

INNOVATIVE WORKSHOP OF MASTERY REMOTE DESKTOP AND TEAMVIEWER FOR STUDENTS OF DHARMA VOCATIONAL SCHOOL KARAWACI OF COMPUTER NETWORK DEPARTMENT

### Oleh

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**Abstract:** Information and communication technology (ICT) has become the backbone of various industrial sectors. There are many applications that can be offered to solve computer repair problems remotely and Remote Desktop and TeamViewer applications are two of them. Dharma Siswa Karawaci Vocational School is committed to preparing graduates who are ready to work and highly competitive in the industrial world. The PKM of Postgraduate Program in Informatics Engineering, Pamulang University-UNPAM conducted an innovative workshop on Remote Desktop and TeamViewer on October 19, 2024. A survey showed they are satisified to participate in the workshop. Student participants can improve the skills of the Vocational School students in mastering Remote Desktop and TeamViewer technology for solving problems and managing networks remotely. The workshop will provide practical experience that suits the current needs of the IT industry, through direct training and simulations. Considering that the workshop only takes a few hours, the student participants of the workshop can continue their training not only at the school or at home, but also can communicate with the Team of S2 TI UNPAM. If necessary, the follow-up workshops can be carried out either offline or online.

## PENDAHULUAN

In this era of fast-paced globalization, ICT has become the backbone of various industrial sectors. Expertise in managing and maintaining computer networks is one of the skills that is really needed, especially, in the IT world of work. One of the solutions used to

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make remote management easier is the Remote Desktop and TeamViewer applications, which allow computer access from any location, making troubleshooting and system management easier. This skill is very important for vocational school students, especially, those majoring in Computer and Network Engineering (TKJ), so that they are able to compete in a world of work that increasingly demands efficiency and high technical skills. SMK Dharma Siswa Karawaci, Tangerang City is committed to preparing graduates who are ready to work and highly competitive in the industrial world [1]. SMK Dharma Siswa is a vocational school that the implementation study time is afternoon and is now in the process of being ISO certified and has the Internet speed of 200 Mb. Regarding the implementation of training, especially the use of Remote Desktop and Team Reviewer, many students have not received comprehensive practical training in the use of Remote Desktop and TeamViewer technology. These two applications are not only useful in technical support scenarios, but also are relevant in the context of network-based learning and collaborative work. It is, therefore, important that students have received innovative training so that they can make maximum use of this technology, both for academic and professional needs in the future.

The Vocational School is located in the Karawaci area, Tangerang and the Karawaci region's infrastructure continues to improve, providing a conducive environment for students to learn and develop. The Vocational School has established many partnerships with various industries, giving students access to the world of work through internship programs, collaboration and competency development activities. Apart from that, the development of industrial areas around Karawaci provides great potential for vocational school graduates to be absorbed by companies that need skilled workers in the field of Computer and Network Technology (TKJ). The Vocational School has also a great opportunity to continue to develop and improve the quality of its education, and make this school one of the leading vocational education centers in Tangerang and its surroundings.



Figure 1. Gate of SMK Dharma Siswa Karawaci Kota Tengerang. Formulation of the Problem

As is known, Remote PC by iDrive provides key features that are useful for practically controlling a PC remotely. In this way, Remote PC by iDrive users can access computers remotely, even via smartphone or tablet devices. Remote PC by iDrive is an option that really supports collaboration activities, allows for chat, exchange files via a drag and drop interface, and provides a whiteboard feature when a remote PC session is in progress and is one of the remote PC applications with the most complete features in the world. Then LogMein Pro can be a good form of investment for a company. Its various features are suitable for accommodating collaboration needs, especially for companies with a very large number of members. The reason is, LogMein Pro supports an unlimited number of users so that file



exchange or screen sharing can be done with anyone. As further known, Chrome Remote Desktop is an option with fairly minimalist features and supports device control from Android and iOS smartphones. Not only is Chrome Remote Desktop free, but Microsoft Remote Desktop can also be used as a free solution to control your PC from a distance. Finally, Microsoft Remote Desktop is compatible with Windows 8 and 10, just pay attention to which version you use. If you use Windows 8 or 10 Home Edition, you can control remotely on a second PC, as long as this second PC is running Windows 8 or 10 Pro/Enterprise Edition. Microsoft Remote Desktop also supports cross-device and overall, Microsoft Remote Desktop and TeamViewer and all its uses can be seen in full in papers written in journals and theses [2-9].





