

THE STUDENT INFORMATION PROCESSING BOARD

Value delivered by SIPB

SIPB develops and maintains services that deliver tangible monetary value to the MIT community.

Debathena is a collaboration between SIPB and IS&T to create the technology that powers cluster machines and hundreds of desktops and laptops across MIT. Debathena transitions away from proprietary Red Hat Enterprise Linux to Debian, and combines the advantages of the original project Athena with a modern Linux distribution.

Scripts provides shared hosting services to the MIT community. Scripts accounts are easy to setup from an Athena workstation, and our servers offer a plethora of software and functionality, as well as a popular autoinstaller service. Equivalent commodity hosting of active Scripts websites would cost **\$130,000** a year.¹

XVM provides virtualization services to the MIT community. Virtual machines give users customizability and flexibility without the footprint of a physical machine. Equivalent commodity hosting of the machines currently running on XVM would cost **\$58,000** a year; next tier IS&T hosting would cost **\$277,000** a year.² XVM is energy-efficient too: physical servers would guzzle an extra **\$184,000** a year worth of kilowatt-hours.³

¹Number of active websites (1090 out of 2855) × Dreamhost one-year plan (\$119.40).

²Number of running VMs (c. 240) × Slicehost 256MB slice (\$240).

³750W server, with \$.12/kWH power cost. Total XVM hardware is rated at 5kW.

In-person support. SIPB members staff an office outside of the student center cluster and are happy to answer technical questions of those passing by. Members also troubleshoot problems on a variety of mailing lists and support queues.

Educational opportunities at SIPB

SIPB organizes and fosters an educational environment that is not found anywhere else on MIT. SIPB organizes classes on computing subjects. Of special note is “Caffeinated 6.001”, a class for credit made possible by partnership between former 6.001 students and course 6 staff. Furthermore, SIPB projects give students access to production environments that serve thousands of users every day, something not found in a purely academic context. Academic theses and businesses like Ksplice have grown from conversations in the SIPB office.

Essential resources

To continue its mission, SIPB needs four things:

- A budget,
- Office space in the Student Center,
- Machine room space in the Student Center, and
- The ability to ask for supplemental funding for special projects.

Conclusion

The Student Information Processing Board is a vital component of computing at MIT, offering a wide array of services to the community that complement IS&T’s services.