

#### Benefits:

- · Learning from and collaborating with one of the best non-profits in San Francisco
- · Networking and exposure to non-profit professional work
- Being part of a positive, mission-oriented non-profit
- A great letter of recommendation/reference (upon completion of fulfilled duties)
- Helping build a digital library
- Free staff lunch on Friday's
- Blue Bottle Coffee
- Beverage fridge
- · Fresh fruit brought in everyday
- · Snack drawer

If interested please send a cover letter expressing your interest to the following jobs@archive.org

#### Volunteer Scanning Positions

#### **Volunteer Scanning Positions**

The Internet Archive is a non-profit organization working with 80+world-class universities and libraries to create the world's largest digital open-source library.

The Internet Archive is looking for interns to help us upload books and work on other interesting projects.

We need your help! If you can give us some of your time, we can give you a chance to help bring digital knowledge to others both near and far! Come join us! We can offer college credit in exchange for your volunteering. Volunteer Scanner Positions

Basic knowledge of computers, digital files helpful. Pleasant, low-stress work environment. A love of books is a plus.

Gain experience in the following fields of endeavor: building an open source digital library, digital photography, and digital scanning software, preservation, presentation and production of digital books. Digitizing special collection books from different centuries. Understanding copyrights and public domain materials.

Commitment: Assistance is needed Monday through Friday from 8:00am to 5:00pm. Position involves a commitment of a minimum 3 hours and up, at least one day a week, as well as a minimum commitment length of one month.

For those interested in bolstering their credentials, we offer a four-hour, one day a week, six-week internship. Applicable fields of endeavor include digital photography, digital media, Non-Profit, Library Science, Computer Science. We will train you on Scribe 2 software.

Interrelations: The volunteer Scanner will interact with the Coordinator, the professional scanning staff and other volunteers.

#### Physical/Special Requirements:

- Must have reasonable computer skills; e.g. can navigate desktop and computer programs.
- Must be able to work independently.
- Must be able to lift heavy books.
- Must be able to sit for 1-2 hour periods and are comfortable with repetitive motion.
- Must be able to gently handle special collection books.
- Must have the desire to contribute to the world's largest digital open source library.

## THIS IS A NON-PAYING VOLUNTEER POSITION

If interested please send a cover letter expressing your interest to the following:

- For Indiana (Fort Wayne): jeffs@archive.org,
- · For Princeton: stacy@archive.org,
- For Boston: stacey@archive.org,
- For Toronto: gabe@archive.org

Terms of Use (10 Mar 2001)

Advanced Search

All Media Types

Universal access to all knowledge

Donate | Store | Blog | FAQ | Jobs | Volunteer Positions | Contact | Bios | Forums | Projects | Terms, Privacy, & Copyright

Search:

Q Advanced Search

Anonymous User (login or join us)

Any field: contains

AND Title: contains

AND Creator: contains

AND Description: contains

AND Collection: All collections is AND Mediatype: All mediatypes is

AND Custom field contains

AND Custom field contains

AND Custom field contains

AND Date: YYYY MM DD

AND Date range: YYYY MMDD TO YYYY MM DD

## Advanced Search returning JSON, XML, and more

This will return results in the format of your choice.

Query:

Fields to return (pick one or more): (optional) Sort results by:

avg\_rating call number collection contributor

coverage creator date

description downloads

foldoutcount format

headerImage

identifier imagecount language

licenseurl mediatype month num\_reviews

oai\_updatedate publicdate publisher

rights scanningcentre source

subject title type volume

week year

Number of results:

Page:

Indent response:

JSON format:

XML format: save to file:

HTML table:

CSV format: (show/hide help)

**RSS** format:

("Fields to return" ignored)

Instructions for using the advanced search engine to create reports for items pertaining to books...

#### Notes

- You can try constructing a search query and hitting "Search" in the top "Advanced Search" section and then coming "back" to this section to copy that query into the "Query:" box.
- "downloads" is the number of downloads for content in an item
- "month" is the number of downloads in the last 30 days
- "week" is the number of downloads in the last 7 days
- We have a known bug in our site with using "TO" in things like titles/descriptions. If you run into a problem and need to use "TO", use it lowercase and you will avoid this bug.

