

# Application and Analysis of Computer Remote Network Communication Technology in Real Life

Gao Kun

Shaanxi Xueqian Normal University, Xi'an Shaanxi, 710100, China

**Keywords:** Network communication; Remote; Computer; Practical application

**Abstract:** Nowadays, the development of society and economy promotes the rapid progress of science and technology, especially the development of information technology and personal computer. With the improvement of people's income level and the decrease of production cost of microcomputers, microcomputers have achieved great popularity, and the application of computers in people's production and life is also increasing. Among them, network communication technology is one of the most frequently used technologies. This paper mainly studies and discusses the concept, characteristics, foundation and application of network communication technology in the computer field, and then clarifies the improvement of life brought about by it.

## 1. Introduction

Modern society is a society changing with each passing day. With the great development of social economy, science and technology have also made rapid progress. Especially in today's trend of globalization, the advance of globalization has been firmly bound up with informationization and can not be separated [1]. The most frequently used electronic devices, personal computers and mobile phones in our daily production and life are all progressive information technologies that are embodied and concrete in our daily lives. These devices also provide many conveniences for our daily lives and promote the development of telecommunications technology.

## 2. Overview of Related Concepts

In order to apply computer and remote communication technology more reasonably and scientifically, we should have a thorough and clear understanding of the concept and principle of this technology. This technology realizes the real-time transmission and communication of information between networked computers through the application of data transmission protocol and IO. At present, a variety of protocols and IO have been effectively applied in real-time information transmission on the Internet and serve people's production and life. After a computer sends a message, the other computer responsible for receiving needs to process and reflect in real time based on the accepted data. The goal of this technology is the process. In this process, the information interconnection and intercommunication between computers can be realized in strict accordance with the principles and regulations of the protocols used [2]. The following are some of the basic elements of this technology.

### 2.1 Constituent Elements

In the application of this technology, four main components are indispensable. That is to say, the host responsible for the processing and processing of the exchanged data, the terminal responsible for information and data reception, the channel for information exchange and the exchange equipment responsible for data exchange. Most of the components we use in our daily production and life are the terminal parts, namely personal computers.

### 2.2 Direction of Data Circulation

In the application of telecommunication technology, according to the flow of data and information and the direction of transmission, we can divide the practical application of this

technology into the following different types. First, single-direction transmission. In this form, the flow and transmission of information has only one orientation. Second, two-way transmission. In this transmission mode, data and information can be circulated and propagated in both directions, but the data transmission path required for this type of transmission is too precise, the laying requirements are high, and the cost is large, so it is not suitable for large-scale applications. Semi-bidirectional transmission can also share and interconnect data bidirectionally, but on this basis, this form can also carry out one-way transmission in some cases [3]. Relevant practical experience shows that this form is the most appropriate and scientific way for large-scale application. It can still maintain high-quality data sharing and transmission under the condition of saving manpower and material resources.

### **2.3 Link form**

In the remote data communication technology, there are many connection modes to choose, such as single-point-to-single, thread aggregation and so on. In the actual application, we should base on the actual situation we are facing and reasonably choose the applicable link form.

## **3. Characteristics and Advantages**

### **3.1 Data Transmission Communication Network**

Fundamentally, it is the data transmission and exchange between computer terminals through the communication network, so the core purpose of data transmission communication network is to act as a bridge and medium in the data transmission between computers. At the same time, it is the development and extensive use of this network that has promoted the large-scale popularization and practical application of digital communication [4]. The concept of communication is actually the transmission and exchange of information between two things. In the ancient times when science and technology were backward, the working people of our country used wolf dung to ignite the black smoke, that is, wolf smoke, to deliver the news of the enemy's invasion. In ancient military operations, gongs and drums were responsible for transmitting information. If drumming is to convey the message of advance and charge, if drumming is to convey the message of receipt and withdrawal. These means are basically the way of communication. After the development of human science and technology entered the era of electrification, people began to find new ways of information exchange and communication [5]. The first thing that was commonly used was the telephone. The advantages of telephone communication are rapid and direct, but there are certain limitations and shortcomings, that is, it is easily affected by external interference in data transmission, which has a negative impact on call efficiency. But digital communication technology can effectively avoid these defects and deficiencies. As a kind of communication technology, this method can effectively resist external interference, and the error is small and easy to avoid. Therefore, the efficiency of information communication technology is greatly improved, and it is currently in the widely used data communication means. Mainstream status [6].

