

# Secure Socket Shell(SSH)

Feasability study for the department of IST

## **What is SSH?**

SSH is based on open-source technology. The most commonly used implementation of SSH is OpenSSH, which is open-source software. This means that its source code is freely available for anyone to view, modify, and distribute under open-source licenses. OpenSSH is widely used in various operating systems, including Linux and Unix-based systems, and it has played a crucial role in making secure remote access and data transfer accessible to a broad range of users and developers. Open-source software like OpenSSH is often favored for its transparency, security, and the ability for the community to contribute to its development and improvement.

## **What problems does it solve in the context of the Department of IST?**

This new addition would enable the students to seamlessly access the resources from the department server anywhere at anytime. The data that is used by the students is often decentralized between the labs and it is completely inaccessible outside the department.

Now the inclusion of this technology will solve the problems of decentralized data and localized resource problems.

## **Cost Analysis:**

After discussing with Anto sir, it is now clear that most of the tools that are required to the installation of the technology is already present in the department. With the small need for some storage space to accommodate all the students across the IT(UG), IT(PG) and MCA.

For this using an incremental phase based implementation of the technology the currently available storage is enough for the test run.

If the test run becomes successful additional storage of atmost 10TB can be added incrementally as per the demand from the students.

Additional information can be get from Anto sir.

## **In conclusion:**

implementing SSH technology, particularly OpenSSH, within the Department of IST presents an opportunity to significantly enhance access to department resources for students. It addresses the issues of decentralized data and localized resource accessibility. Cost-wise, the existing infrastructure is largely sufficient, and an incremental approach allows for scalability based on student demand. Overall,

this addition stands to streamline access and improve the overall efficiency of the department's operations.