The Web is the largest man-made communication and information infrastructure that influences all parts of today’s community and life. The aim of the L3S Web observatory is to provide a central authority to observe and understand the dynamics of Web content, structure and usage. Observing the Web involves the close monitoring and understanding across all layers ranging from network infrastructure and traffic via content evolution and semantics to user behaviour and interaction. Actively shaping these aspects allows us to achieve better governance, preserve our cultural heritage, improve accessibility overcoming the digital divide, and protect each individual user on the Web.