### **3.2 The Combination of this Technology and Computer is very Convenient and Fast.**

We can see that the hardware device used by the network communication processing signal is the computer. This feature greatly increases the universality and adaptability of this technology, and can cope with most of the daily communication needs [7].

In addition, due to the simplicity of the signals used in the process of data transmission in network communication and the low requirement of the hardware facilities used in the process of data transmission, it does not need too much manpower and material resources.

Nowadays, most of the circuit systems used in network data transmission systems are integrated. Most of these circuits are relatively simple, small in weight and scale, low in energy consumption and stable in operation. The scale of today's integrated circuits continues to expand, providing greater possibilities for reduced costs. The application of digital communication facilities will be more and more, and the holding capacity of equipment terminals will continue to rise.

### **3.3 The remote information exchange system can serve all computer users in a certain area through a data processing server, which can even cover the whole country.**

Under such circumstances, the information exchanged and processed by network clients and data exchange servers must be efficiently circulated within the network. Nowadays, the great development of information technology and computer technology has promoted great innovation in all fields of production and life. In the information communication network, the computer can not only download and receive information through the network, but also store information on the network in the computer through its own data storage, such as hard disk, disk and so on, so as to send it again in the future. Such information exchange and storage methods are now widely used in various fields. In the national defense and military, we can use this system to build a national defense monitoring system, and in the financial industry, railway industry, warehousing logistics, enterprise construction, weather forecasting, big data and online shopping, etc. also have in-depth application [8].

## **4. Practical application in daily life**

### **4.1 ICQ software**

The name of ICQ actually comes from the English name of this software, namely I SEEK YOU. After a simple homophonic processing, the abbreviation of ICQ appears. This software is a social platform-like software that enables text messages to be sent and some files to be exchanged between users who have established a friend relationship. At the same time, the software server will also keep the chat records of users and friends for a certain period of time, and users can retrieve and view these records at any time. Users add friends in a variety of ways, and when friends are about to celebrate their birthdays, software officials will also advise users to offer their best wishes in the form of messages [9]. In addition to these functions, users can edit and modify their personal information, add their own choice of expressions, or even choose their own sound effects when entering, which has strong interaction. Although this software has been crowded out by Tencent's QQ to occupy a large part of the market share, it still has a considerable number of users.

### **4.2 MSN**

MSN is another choice when we need to communicate with each other in our life and work. This software is a long-distance communication software from MICROSOFT Company, which is based on information network and personal computer. Users can use the software through their own terminal computers and the Internet to communicate directly with friends thousands of miles away. In the design of this software, Microsoft has mentioned the security to a very high level, which can effectively protect the user's personal information, and also automatically filter the poorly qualified customers to ensure the environment is good and enhance the user's user experience.

### **4.3 Tencent QQ**

Tencent QQ firmly occupies the leading position in the domestic market of telecommunication network communication software nowadays. It can be said that it is one of the giants with the largest number of users in China. Nowadays, almost all Internet users in China have at least one QQ number. This software comes from the domestic Internet giant TENCENT. The software also implements remote instant messaging through personal computers and the Internet, through which two users thousands of miles away can also communicate instantly. This software optimizes the reception and transmission of information very well, and supports multi-person group building, voice chat, voice message and video chat. The application of QQ mailbox is integrated in the software. Users can send and receive e-mail through this software [10]. This software now has great advantages on mobile platforms, enabling cross-platform, that is, the interconnection between computers and mobile phones. The software has the above advantages, and can also visually display the real-time situation of the friend to the user. The user can display the online status of the avatar through the light and dark of the avatar, and the user can also choose to display the online status to

the outside world. Such as stealth, online, etc. The means to add friends is also very diverse, helping users expand their social circles. At the same time, this software has achieved the industry's top level in real-time file transfer and sharing, network office and file management.

