

SPDY Accelerator for Improving Web Access Speed

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Abstract— The next-generation protocol SPDY proposed by Google was decided to use as a basis of the technical specification of the HTTP/2.0 protocol which has been studying in the IETF standardization process. SPDY is a protocol to realize high-speed Web access by using SPDY session that has been established between the client and the Web server for transmitting and receiving page resources. Since a modern Web page usually consists of multiple page resources that are stored on multiple domains (multi-domain configuration), the client has to establish multiple SPDY sessions with multiple Web servers. In that case, SPDY would not realize high-speed Web access since it takes several seconds for establishing multiple SPDY sessions in mobile environment with high-latency. In this paper, we propose the SPDY accelerator which can considerably accelerates Web access speed by combining SPDY protocol and cache system even in the multi-domain configuration. We confirmed that the proposed system can improve the page loading time to 1/3 by comparing with the existing SPDY.

Keyword— SPDY, Web contents delivery, cache, reverse proxy



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