### Figure 2. Branding Remote Desk and TeamViewer.

TeamViewer is also quite popular and offers its features for free as long as they are not used for commercial reasons. With TeamViewer, you can experience a solid experience controlling your PC remotely, whether from a PC controlling a PC or a smartphone controlling a smartphone. TeamViewer is suitable for online meetings, helping friends who have technical problems without having to meet, and much more [9]. TeamViewer is available for all platforms, such as Linux, Mac, Raspberry Pi, Android, iOS, and of course Windows and TeamViewer is also available in a portable version. Remote Desktop Manager is currently considered sufficient, however, this application is also available for free even though this version does not offer a role-based access feature. Apart from making it easier for users to control subordinate PCs, remote desktop applications that have an unattended access feature can also be used to turn off PCs at home. If there are files left behind, users can access them remotely without asking someone at home to control them. In its journey, the Dharma Siwa Karawaci Vocational School, Tangerang City, Department of Computer and Network Engineering, continues to develop itself to continue to improve its abilities and catch up, especially in the new fields of Remote Desktop and Team Viewer which have been circulating for a long time but are still new among SMJ TKJ Departments. For this reason, the Community Service Team (PKM) for Masters in Information Engineering, Pamulang University Postgraduate Program (UNPAM) has held a workshop with the title Innovative Workshop on Mastering Remote Desktop and Team Viewer for Karawaci "Dharma Siswa Vocational School" students in the TKJ (Basic Computer Network) Department. After examining all the problems at Dharma Siswa Vocational School, some of the problems faced by the students are as follows that the Vocational School a) has never had a workshop, especially those related to students' understanding of the concept and use of Remote Desktop and TeamViewer in managing computer networks; b) there has never been any knowledge of providing effective and practical training so that students can master remote network troubleshooting using Remote Desktop and TeamViewer; and c) do not have experience in



using Remote Desktop and TeamViewer in a practical curriculum to help students be better prepared to face challenges in the world of work in the IT field.

# Goals and Benefits of PKM Master's Degree of Informatics Engineering UNPAM

The main objectives of this PKM are a) to organize workshops, especially those related to the understanding of SMK Dharma students majoring in TKJ regarding the concept and use of Remote Desktop and TeamViewer in managing computer networks; b) provide knowledge in effective and practical training so that students can master remote network troubleshooting using Remote Desktop and TeamViewer; c) provide experience in using Remote Desktop and TeamViewer into a practical curriculum to help students be better prepared to face challenges in the world of work in the IT field. The benefit of this PKM is that this Innovative Workshop is expected to improve the skills of SMK Dharma Siswa students in mastering Remote Desktop and TeamViewer technology for remote network management. It is hoped that in the future students will be able to use computers/laptops remotely and when it comes to trouble shooting, students will be able to carry out repairs effectively and efficiently by equipping students with troubleshooting skills and solving technical problems independently through the use of remote software. Apart from that, it also prepares students to be better prepared to face the world of work in the IT field, especially in technical support and network administration, with relevant and applicable skills. This is closely related to advances in IT technology which are increasingly developing rapidly, so that after attending this workshop, graduates of Dharma Vocational School, students majoring in TKJ, became more confident in dealing with advances in IT technology, when applying for jobs related especially to Remote Desktop and TimViewer. Lastly, providing practical experience that suits the needs of the current IT industry, through direct training and simulations of the world of work.

## LITERATURE REVIEW

## TeamViewer Solution, Remote Desktop Access in Indonesia

TeamViewer was invented a long time ago and continues to provide innovative solutions for remote desktop access and collaboration needs. TeamViewer software is actively running on more than 400 million devices, of which at least 30 million users are connected to TeamViewer at any time. TeamViewer is equipped with solutions for IT monitoring, anti-malware, data backup, and web conferencing. With TeamViewer, people can carry out remote desktop activities with confidence, because they are using reliable and flexible software, whether for personal needs, small businesses, or large companies. If you are looking for a remote desktop solution for desktop or mobile PCs at an economical price, TeamViewer is very suitable for anyone and provides the best performance for anyone's computer /laptop. PT Digital Solusi Grup, is a local company that is engaged in offering very competitive TeamViewer Licenses and TeamViewer now offers a package that is guaranteed to be fast, easy and definitely safe [10-11]. With TeamViewer, be guaranteed to work quietly and securely and join the millions of users around the world who have trusted TeamViewer as their productivity partner [12]. With direct support from TeamViewer Indonesia, users are guaranteed to get the latest and leading remote desktop and collaboration software solutions. TimViewer is ready to help users in every step to manage devices and improve collaboration with the best solutions from TeamViewer [13].



