

IETF University Outreach Pilot Programme

Post-Event Report

3 September 2013

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Executive Summary

The Internet Society launched a pilot programme in conjunction with IETF 87, held in Berlin, July 28 - August 2, 2013. Its principal goal was to increase student participation in the meeting as well as student appreciation for the development of open standards for the Internet. The programme included outreach to German and Austrian faculty, pre-event orientation information for students, and a number of tailored on-site meetings. Coupled with other student-focused activities held in conjunction with IETF 87, and thanks to strong support from local professors, the programme contributed to a dramatic increase in student participation.

Background

Every IETF meeting presents a unique opportunity for computer science and engineering students in the vicinity to gain exposure to standards development. Meetings also provide the IETF with opportunities to involve the next generation in its important work.

While the IETF has offered students a discount on the registration fee for many years, it has lacked resources to actively promote registration by students, help them prepare for participation, and address their specific needs and interests on site. As a consequence, student registrations at recent IETF meetings account for little more than 3% of total attendance. It is unknown how many of those who attended, as students, ever return or remain engaged as remote contributors.

Recognizing the potential for greater student involvement, the Internet Society's Internet Leadership team approached IETF leaders with a plan for formalizing outreach and orientation for local students. The result was the IETF University Outreach Pilot Programme, launched in conjunction with IETF 87.

Project Scope

With advice and input from German university faculty active in the IETF and ISOC's German chapter, a pilot programme was drafted and included plans to:

- Raise awareness among area faculty and students of the opportunity to participate;
- Provide materials about the IETF and the meeting to help students prepare;
- Hold a number of student-focused events during the IETF meeting; and
- Provide information on the Internet Society and the benefits of membership.

Shortly after IETF 86, the pilot programme team reached out to contacts at 15 German and Austrian universities and asked that they share information on IETF 87 with their students and encourage them to attend. The goals were to attract 50 to 75 student registrants, and to provide them with information necessary for meaningful engagement at the meeting.

A post-meeting survey of the Freie Universität Berlin and Hamburg University students indicated that nearly 100% subscribed to Working Group elists prior to the meeting and planned to continue tracking Internet drafts after the meeting.

Two local professors, Matthias Wählisch of Freie Universität Berlin and Thomas Schmidt of Hamburg University of Applied Sciences, were especially supportive of the programme. Both had previously attended IETF meetings, as well as the Internet Society's Network and Distributed System Security (NDSS) Symposium. Wählisch and Schmidt engaged their students in a number of formal activities during the lead up to IETF 87. Both professors organized preparatory meetings, encouraged their students to join Working Group elists of interest, and asked them to review drafts.

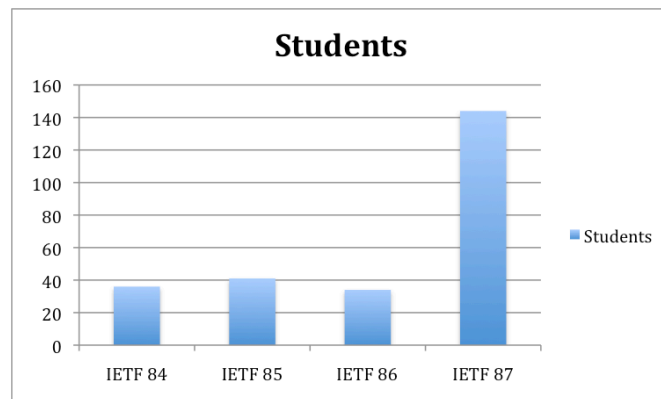
Pilot Programme activities onsite included an orientation session tailored for the students and delivered in German, and daily briefings featuring IETF guest speakers. The Internet Society's German Chapter leader and long-time IETF participant, Hans Peter Dittler, delivered the orientation session. Internet Leadership senior manager, Steve Conte, arranged guest speakers for the daily briefings. These included:

