

Project: ISOC Open Internet Provider

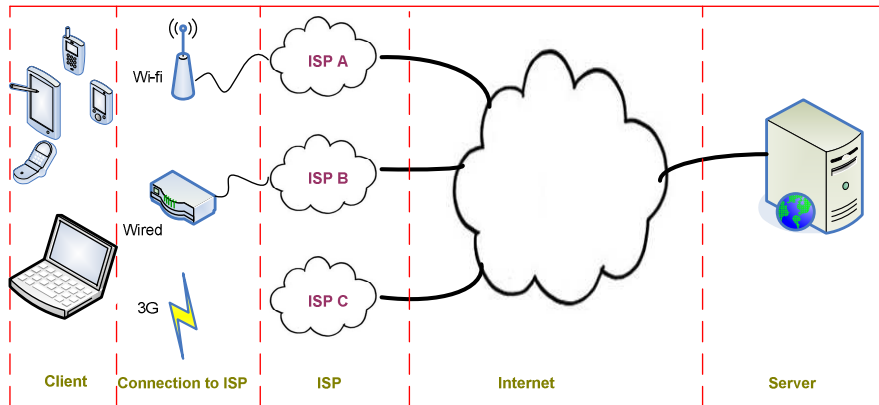
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Background

[We know what we want to do]

Overview



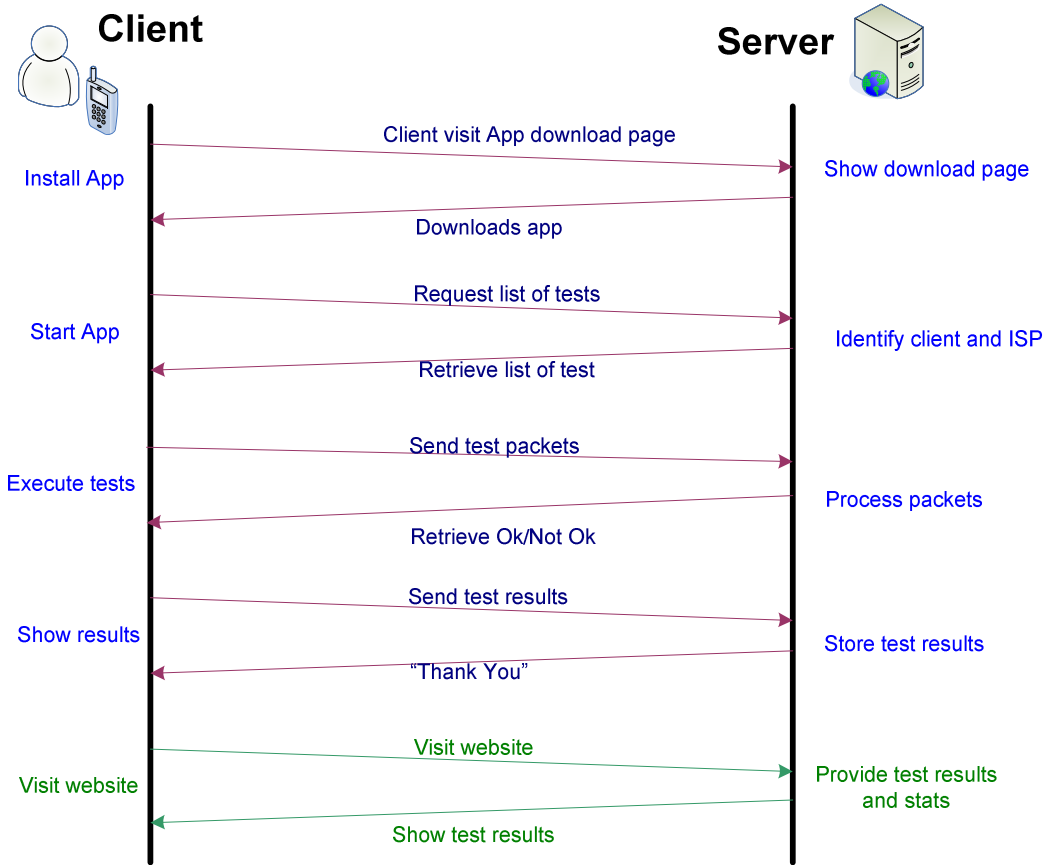
Project parts

In this project we have defined 5 parts

1. Client
 - Examples: Smartphone, like iPhone, Android, but also tablets.
 - Perhaps in a later stage we can make the software available for other devices like laptops, macbooks and PC's.
2. Connection to ISP
 - We need to know how a client is connected. For example via mobile network or via wi-fi from DSL-router.
3. ISP
 - We need to know the ISP name. We have to do an IP-lookup for ISP.
 - It would be nice if we could use geo-location.
4. Internet
5. Server
 - This is preferable on one server.
 - It's possible that more servers are available to provide the testing tools.

Global process overview

We can define global functional processes between the client and server.



Each global process step has requirement for the server and client.

Functional requirements have been flagged with MoSCoW (Must have, Should have, Could Have, Would Have).

	Server	MoSCoW
1	Server Linux Ubuntu Server	S
1a	IPV6 must be configured	W
2	Server is a webserver (Apache)	M
2a	Server must serve webpages	M
2b	Standard navigation pages (Like: Home, background, contact, who we are)	M
2c	Download page for Android, Iphone , tablet app	M
2d	Page(s) with the test results per measurement per ISP, top 10	M
2e	Results retrieved from clients must be visible immediately	M
2f	Website statistics, especially for the app downloads	S
2g	Registration page for the client	W
2h	Advertising page for contributors	W

3	Server contains database MySQL	S
3a	Keeps client tests configuration in database	S
3b	Keeps test results in database	M
3c	Keeps ISP ip-ranges	M
4	Server contains configuration for clients	M
4a	Contains type of tests	M
4b	Contains a list of other servers to use for the test	C
5	Server contains application for doing tests with clients	M
5a	Port number and protocol must be defined	M
5b	Amount of packets, size and time must be measured	M
5c	Averages and other statistical information should be calculated	S
5d	Server must be able to do concurrent testing with several clients	M
5e	Server must be able to identify clients network and ISP	M
5f	Server must be able to identify mobile network from wired network	S
5g	Each test must represent an existing application (like Skype, Bittorent)	M
	Client	
1	Client app installation	
1a	App must be available for iPhone, iPad and Andriod	M
1b	Client application can be available for PC with Linux, Windows, Mac	W
1c	Look and feel of the app must be similar as the website	S
1d	App must be easy to install	M
2	Client app start	
2a	App must inform the user step-by-step what it is doing	M
2b	App connects via http to a pre-defined URL to retrieve the configuration	M
2c	App must be able to do different tests with different servers	M
2d	App must be able to use different protocols and port numbers	M
2e	App must be able to distinguish wi-fi from mobile connections	M
2f	App communicates via http to the server (send results, ip-address)	M
2g	App must be able to do tests multiple times	M
2h	App should be able to do tests using ipv6	S
2i	User must be able to select which test must be done	S
2j	User must be able to retrieve information about the connected network	M
3	Client app results	
3a	App must say "thank you" to the user	M
3b	App must ask the client to do more tests	M
3c	App must send results to the server (got from the configuration)	M