#### Dates and ranges

The following dates can be used for range queries:

- addeddate
- createdate
- date
- indexdate
- publicdate
- reviewdate
- updatedate

The special date field, "oai\_updatedate", can be used to mean all of the following dates combined:

- addeddate
- indexdate
- publicdate
- reviewdate
- updatedate

The rationale for "oai\_updatedate" date merging is to allow something like the Open Archives Initiative protocol get time-sortable lists of updated or added items.

- addededate -- should be time the item was initially added to archive
- indexdate -- should be last time item had a change that updated our search engine
- publicdate -- should be, for \*most\* items, the time after its first derive is done (ie: has "public formats" for a /details/ page)
- reviewdate -- updated to be the most recent time of all reviews (updated on new reviews and review changes)
- updatedate -- mostly the time of the last /editxml/ page submit for an item

## Example date ranges:

```
updatedate:[2007 TO 2008]
createdate:[2007-02-01 TO 2007-02-11]
```

For dates like "sponsordate" that are not able to do ranges, they can still use \* wildcards, for example:

```
sponsordate:200802*
```

#### Example queries

```
publicdate:[2008-02-01 TO 2008-03-01] AND
contributor:smithsonian
```

sponsordate:200802\* AND mediatype:texts

indexdate:[2008-02-01T00:12:00Z TO 2008-0301T00:23:59Z]

## Explanation of Terms, Operators, Queries, and Grouping

Here, you will find an explanation on how the syntax to the search engine works.

Our site uses the **Apache Lucene** opensource search engine library and uses its <u>lucene query syntax</u>. A briefer explanation of the syntax follows.

#### Terms:

The search engine supports two types of terms, single terms and phrases. A single term is a single word such as "test" or "hello".

A phrase is a group of words such as "duck and cover".

## Field Specific queries:

If you want to restrict your search to a specific part of the metadata, you can append in front the term a Field Shortcut, such as:

will look for "Duck and Cover" only in the title of the items. For more information on Field Shortcuts, see section about Field Shortcuts Expansion NOTE: searching in only a restricted set is better than using the default set for two reasons:

- 1. it's much faster
- 2. the results are much more relevant

#### **Boolean Operators:**

By default, the operator is AND, which means that the query:

is exactly similar to test AND hello, which means that documents containing the term "test" AND the term "hello" will be returned.

The query:

will return documents either containing the term "test" OR the term "hello". The query:

will return documents that contain the term "test" but not the term "hello" NOTE: using the NOT operator, be sure to supply at least one term without the NOT, or search will fail (the query NOT test is not valid).

#### **Range Queries:**

range queries allow you to search for documents whose field match values in between two bounds, for example:

will return items whose download count is between 1000 and 2000. using [] will include the bounds in the search, and () will exclude the bounds from the search If you don't want to specify a bound, you can use the special keyword "null":

will search for items with more that 10000 downloads.

#### Boosting a term:

Boosting allows you to control the relevance of a document by boosting its term. For example, if you are searching for war gulf and you want the term "gulf" to be more relevant boost it using the ^ symbol along with the boost factor next to the term. You would type:

This will make documents with the term gulf appear more relevant.

#### Grouping:

The search engine supports using parentheses to group clauses to form subqueries, for example:

you can also use this feature within a field:

## **Fuzzy Queries:**

If you are not sure how to spell a word you can ask the search engine to try to figure it out for you. To do this, append a  $\sim$  after the term to apply it on, for example:

will find the words buttonwood, as well as cottonwood and buttonware. NOTE: this query involves a lot of computing, so use it wisely and expect to wait a little for results to come in!

Terms of Use (10 Mar 2001)

## **Get a Virtual Library Card**

Complete the form below to create a new Internet Archive account:

Your email address verification required

Choose a screen name displayed with your reviews, etc.