- Monday
Topic: Why Deutsche Telekom supports the work of the IETF
Speaker: Axel Clauberg (Deutsche Telekom)
- Tuesday
Topic: Cisco participation in the IETF
Speaker: Fred Baker (Cisco Systems)
- Wednesday
Topics: Remote participation in the IETF; RIPE NCC and the IETF EDU Team
Speakers: Steve Conte (Internet Society) and Mirjam Kühne (Ripe NCC)
- Thursday
Topics: Internet Society membership and programmes of interest to students
Speakers: Hans Peter Dittler (ISOC DE) and Jacek Gajewski (Internet Society)

Results

German law and IETF's own policies in the area of privacy make it difficult to provide precise metrics regarding student participation. Also, other student-focused programmes in Berlin, such as the Maniac Challenge, may have impacted student turn-out. Nevertheless, much of the dramatic increase in student registration at the Berlin meeting can be attributed to the IETF University Outreach Pilot Programme.

Overall paid student registration at IETF 87 reached 144, reflecting an average increase of 290% over each of the past 3 IETF meetings.



Source: IETF Registrar

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Source: IETF Registrar

Early cultivation of computer science and engineering school faculty in the vicinity of each IETF meeting will remain critical to the success of the programme.

A post-meeting survey of the Freie Universität Berlin and Hamburg University students indicated that nearly 100% subscribed to Working Group elists prior to the meeting and planned to continue tracking Internet drafts after the meeting. Also, 85% indicated that their understanding of the Internet standards development process improved during the meeting.

Participating faculty indicated that the IETF University Outreach Pilot Programme afforded their students valuable practical experience, unavailable in the classroom.

Conclusion

A coordinated University Outreach Programme, combining information for faculty, resources for students, and tailored on-site activities has the potential to increase student participation in IETF meetings and, as a result, their appreciation for Internet standards work.

Key Factors for Success

The number and proximity of computer science and engineering schools for each IETF venue is likely to impact the success of the programme at each meeting. The greater the number of schools in close proximity to the venue, the more faculty and students we are likely to engage.

Early cultivation of faculty in the vicinity of each IETF meeting will remain critical to the success of the programme. Results indicate much deeper engagement among students when faculty have sufficient time to incorporate IETF meeting preparation into the academic calendar.

Proposed Next Steps

Confirm that there is organizational (IETF and ISOC) support to continue the programme in future.

Convene a small team at the IETF meeting in Vancouver to assess opportunities and coordination for university outreach programmes in conjunction with IETF 89 through 94.

Consider expansion of the programme to include schools and students in Latin America in support of the IETF's effort to increase the level of participation from South and Central America.

Coordinate with the IETF EDU Team to promote any tutorials of interest to student registrants.

Propose creation of a special IETF elist to satisfy students' interest in communicating with one another in connection with meetings. This was a specific request made by several students.

Acknowledgements

The IETF University Outreach Pilot Programme owes its success to the IETF leadership and many individuals:

IETF Leadership

IETF Chair Jari Arkko, IAOC Chair Bob Hinden, IAD Ray Pelletier

Fred Baker, Cisco Systems

Marcia Beaulieu, IETF Secretariat

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Steve Conte, Internet Society

Kevin Craemer, Internet Society

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Mirjam Kühne, Ripe NCC and the IETF EDU Team

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Greg Wood, Internet Society

Sabrina Wilmot, Internet Society

Dan York, Internet Society

Appendices

The following related materials and resources can be found online:

<http://www.internetsociety.org/IUO-Information>

IETF University Outreach Pilot Programme briefing document (one page)

IETF University Outreach promotional poster (developed for display at target schools)

Video of briefing session presentation by Axel Clauberg, Deutsche Telekom

Video of briefing session presentation by Fred Baker, Cisco Systems

Photo of students at daily briefing session

Photo of Matthias Wählisch and Thomas Schmidt receiving IETF and ISOC tokens of appreciation