#### **4.4 Online Video Watching and Live Broadcasting**

Along with the speeding up of Internet construction in China, the Internet bandwidth used by Chinese residents has gradually increased, and the amount of real-time data transmitted by the network has been greatly improved. This also means that online viewing of high-definition video through the Internet is becoming more and more convenient. At present, the domestic network video media platform can be described as a hundred flowers, relying on their unique video resources to compete fiercely, bringing great convenience to users. Among them, Youku, Tencent Video, iQiyi, BILIBILI are undoubtedly the best among them. Through these platforms, users can see high-definition videos at home and abroad without leaving home. At the same time, they can also support the storage of videos on local computer disks. Even when the network situation is poor, they can watch videos saved on local hard disk. In addition, the continuous development of network video live broadcasting has become an important way of daily entertainment for network users, the mainstream of live broadcasting platforms are Tiger's Tooth, Fighting Fish, Battle Flag and so on. With the development of live video broadcasting, the category of live broadcasting is also expanding. From the beginning of games, digital, talent, to today's outdoor, film and other flowers blooming, for Internet users' leisure and entertainment really add beautiful color.

#### **5. Conclusions**

Computer remote communication is closely related to the ever-developing information technology and complements each other. In the process of its realization, it embodies the convenience of communication technology. Nowadays, this technology has been gradually popularized, penetrated into the daily life, production and entertainment of every ordinary user, and has made great contributions to the improvement of people's living standards. What we can see is that this technology will gradually enhance its influence in the future, and penetrate deeper into all aspects of our lives.

#### **Acknowledgement**

Scientific research projects in 2019 (HUMANITIES AND SOCIAL SCIENCES): Difficulties and Countermeasures of Transformation of Qindong Cultural Resources to Cultural Industry (Project No. 17HX86).

#### **References**

- [1] Yue, Min M. Removing Cloud of Grey Remote Sensing Image Based on Network Communication [J]. Applied Mechanics and Materials, 2014, 513-517:3165-3169.
- [2] Wang F, Liu C, Shi L. C/S-Based Network Remote Control System[J]. Applied Mechanics and Materials, 2014, 484-485:353-357.
- [3] Lv Z L, Qi G M, Jiang T J, et al. A simplified electrochemical instrument equipped with automated flow-injection system and network communication technology for remote online monitoring of heavy metal ions[J]. Journal of Electroanalytical Chemistry, 2017, 791(Complete):49-55.
- [4] Kuzlu M, Pipattanasomporn M, Rahman S. Communication network requirements for major smart grid applications in HAN, NAN and WAN[J]. Computer Networks, 2014, 67:74-88.
- [5] Ramirez W, Masip-Bruin X, Marin-Tordera E, et al. Managing resilience in carrier grade networks: Survey, open issues and trends[J]. Computer Communications, 2015, 61:1-16.

- [6] Yang D L, Tong J, Xu G, et al. Research on Access Network Communication Technology for Condition Monitoring System of Power Transmission Line[J]. *Advanced Materials Research*, 2014, 1008-1009:684-689.
- [7] Tao L, Li W L, Yu Y Y, et al. A Study and Design of Compressed Encoder Based on Neural Network for Remote Sensing Image[J]. *Advanced Materials Research*, 2014, 989-994:4100-4103.
- [8] Abolfazli S, Sanaei Moghaddom Z, Gani-Ikilama, A, et al. Rich mobile applications: genesis, taxonomy, and open issues[J]. *Journal of Network & Computer Applications*, 2014, 40(7):345-362.
- [9] Sun G L, Tao Z G, Zhang B, et al. Application of Beidou Satellite Communication Technology in the Landslide Remote Monitoring and Early Warning System[J]. *Advanced Materials Research*, 2014, 945-949:2150-2154.
- [10] Zhengye F U, Lin W U, Jing W. Network Hardware Monitoring for Remote Sensing Application Based on Agent[J]. *Computer Engineering*, 2014, 40(2):308-313.