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## A world without Ethernet

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**Can you imagine a world of communication, which would dominate the field of carriers and service providers from Metro FDDI? Even better, the IEEE defines a token bus standard for the first mile? Or in harsh environments, the ATM is used as the industry standard? Or for the standardization of the data centers of the proposal, "Fibre Channel over Token Ring" is implemented? The networked world would certainly be different if the Ethernet technology would not have won the battles.**

Without the dominance of Ethernet, the general standards would certainly not enforced so fast. The networked systems would be much more complex than they are today in practice and the networks would certainly be less reliable and slower. Without the invention of the Ethernet, it would certainly lasted a long time and the proprietary network technologies have halted all further development. The dissemination of the Internet Protocol (IP) would not happen so very quickly. Probably would each network segment - the local area network (LAN), the metro area (MAN) and Wide Area Network (WAN) - are built on a different technology. The token-ring would probably have for a long time dominated the LAN. In special areas (production), the token bus would have continued to spread.

Probably would have also determined the FDDI metro area for many years and at ATM and Frame Relay would not get past across the WAN. The various technologies that would determine the different parts of networks, of course, would have drastic consequences on the end-to-end services. Gateways and bridges between different technologies would increase the delay and lead to an increase in expenses for the operation of the networks would be necessary. Probably would be without the Ethernet progress in distributed computing and the client-server computing has never been realized and would stunted. Therefore, there would not today's client-server structures and Microsoft and Novell have their proprietary protocols can penetrate the market even longer. Certainly the change from centralized architectures have slowed to client-server versions. Consequently, the minicomputer and mid-range systems would have been much more at home in the company.

The extreme throughput speeds of today 100 Gbit / s would probably still science fiction. Because the flow rates were increased by Token-Ring in the past only in steps of factor 4, while the Ethernet speed is always increased by a factor of 10. Specifications for 100 Mbit / s and Gigabit Token Ring are still enshrined in the late 1990s, but did not reach the market more.

Had the Token Ring won this fight, IBM, and therefore would not be the top dog in Cisco networking. IBM - as a long-time advocate of the token-ring, would have significantly increased its market potential and the spread of other network standards on price controls. Cisco, Juniper and Co. would have had no chance against IBM, enforce network standards. The networks have evolved only in the lee of IBM. As a consequence, the Ethernet and wireless LANs were major flops. But a failed Ethernet would have had a direct and positive impact on the business of system integrators and professional services organizations. Forecasts indicate that the volume of business these companies, the 5 - would amount to 10 times the current sales. As the complexity, due to the different technologies in the LAN, MAN and WAN would be much larger, the company needed an army of engineers to these networks to keep in operation.

## Conclusion

Thankfully, the story is different. Ethernet has simplified the complicated world of IT and made it available for everyone. Congratulations to "Ethernet" on the 40th Birthday. At the summit of the IT industry, which in Mountain View, California, takes place today and tomorrow, the 40th is Birthday appropriately recognized Ethernet.

<http://www.netevents.org.uk/global-netevents-summit-live>

Under the mentioned live stream of NetEvents can the current talk live right. The Who's Who of the industry is present, among other things, the inventor of Ethernet, Bob Metcalfe.