Project Plan

Team information

No.: Team5
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Details about our approach

The support of IPV6 on Iodine can be mainly divided into two parts: server and client.
Server use DNS over UDPv6 instead of UDPv4 for the Iodine-Iodined communication. Do things below:
(1) Listen and receive DNS request;
(2) Resolve IPV6 data packet;
(3) Package IPV6 data packet;
(4) Send DNS response.

Client receives commands with an IPv6 address instead of an IPv4 address provided by user. Then do things below:
(1) Package UDPv6 data packet;
(2) Send DNS request;
(3) Receive DNS response;
(4) Resolve UDPv6 data packet.

We could extract the common parts in implementations of both server and client Iodine IPV6 supports easily.
1. package and resolve UDPv6 data packets;
2. Send/receive DNS requests and responses.

We'll dive into the source code of Iodine, especially sections handling with UDPv4 data packets, DNS requests and responses, and then develop server and client to support IPV6 on Iodine based on the differences between IPV4 and IPV6 protocols.

Milestones and coordination

Schedule	Goals	Deadline	Coordination
Project plan	1. details about our approach 2. intermediate milestones 3. team information and coordination	 07/11/2011	 Both
Investigation	1. Simple investigation on IPV6 today 2. Investigation and installation or use of tools and iodine	10/11/2011 12/11/2011	 Both

Set up	1. Register a domain name, run a simple HTTP server and iodine on virtual host	20/11/2011	
	2. Test setup and measure the performance	27/11/2011	
	3. Dive into the source code of Iodine	06/12/2011	Both
Develop and test	1. Send/receive DNS requests and responses	15/12/2011	
	2. Package and resolve UDPv6 data packets	23/12/2011	Zhe Zhang for client Yue Ye for server
	3. Server could use DNS over UDPv6 instead of UDPv4 for the Iodine-Iodined communication		
	4. Client could tackle commands with an IPv6 address instead of an IPv4 address provided by user	15/01/2012	
	5. Test on server and client	22/01/2012	
Final assessment	1. Report		
	2. Problems		
	3. Future expectation	31/01/2012	Both