

# **On the Subject of copying in the cloud computing ----Taking Relevant Cases as Reference<sup>1</sup>**

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## **Abstract**

Cloud computing technology brings a lot of new problems to the copyright law, of which judgment of copy subject has drawn much attention and is also the most critical issue. And, different judgments of copy subject have been made in existing juridical practice under the environment of cloud computing. This paper intends to discuss the subject judgment of copy behavior under the cloud environment, and explore the possible solutions to “cloud computing” faced by the legislature and the judiciary from the perspective of case studies.

**Key words:** Cloud computing; Subject of copying; Technology neutral; Balance of interest

Cloud computing, often referred to as simply “the cloud”, is a new Internet-based computing that provides on-demand computer processing resources and data to individual users and enterprises on a pay-for-use basis. It is a model that combines multiple configurable computing resources (e.g., computer networks, servers, storage, applications and services). As the result of the evolution and adoption of existing technologies and paradigms, the management models derived from cloud

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computing have imposed great pressure on existing copyright law. The Cablevision case<sup>2</sup> decided by the U.S. Court of Appeals for the Second Circuit in 2008 and the Optus case<sup>3</sup> decided by the Full Federal Court of Australia in 2012, two similar cases, which resulted in two different rulings, have been widely discussed in recent years.

## **I. Exploitation of media content in cloud environment**

In cloud environment, the new development of digital video recorder was announced, called remote storage digital video recorder (RS-DVR), or Internet-based digital video recorder system (IDVR). The RS-DVR system allow its users to remotely record media content on a provider's central server, where also is the storage of the copies, rather than on a hard drive in the users' home. The recorded data is streamed to the users at their request for transmission. The acts that mentioned above raise issues for copyright law, if a copy has been made in cloud environment, which party causes it?

## **II. The Courts' Rulings**

### **1. The Cablevision case summarized by “the act of copying of Users”**

Cablevision appealed to the Second Circuit Court of Appeals and the Circuit Court reversed and vacated the judgment --- it is defendant Cablevision not the customer who made the copy, and remanded the case. When there is a dispute as to the author of an allegedly infringing instance of reproduction, the Second Circuit directed their attention to the volitional conduct that causes the copy to be made. There are only two instances of volitional conduct in the case: Cablevision's conduct in designing, housing, and maintaining a system that exists only to produce a copy, and a customer's conduct in ordering that system to produce a copy of a specific program.<sup>4</sup> In the case of a VCR, it seems clear that the operator of the VCR, the person who actually presses the button to make the recording, not the person who manufactures, maintains, or, if distinct from the operator, owns the machine.<sup>5</sup>

The Second Circuit also held that in determining who actually “makes” a copy, a significant difference exists between making a request to a human employee, and issuing a command directly to a system. The human employee, who volitionally operates the copying system, is the subject of copying. Contrarily, the customer who issues a command directly to a system, which automatically obeys commands and engages in no volitional conduct, makes himself the subject of copying.<sup>6</sup> In this case, copies produced by the RS-DVR system are “made” by the RS-DVR customer, and Cablevision's contribution to this reproduction by providing the system does not warrant the imposition of direct liability.

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<sup>2</sup> Cartoon Network LP v. CSC Holdings, Inc. (Cablevision II), 536 F.3d 121. (2d Cir. 2008).

<sup>3</sup> Singtel Optus Pty Ltd v National Rugby League Investments Pty Ltd (No 2) [2012] FCA 34.

<sup>4</sup> Cartoon Network LP v. CSC Holdings, Inc. (Cablevision II), 536 F.3d 121. (2d Cir. 2008), at 131.

<sup>5</sup> Cartoon Network LP v. CSC Holdings, Inc. (Cablevision II), 536 F.3d 121. (2d Cir. 2008), at 131.

<sup>6</sup> Cartoon Network LP v. CSC Holdings, Inc. (Cablevision II), 536 F.3d 121. (2d Cir. 2008), at 131.

In summary, the U.S. Court concludes: the copy behavior is conducted by the users not by the cloud service providers. According to the theory of “volitional conduct”, the subject of copying are users instead of the cloud services providers.

## 2. The Optus case summarized by “the act of copying of cloud service providers”

The Federal Court of Australia believes that United States Courts also differ on how to tell direct and indirect infringement of copyright when it refers to the copy of works by automation technology. Thus, when discussing “the act of copying”, the Federal Court of Australia refuses to apply to the standard of “volitional conduct” from United States Courts. They argue that users press record and thus have copies but it doesn’t necessarily mean that users have the act of copying.<sup>7</sup> The “act of copying” under the law of copyright is interpreted as “behaviors of making copies”<sup>8</sup>. While in the whole process, users only initiate the act of copying. And, due to the design of TV now system, it obtains broadcast signals and transmits sounds and pictures to its servers. The whole process is automatic, which makes Optus become the conductor of the act of copying.<sup>9</sup> Because Optus not only asks users to use its services but also designs and maintains a complex system to make users record works they want to watch, the behaviors of Optus obviously include in “replication” behaviors. That is, Optus replicates for users and users give copy orders to Optus and Optus finishes it through the system of TV now.<sup>10</sup> Thus, Optus becomes the subject of the act of copying by receiving copy orders given by a certain person.