### Remote Desktop, Heidelberger TeamViewer and Investigative Forensics

Remote desktop allows users to access their computers remotely via the Internet, which is widely used as a basic tool in areas such as remote work, remote assistance, and remote administration. However, existing remote desktops are designed to work in the mode of updating real-time user commands and remote screen status interactively for better user experience, such working mode may cause serious side-channel information leakage problems even if the traffic is encrypted, as shown revealed in this paper. We conducted experimental research to assess side-channel information leakage of the six most popular remote desktop software on Windows 10 & 7 platforms: Anydesk, ConnectWise, MicroRDS, RealVNC, Teamviewer, and Zoho Assist. With the help of machine learning techniques including logistic regression, support vector machine, gradient boosting decision tree, random forest as well as flow burst statistical features, we observe that the attacker can very well uncover (highest at 99.26% TPR, 0.57% FPR, 97.17% F1-score) 5 types of daily activities that include document editing, document reading, web surfing, watching videos and installing software and even worse correctly classifying 4 predefined good activities such as document editing with Microsoft Office Word and three other editing tools with a high true positive rate and low false positive ratio. Our results prove the fact that remote desktop traffic encryption mechanisms are not enough to prevent side-channel information leakage and both users and remote desktop providers should pay more attention to such serious privacy leakage problems [14].

After intensive review, Heidelberger Druckmaschinen (HDM) has selected TeamViewer as a partner to provide secure Remote Help Desk support and Remote Installation/Upgrades for Prinect® customers. TeamViewer is a market leader and its ability to provide private, encrypted and secure remote access to Heidelberg® systems makes it the ideal tool for world-class remote support services. TeamViewer Tensor's built-in high security features combined with an enterprise-class Conditional Access Router are the reasons why Heidelberg chose TeamViewer as their trusted partner. This document describes the use of TeamViewer to provide remote service and support for customers who require high security [15]. Investigative forensics can answer questions about data theft, questions such as those relating to when, what, and who (or to whom) and the use of application logs and other available tools. The answers to these questions can form the basis of strong digital evidence for legal purposes, even though they may provide only partial responses to the questions. Other complementary sources are needed to construct complete answers and accurate digital evidence. Nonetheless, we have identified and analyzed several use cases that can help leverage early alarms that can provide warnings about certain behaviors in encrypted traffic that can be detected through network monitoring [16].

Remote desktop allows users to access their computers remotely via the Internet, which is widely used as a basic tool in areas such as remote work, remote assistance, and remote administration. To reassure users, experimental research has been conducted to assess the side-channel information leakage of the six most popular remote desktop software on Windows 10 & 7 platforms: Anydesk, ConnectWise, MicroRDS, RealVNC, TeamViewer, and Zoho Assist. With the help of machine learning techniques including logistic regression, support vector machine, gradient boosting decision tree, random forest as well as flow burst statistical features, it was successfully observed that the attacker was able to very well uncover (highest at 99.26% TPR, 0.57% FPR, 97.17% F1-score) 5 types of daily activities that



include document editing, document reading, web surfing, watching videos and installing software and even worse correctly classifying the 4 predefined good activities. These results prove the fact that remote desktop traffic encryption mechanisms are not enough to prevent side-channel information leakage and both users and remote desktop providers should pay more attention to such serious privacy leakage problems [17].

### METHODS AND MATERIALS Problem Solving Framework

This activity focuses on training students majoring in Computer and Network Engineering (TKJ) in mastering Remote Desktop and TeamViewer software. This workshop includes theoretical introduction, practical use, and simulation of remote network troubleshooting. The aim is to provide students with direct understanding and experience regarding the use of remote technology in managing computer networks. This PKM Lecturer activity was assisted by 8 IT Masters Students Semester 2. In summary, the problem solving framework for implementing PKM is related to the understanding of SMK Dharma students majoring in TKJ regarding the concept and use of Remote Desktop and TeamViewer in managing computer networks. It is hoped that the participants' knowledge in effective and practical training will provide the ability to carry out network troubleshooting remotely using Remote Desktop and TeamViewer, thereby helping students be better prepared to face challenges in the world of work in the IT field.

