Audio Archiving
Based on the Paper written by
Gladney, Henry Martin, (2001), “Audio archiving for 100 years and longer: once we
decide what to save how should we do it?” Journal of the Audio Engineering Society v49
n7/8 2001 p628-637

Audio Archiving, What is it? Basically audio archiving involves storing digital
documents such as audio, video, image, text data, scientific tables and computer programs
in an orderly fashion that will allow access in the future to these stored digital documents.

“Thanks to the internet and the rapid global expansion of computing, humans and
their machines will create more information in the next three years then in the 300,000
years of history dating to the earliest cave paintings and beyond.” This comment is
undoubtedly true, as the paper was written in 2001 we can see that those 3 years have
passed. When we look back within those three years it has been the boom of the internet.
More and more digital documents are created everyday even every second. You no longer
need a degree to be an expert on certain subject to write an informative paper to share
with the world. Thanks to the internet and its global audience you may write anything and
publish it on the World Wide Web and there are people who will be able to access it and
use it for different purposes.

Choosing what documents to store and what not to store is often the hardest task of
Audio Archiving. We often save what we think may be of importance in a safe place.
Artifacts from statesmen, scholars, artists and performers from past years often decay
before collectors can decide which of them they may choose to keep because they are of
value and purpose. An example from Gladney, Henry Martin, (2001) “It was not until late
in the twentieth century that libraries took an interest in the youthful correspondence of
Leonard Bernstein”. Leonard Bernstein was the first American musician to receive world
wide recognition for his classical music. Now you would think that such an important part
of history like that would be recorded somewhere, but as it says above it is not until we
realise something is of importance or of value that we archive it.

Looking at how to store digital documents, According to Gladney, Henry Martin,
(2001). In order for long-term preservation you need to prepare the original artifact for
optimal conversion from analog to digital format. One example of a conversion is a
modem which turns signals from digital to analog before transmitting those signals over
communication lines such as telephone lines that carry only analog signals. The signals
are turned back into digital form at the receiving end so that the computer can process the
data in its digital format (Webopedia Website). Provide missing metadata which means
making sure that all tags such as author, subject, publisher etc have the correct tags which
will allow the data to be correctly and efficiently identified. Convert the content to forms
highly likely to be comprehensible in 100 years or more. When looking back audio music
was stored on records, and again looking forward throughout the years the use of musical
records has vanished and was taken over by cassettes then cd’s. The oldest cassettes
stored in archives are still playable after 40 or 50 years, and discs have survived for a
century or more. This potential lifespan can be considerably reduced if recordings are not
manufactured, handled and/or stored correctly (ScreenSound Australia Website), but now
the need for physical storage units such as these has diminished. People are able to carry around audio documents on portable mp3’s players or USB drives for example. As technology advances you cannot make sure the device you store your information on will be the same device that it will be extracted from in 100 years, because of this you cannot guarantee the information you wish to archive will be available in the future. The final guideline offered by Gladney, Henry Martin, (2001), is to ensure that the transformed data and metadata survive. Once again you cannot make any guarantees on this but to the best of your ability make do with what you know.

Looking at the different challenges associated by audio archiving there are many and they vary. The administrative challenges, where there are issues of authorization to engage in digital archiving and no funding as it is diverted to finding for more traditional activities. Synergetic challenges, this is where not everyone has the same level of access to different collections. The ability to archive, often libraries do not have the digital infrastructure and staff skills required for digital serving and archiving. Legal challenges where the liability risk of libraries are high because of the copyright and infringement issues they face by providing copious amounts of data which they are not able to control how and where the materials are reused. When looking at these challenges we wonder why we archive documents if some libraries do not know how to correctly archive documents and if those documents are not going to be available to everyone, also when there is no guarantee that these documents will be accessed again.

With the growth of internet usage by different countries and populations it is easy to see how the incredibly large growth of digital data would be easily achieved. As you can see in the following diagram Europe, North America and Asia have the highest internet usage among the other world regions. Concentrating on digital audio media most music for example most comes from America and Europe. Although there are many recording artists in Australia, it is much easier to distribute audio documents in those countries than it is in Australia. You can see that Australia is only 1.8% of the world users.

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<tbody>
<tr>
<td>Africa</td>
<td>896,721,874</td>
<td>14.0 %</td>
<td>23,867,500</td>
<td>428.7 %</td>
<td>2.7 %</td>
<td>2.5 %</td>
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<tr>
<td>Asia</td>
<td>3,622,994,130</td>
<td>56.4 %</td>
<td>327,066,713</td>
<td>186.1 %</td>
<td>9.0 %</td>
<td>34.2 %</td>
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<tr>
<td>Europe</td>
<td>731,018,523</td>
<td>11.4 %</td>
<td>273,262,955</td>
<td>165.1 %</td>
<td>37.4 %</td>
<td>28.5 %</td>
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<tr>
<td>Middle East</td>
<td>260,814,179</td>
<td>4.1 %</td>
<td>21,422,500</td>
<td>305.4 %</td>
<td>8.2 %</td>
<td>2.2 %</td>
</tr>
<tr>
<td>North America</td>
<td>328,387,059</td>
<td>5.1 %</td>
<td>223,779,183</td>
<td>107.0 %</td>
<td>68.1 %</td>
<td>23.4 %</td>
</tr>
<tr>
<td>Latin America/Caribbean</td>
<td>546,723,509</td>
<td>8.5 %</td>
<td>70,699,084</td>
<td>291.31 %</td>
<td>12.9 %</td>
<td>7.4 %</td>
</tr>
<tr>
<td>Oceania / Australia</td>
<td>33,443,448</td>
<td>0.5 %</td>
<td>17,655,737</td>
<td>131.7 %</td>
<td>52.8 %</td>
<td>1.8 %</td>
</tr>
<tr>
<td>WORLD TOTAL</td>
<td>6,420,102,722</td>
<td>100.0 %</td>
<td>957,753,672</td>
<td>165.3 %</td>
<td>14.9 %</td>
<td>100.0 %</td>
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NOTES: (1) Internet Usage and World Population Statistics were updated on September 30, 2005. (2) For regional information, click on each world region. (3) Demographic (Population) numbers are based on data contained in the world-gazetteer website. (4) Internet usage information comes from data published by Nielsen/NetRatings, by the International Telecommunications Union, by local NICS, and by other other reliable sources. (5) For definitions, disclaimer, and navigation help, see the Site Surfing Guide. (6) Information from this site may be cited, giving due credit and establishing an active link back to www.internetworldstats.com. ©Copyright 2005, Miniwatts International, LLC. All rights reserved.

Figure 1 - Internet World Stats – Usage and population statistics.
In conclusion there are many digital documents that have been archived but whether or not they are of value cannot be predicted till future years. The task that people find the hardest is what to archive and how to archive. There are millions upon millions of documents and several different ways of archiving. In order to archive into the future is a hard task, with ever growing and expanding technology we cannot make guarantees of which formats and devices will be used in the future and whether the documents we archive can be reproduced.

References


http://www.webopedia.com