In view of this, the Federal Court of Australia concludes: the copy behavior is either conducted by Optus or by Optus and its users together. However, the court believes that there is no necessity to consider whether Optus conducts the behavior alone or not. The conclusion of such behaviors conducted by Optus is all required.<sup>11</sup>

### III. The subject of act of copying in a cloud environment

The author thinks that users, not cloud services providers, are the subject of the act of copying, mainly based on the following two perspectives:

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<sup>7</sup> National Rugby League Investments Pty Ltd and Another v Singtel Optus Pty Ltd and Others, [2012] FCAFC 59, at 59.

<sup>8</sup> National Rugby League Investments Pty Ltd and Another v Singtel Optus Pty Ltd and Others, [2012] FCAFC 59, at 58.

<sup>9</sup> National Rugby League Investments Pty Ltd and Another v Singtel Optus Pty Ltd and Others, [2012] FCAFC 59, at 60, 66.

<sup>10</sup> National Rugby League Investments Pty Ltd and Another v Singtel Optus Pty Ltd and Others, [2012] FCAFC 59, at 75.

<sup>11</sup> National Rugby League Investments Pty Ltd and Another v Singtel Optus Pty Ltd and Others, [2012] FCAFC 59, at 78.

## 1. Based on the comparison between VCR/DVR and RS-DVR/IDVR mode

**Copying mode: VCR/DVR vs RS-DVR/IDVR**

<b>Mode</b>	<b>VCR/DVR</b>	<b>RS-DVR/IDVR</b>
<b>Content provided by the company (usually will be the defendant in the case)</b>	products (tangible video recorders or Digital Video recorders)	service (intangible system which can be used to copy copyrighted works)
<b>Act of the users</b>	select the program and press the "copy" button	select the program and press the "copy" button
<b>The carrier of the copy</b>	tapes or disks in the users' home	remote server provide by the cloud service providers
<b>The place of the copying device</b>	users' home	remote server provide by the cloud service providers
<b>The process of copying</b>	automatically copied by the device in the users' home after started by the users	automatically copied by the system in the remote server after started by the users (in the cloud)
<b>Period of the preservation of copies</b>	can be preserved permanently	the copies will be deleted automatically by the system 30 days after the act of copying
<b>The purpose of copying</b>	time-shifting	time-shifting

Compared with traditional VCR/DVR mode, the differences of RS-DVR/IDVR mode involved in the act of copying are:

- (a) users do not need to buy any tangible recording device and they can still copy TV programs they want to watch;
- (b) the whole recording process is not finished at home but in the cloud;
- (c) the copy is also stored in the cloud.

Such differences don't change the facts as follows:

- (a) the purpose of copying works is for changing the viewing time;
- (b) programs needed to be copied are chosen by users and they can watch them at convenient time;
- (c) after users press record, the whole process doesn't need a third party and it is completed by recording devices or the cloud system.

The main reason causing these differences is that manufacturers, nowadays, don't need to provide any tangible recording device but intangible services. Therefore, if manufacturers who provide

recording devices are admitted not to conduct the act of copying directly, so do the cloud services providers with the recording system.

2. The storage site of copies should not be regarded as a criterion for judgment on the subject of copying

The other main difference between two modes is the storage site, at home or in the cloud. However, it should not be used to judge “who” conducts the act of copying.

For example, there is such a hypothetical situation: the consumer A copied a work in B’s house (when A was copying, B was not there.) and left the copy in B’s house. If A wants to watch the work, A will come to B’s house. In such a case, though the copy is in B’s house, the one who copied is obviously A. Thus, the copy simply stored in the cloud should not be viewed as a criterion for judgment to decide that the cloud services provider is involved directly in doing the act of copying.<sup>12</sup>

#### **IV. Conclusion: technology-neutral and balance of interest**

The era of cloud computing has just begun and the copyright system will face increased challenges. The judgment on the subject of copying is only one of problems that the cloud computing brings to judicial practice.

New technologies give new productivity. Based on it, it is not always impossible to have win-win and multi-win outcomes for each party. When the copyright system is adjusting itself, it may be feasible to hold on technology-neutral and achieve a balance of interests among various subjects of copyright.

#### **Reference**

- [1] National Rugby League Investments Pty Ltd and Another v Singtel Optus Pty Ltd and Others, [2012] FCAFC 59.
- [2] Singtel Optus Pty Ltd v National Rugby League Investments Pty Ltd (No 2) [2012] FCA 34.
- [3] Cartoon Network LP v. CSC Holdings, Inc. (Cablevision II), 536 F.3d 121. (2d Cir. 2008).

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<sup>12</sup> National Rugby League Investments Pty Ltd and Another v Singtel Optus Pty Ltd and Others, [2012] FCAFC 59, at 75.