## **Realization of Problem Solving**

PKM was carried out by the IT Masters Study Program Team along with the Dharma Siswa Vocational School Karawaci, Tangerang City. The realization of solving the problems faced by the Vocational School previously was a) the need for an innovative workshop by Instructors of Semester 2 IT Masters Study Program students related to the basics of Remote Desk and Team Viewer and at the same time practicing them in the workshop; b) the need for direct discussion between all workshop participants and the UNPAM IT Masters PKM Team. Direct discussions about things experienced by participants and the PKM Team immediately conveyed the answers to all participants and c) the need for monitoring and evaluation (monev), so as to get important points related to the implementation of PKM. The question point also concerns the evaluation of the role of LPPM UNPAM before implementing the PKM and the complete evaluation can be seen in the Appendix.

## **Target Audience**

In implementing the PKM Masters in IT UNPAM, there are 3 targets to be achieved, namely a) all participants who have taken part in the Innovative Remote Desktop and TeamViewer Workshop can practice the results of their knowledge and knowledge in everyday events; b) all instructors who have delivered their material at the Innovative Workshop can continue to improve their abilities, especially in the field of Remote Desk and Team Viewer considering that IT development is very fast; and c) all those responsible for this PKM, especially the UNPAM IT Masters Study Program, are expected to continue to make contact with the Dharma Siswa Vocational School organizers, so that if necessary in the future, further PKM implementation can be carried out not only offline but also online. **Place and Time** 

The implementation of the PKM Innovative Remote Desk and TeamViewer Workshop was held on Saturday, 19 October 2024 at SMK Dharma Siswa Karawaci with the following



agenda:

# Table 1. Implementation of Activities PKM Lecturer-Studentat Vocational School Dharma Siswa Karawaci,

No	Time	Activity	Responsible Person
1	13.00-13.15	<ul> <li>Welcome Greetings,</li> <li>Singing the Indonesia Raya and</li> <li>Chanting prayers</li> </ul>	Farhan et. al
2	13.15-13.25	<ul> <li>Welcome speech:</li> <li>1. Principal of Dharma Siswa Vocational School, Mess. Herlina, SE</li> <li>2. Opening speech from UNPAM Informatics Engineering Magister's Study Program, Dr. Taswanda Taryo, M.Sc.</li> </ul>	Farhan et. al
3	13.25-13.55	<ul> <li>Introduction to Remote Desktop:</li> <li>1. Explanation of the basic concept of Remote Desktop and its functions.</li> <li>2. How to install, configure and demonstrate Remote Desktop</li> </ul>	Farhan et. al
4	13.55-14.25	<ol> <li>Introduction to TeamViewer:         <ol> <li>Introduction to TeamViewer and its uses.</li> <li>Installation and configuration of TeamViewer.</li> <li>Demonstration of using TeamViewer for remote troubleshooting.</li> </ol> </li> </ol>	Farhan et. al
5	14.25-14.55	<ul> <li>Hands-on Practice:</li> <li>1. Participants are divided into groups to practice using Remote Desktop and TeamViewer</li> <li>2. Network troubleshooting simulation by participants.</li> </ul>	Farhan et. al



6	14.55-15.10	Questions & Answers and Discussion:Answers and Discussion:1. Participantscanask Farhan et. alquestions about the material that has been presented and evaluate.Farhan et. al2. Closing participation certificates.Dr. Taswanda Taryo, M.Sc.
7	15.10-15.30	Friendly hospitality and group Farhan et. al photos