Choose a password

Confirm password

#### **Internet Archive announcements:**

Send me general announcements from the Internet Archive (approx. one per month) Send me announcements about Internet Archive events in the San Francisco Bay Area

#### Terms of Use:

I've read and agreed to Internet Archive's Terms of Use

Terms of Use (10 Mar 2001)

## Donate

## Donate to the Internet Archive!

Help us keep the library free for millions of people by making a tax-deductible donation today. Donors will receive an email confirmation of their donation that can be used for tax records.



Brewster Kahle Founder & Digital Librarian

Hello Patron,

Every day 3 million people use our collections.

We have archived over ten petabytes (that's 10,000,000,000,000,000 bytes!) of information, including everything ever written in <u>Balinese</u>. This year we also launched our groundbreaking <u>TV News Search and Borrow service</u>, which former FCC Chairman Newton Minow said "offers citizens exceptional opportunities" to easily do their own fact checking and "to hold powerful public institutions accountable."

Your support helps us build amazing services and keep them free for people around the globe.

Please make a donation today.

## Register for a library card?

Login or Register your library card in order to become a member of the Internet Archive, so we can thank you!

## 1. Pick your donation type

One-Time Subscription

A one-time donation is a good way to support the Internet Archive's work if you don't want to commit to a monthly donation.

## 2. Pick your donation level

\$25 \$50 \$100 \$250 \$1000

Or choose your own amount.

## 3. Select a payment service

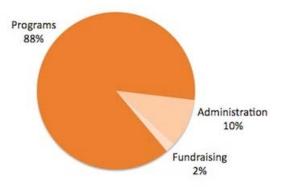








## Where your money goes



## Want to contribute another way?

Tax ID: 94-3242767

If you'd like to contribute another way, please contact us at <a href="mailto:donations@archive.org">donations@archive.org</a>.

Or mail your donation to: Internet Archive 300 Funston Avenue San Francisco, CA 94118

# Your support is vital to us. Thank you.

Terms of Use (10 Mar 2001)



All Media Types

Advanced Search



# Wayback Machine APIs

The Internet Archive Wayback Machine supports a number of different APIs to make it easier for developers to retrieve information about Wayback capture data.

The following is a listing of currently supported APIs. This page is subject to change frequently, please check back for the latest info.

Updated on September, 24, 2013

# Wayback Availability JSON API

This simple API for Wayback is a test to see if a given url is archived and currenlty accessible in the Wayback Machine. This API is useful for providing a 404 or other error handler which checks Wayback to see if it has an archived copy ready to display. The API can be used as follows:

http://archive.org/wayback/available?url=example.com
which might return:

if the url is available. When available, the **url** is the link to the archived snapshot in the Wayback Machine At this time, archived\_snapshots just returns a single **closest** snapshot, but additional snapshots may be added in the future.

If the url is not available (not archived or currently not accessible), the response will be:

```
{"archived_snapshots":{}}
```

# Other Options

Additional options which may be specified are timestamp and callback

• timestamp is the timestamp to look up in Wayback. If not specified, the most recenty available capture in Wayback is returned. The format of the timestamp is 1-14 digits (YYYYMMDDhhmmss) ex:

```
http://archive.org/wayback/available?url=example.com&timestamp=20060101
```

may result in the following response (note that the snapshot timestamp is now close to 20060101):

callback is an optional callback which may be specified to produce a JSONP response.

# Memento API

The Internet Archive Wayback Machine is also fully compliant with the Memento Protocol The Memento API provides additional interfaces for querying snapshots (eg 'Mementos') in the Wayback Machine. The Availability API is partially based on the Memento APIs.

Here are some specific examples of Memento support in the Wayback Machine

# Wayback CDX Server API

The CDX Server is another API which allows for complex querying, filtering and analysis of Wayback capture data. If you are looking for more in depth information about Wayback machine data, please take a look at the CDX server API.

The latest documentation on the CDX server can be found at: Wayback CDX Server @ GitHub

Terms of Use (10 Mar 2001)