R. Garbrick Data I/O Corp. 30 June 1998

Content-Specific Hypertext Transfer Protocol

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Abstract

This document describes HTTPX, a protocol for providing access to materials that may be objectionable or that have age or locale-based restrictions, while providing a simple method to filter such content where required.

HTTPX uses the protocol HTTP 1.1 ([RFC 2068]), with the single exception of designating a separate range of TCP and UDP port numbers that are allocated to a specific content type.

1. Rationale and Scope

The problem of unintentional distribution of adult-oriented materials to minors via the internet has become an increasing problem. URL filtering schemes have proven either ineffective or

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and expensive. In addition, these methods place full responsibility for restricting access on the end user and places no responsibility on the distributor, where most such restrictions, such as access to alcohol, cigarettes and explicit magazines, have historically been placed.

Currently available protocols provide no reasonable means for the distributor to pro-actively apply effective protocol-based controls on content. HTTPX is intended to provide a simple, effective means to filter content by using a standard protocol, HTTP 1.1 ([RFC 2068]), over a specially designated port number.

This simple change will allow the creation of a separate, adult network. Such entities as schools, libraries and businesses that have a requirement for filtering content, will be able to do so with minimal expense, using existing routers, proxy servers or firewalls by disabling those ports. Browser software can be modified to require a password lock to receive data on those ports.

Distributors of adult content could still provide opening screens And advertisements on the existing port 80, and with minimal expense, provide the adult content on the newly designated ports. Governments and Internet Service Providers might provide some incentive for adult content distributors to move their content to the designated ports via service agreements or minor legislation. Moving content to the new ports, might even reduce liability for the distributors.

2. HTTPX Protocol

The HTTPX protocol uses the HTTP 1.1 ($[\mbox{RFC 2068}]$) protocol unchanged, with the exception of designating special TCP and UDP port numbers.

2.1 Proposed TCP and UDP Port Numbers Proposed additions to RFC 1700;

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www-httpx 880/tcp World Wide Web HTTPX for Graphic Sexual content
www-httpx 880/udp World Wide Web HTTPX for Graphic Sexual content
www-httpx 881/tcp World Wide Web HTTPX for Full Nudity
www-httpx 881/udp World Wide Web HTTPX for Full Nudity
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3. References

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[RFC2068] Fielding, R., Gettys, J., Mogul, J., Frystyk, H., and T. Berners-Lee, "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2068,
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January 1997.

[RFC1700] J. Reynolds and J. Postel, "ASSIGNED NUMBERS", <u>RFC 1700</u>, October 1994

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