# **Implementation of Strategy and Its Support**

Considering that the implementation of PKM for Student Lecturers is very short, only a few hours, the implementation strategy implemented to achieve the expected goals has been implemented in the form of a) workshop materials arranged systematically, including the theory and practice of using Remote Desktop and TeamViewer which are relevant to the students' abilities. The material is created in such a way that it can be quickly understood by students participating in the Workshop; b) the workshop is carried out interactively, with demonstrations and direct practice by students and so that the workshop material can reach the students, the workshop is immediately followed by a question and answer session; c) students are divided into small groups to maximize practice with the guidance of assistant instructors, resulting in deeper understanding. There were around 26 students in total and with the hope that the practical implementation could take place effectively, the participants were divided into groups of 2 people and d) evaluation and question and answer sessions ensured that students understood the material and were able to apply it in troubleshooting simulations. Students receive digital training modules and participation certificates as proof of mastery of the material. The supports used to support this program are a) a computer laboratory with a network, projector, and installed Remote Desktop and TeamViewer applications; b) experienced instructors and assistant instructors who accompany student practice and c) digital training modules and certificates. The procedural stages for implementing PKM activities used are a) opening of the event and introductions. The introductions carried out at the beginning of the activity were intended to facilitate communication between the Principal, Representatives from the PKM S2 IT UNPAM Team and also from the presenters; b) the provision of material and practice is carried out using language adjustments so that it is easy for participants to understand. In this way, students will easily understand the content of the material presented by the speakers in the workshop and c) the question & answer session is carried out after all the material and practice has been presented by the speaker, in order to create active interaction between the presenters and the participants.

## **RESULT AND DISCUSSIONS**

## **Implementation of Workshops and Discussions**

The implementation of PKM for IT Masters Lecturers has been assisted by 8 IT Masters students Semester 2 2024-2025 and was only carried out in a few hours, so the



implementation strategy that has been implemented to achieve the expected goals will have been implemented in the form of workshop material which has been prepared systematically and includes theory, and practice using Remote Desktop and TeamViewer that are relevant to student abilities. In this way, the material is created in such a way that it can be quickly understood by students participating in this Innovative Workshop. The workshop is carried out interactively, with demonstrations and direct practice by students, ensuring that they are actively involved in each session and when the workshop is finished, it is followed by a question and answer session. In addition, students are divided into small groups to maximize practice with the guidance of assistant instructors, resulting in deeper understanding. Twenty-six (26) participants attended the workshop which took place effectively and efficiently, so each was divided into one group per 2 people. Finally, an evaluation and question and answer session was held to ensure students understood the material and were able to apply it in the troubleshooting simulation. All participants have been given digital modules and certificates as proof of participation and mastery of the material provided. The supports used to support this workshop program are a) Computer laboratory with network, projector, and installed Remote Desktop and TeamViewer applications; b) Experienced instructors and assistant instructors who accompany student practice and c) Digital training modules and certificates as proof of workshop participation. All activities of this innovative workshop have been recorded with photos which can be seen in this report.

The target of the UNPAM IT Master's PKM, which was assisted by 8 (eight) Semester 2 IT Master's students, was to introduce the Innovative Remote Desktop and TeamViewer Application Workshop application for the students of Dharma Siswa Karawaci Vocational School, Tangerang City on October 19 2024. This PKM has been implemented by UNPAM Information Engineering Master's Study Program is expected to improve the skills of Dharma Siswa Vocational School students in mastering Remote Desktop and TeamViewer technology for remote problem solving and network management. Apart from that, it equips students with troubleshooting skills and solving technical problems independently through the use of remote software. Apart from that, it also prepares students to be better prepared to face the world of work in the IT field, especially in technical support and network administration, with relevant and applicable skills. From the evaluation that has been carried out, this workshop has provided practical experience in accordance with the current needs of the IT industry. Considering that the workshop only takes a few hours, it is hoped that the 26 students who have taken part in this workshop can continue their training at school or at home or can also communicate with the UNPAM IT Masters PKM Team if necessary, so that follow-up workshops can be carried out face to face, face to face or online.

### **Evaluation of PKM Implementation**

With this Innovative Workshop, it is hoped that students at SMK Dharma Siswa Karawaci, Tangerang City will be able to improve their skills in mastering Remote Desktop and TeamViewer technology for remote network management. It is hoped that in the future students will be able to use computers/laptops remotely and when it comes to trouble shooting, students will be able to carry out repairs effectively and efficiently. The workshop results are expected to equip students with troubleshooting skills and solving technical problems independently through the use of remote software. After attending workshops via PKM conducted by lecturers and students, trouble shooting activities became faster, more precise, effective and efficient. In order to provide input for the implementation of this PKM,



evaluation was not only carried out by the Dharma Siswa Karawaci Vocational School but also by the students who took part in this innovative workshop. The results of the second survey of the UNPAM IT Master's PKM Team for the implementation of PKM at the organizing school have been carried out and Table 1 shows the evaluation of the Innovative Workshop participants. The survey results of schools implementing PKM at Dharma Siswa Vocational School were generally satisfied with the entire process of implementing PKM, starting from planning, coordination, implementation and evaluation of this Innovative Workshop.

No	Grade	Material	Understanding	Is it	Overall
	Evaluation	Suitability	of the Material	Practicable	Implementation
1	Clear	9 (34,6%)	15 (61,5%)		
2	Very clear	17 (65,4)	11 (42,3%)		
3	Very good			6 (23,1%)	
4	Good			20 (76,9%)	
5	Very satisfied				16 (61,5%)
6	Satisfied				10 (38,5%)
#Participants		26	26	26	26

Table 2. Evaluation of the Workshop for Remote Desktop and TeamViewer.

Table 2 shows the evaluation results from workshop participants regarding the suitability of the material, understanding of the material provided, ability to practice the material provided and the overall evaluation is almost 70%.

## **CONCLUSIONS AND RECOMMENDATIONS**

An Innovative Workshop on Remote Desktop and TeamViewer Applications was held with 26 students of the Dharma Siswa Karawaci Vocational School, Tangerang City on October 19 2024. The workshop was carried out by the Community Service Team (PKM) of Pamulang University's Masters in IT Study Program (UNPAM) assisted by Master's student in Informatics Engineering. By carrying out this PKM, it is hoped that it can improve the skills of Dharma Siswa Vocational School students in mastering Remote Desktop and TeamViewer technology for problem solving and remote network management. Apart from that, it equips students with troubleshooting skills and solving technical problems independently through the use of remote software. Apart from that, it also prepares students to be better prepared to face the world of work in the IT field, especially in technical support and network administration, with relevant and applicable skills. From the evaluation that has been carried out, this workshop has provided practical experience in accordance with the current needs of the IT industry. This workshop is only a few hours long, however, it is hoped that the 26



participating students can continue their training at school or at home. Participants can also communicate with the UNPAM PKM S2 IT Team if necessary, so that follow-up workshops can be carried out offline or online. The suggestion for this PKM is that this kind of innovative or advanced level workshop needs to continue, so that in the future there will be many students who really understand the importance of Remote Desktop and TeamViewer applications, especially in remote operations and troubleshooting. If necessary, further counseling can be carried out not only offline but also online so the implementation becomes more effective and efficient.



Figure 3. Workshop Participants with Instructor, Head of the Vocational School and IT S2 UNPAM Representative.



Figure 4. Workshop Participants on Remote Desk dan TeamViewer.







Figure 5. Welcoming Speech and Giving Prizes to Outstanding Students.





Figure 6. Awards of The Student Dharma Vocational School to the Chair of PKM UNPAM IT Lecturer.





Link: <u>https://www.instagram.com/p/DCCF\_L7zizT/?igsh=MXVqdnY4ajRzNGh2MQ==</u> <u>https://tangselpos.id/detail/28741/mahasiswa-teknik-informatika-unpam-gelar-pkm-di-</u> <u>smk-dharma-siswa-tangerang</u> Figure 7. PKM S2 IT UNPAM on Instagram and Tangselpos Daily.



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## REFERENCES

- [1] SMK Dharma Siswa Karawaci Kota Tangerang. (2024) Diakses 19 September 2024. https://sekolah.data.kemdikbud.go.id/index.php/chome/profil/50476C1E-\_\_\_BE54-4EDD-92F5-F20C691618BC
- [2] Nurmayanti, Handy Ferdiansyah. (2021). Pemanfaatan Aplikasi Remote Desktop TeamViewer pada Praktikum Jarak Jauh di Sekolah Menengah Kejuruan Negeri 5 Sidrap. Jurnal Basicedu, Volume 5 Nomor 5 Tahun 2021 Hal. 4261 – 4270.
- [3] Andi Nugroho. (2017). *Aplikasi Remote Desktop Komputer dalam Menunjang Proses Belajar Mengajar pada Lab Fasilkom dengan iTALC.* Article in MULTINETICS · May 2017. DOI: 10.32722/multinetics.Vol3.No.1.2017.pp.1-6.
- [4] Fahlepi Roma Doni, Ibnu Dwi Lesmono. (2018). Mengubah Jarak dengan Penerapan Remote Access Menggunakan Team Viewer. Jurnal Kajian Ilmiah Universitas Bhayangkara, Volume 18, No. 2, Mei 2018 p-ISSN 1410-9794 e-ISSN 2597-792X
- [5] Eko Budi Ariyantono. (2014). *Pengamanan Keyboard Jarak Jauh Menggunakan Team Viewer 7 Pada Windows 7*. TESLA VOL. 16 | NO. 2 |OKTOBER 2014 | 123.
- [6] Theo. (2024). Windows RDP vs. TeamViewer Analisis. Blog TSplus. https://tsplus.net/id/windows-rdp-vs-teamviewer-analysis/. Diakses 19 September 2024 Jam 16.32 WIB
- [7] Syakirun Mukmin. (2023). Analisis Perbandingan Kinerja Teamviewer Danultravnc Pada Jaringan Laboratorium SMAN 1 Kuta Baro (Skripsi). Universitas Islam Negeri Ar-Raniry.
- [8] Jimmy Nganta Ginting, Sastra Wandi Nduru. (2024). Pelatihan Penggunaan Team Viewer Untuk Meremote Komputer Jarak Jauh Pada Siswa/I Smk Teknik Komputer Jaringan Yayasan Pendidikan Cerdas Bangsa. Journal of Community Dedication Vol. 4 No. 3 Agustus 2024, hal., 607-616 e-ISSN: 2808-8204.
- [9] Yonly Adrianus Benufinita, Ade Ria Pratami Malaikosab, Enjel Suryanti Modok. (2022). Optimalisasi Teamviewer dalam Mendukung Kegiatan Praktikum Mahasiswa Dari Rumah. Jurnal Pendidikan Teknologi Informasi (JUKANTI) Volume (5) No (1) April 2022–eISSN : 2621-1467. Universitas Citra Bangsa, Nusa Tenggara Timur.
- [10] PT JDSG, (2024). *TeamViewer Remote support terbaik untuk segala kebutuhan*. <u>https://digitalsolusigrup.co.id/product-category/teamviewer/</u> Accessed on November, 25, 2024.
- [11] Teamviewer. (2024). Easy and secure remote connectivity with TeamViewer's Remote Desktop. Accessed on November 25, 2024. <u>https://www.teamviewer.com/apac/campaign/remote-desktop-download-sea/?coupon=CMP-PR-BF24</u>.
- [12] Eri Pebrianto, (2017). Mudahnya Renote Komputer Jarak Jauh dengan TeamViewer.

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Puskomedia.

- [13] Jimmy Nganta Ginting, Sastra Wandi Nduru, (2024). Pelatihan Penggunaan Team Viewer Untuk Meremote Komputer Jarak Jauh Pada Siswa/I Smk Teknik Komputer Jaringan Yayasan Pendidikan Cerdas Bangsa. Journal of Community Dedication Vol. 4 No. 3 Agustus 2024, hal., 607-616.
- [14] Ihsan Syahputra, (2011). Aplikasi danb Implementasi Remote Desk PCMelalui Perangkat Ponsel Berbasis GPRS dengan Menggunakan Java Mobile To PC (Studi Kasus SMK Bhipuri Serpong Tangerang). Tesis Universitas Islam Negeri Syarif Hidayatullah.
- [15] Prinect. (20??). Technical White Paper Heidelberg TeamViewer for Remote Service. https://www.heidelberg.com/us/media/local media/services whitepapers/whitep aper-teamviewer.pdf
- [16] Xabiel G. Paneda, David Melendi, Víctor Corcoba, Alejandro G. Paneda, Roberto García and Dan García. (2024). Forensic Analysis of File Exfiltrations Using Any Desk, Electronics Desktop. Electronics 2024, 13, 1429. <u>https://doi.org/10.3390/ electronics13081429</u>
- [17] Minghao Jiang, Gaopeng Gou, Junzheng Shi, Gang Xiong et. Al. (2019). I Know What You Are Doing With Remote Desktop. <u>IEEE 38th International Performance Computing and</u> <u>Communications Conference (IPCCC)</u>. DOI: <u>10.1109/IPCCC47392.2019.8958721</u>