List of requirements for 'The Octopus'

ReqID	Functional/Non-Functional	Description	Module	Creation date	Change date	Dependencies	Test case	Assignee	Comments	Temporary Index
System Requirements										
Req-Sys_101	Functional	All peers shall be installed with the static ip address of the default bootstrap server.	Client-Backend	21/04/2016	29/04/2016		Test_201		Reformulated requirement	1
Req-Back_102	Functional	All peers shall connect to the bootstrap server upon start.	Client-Backend	21/04/2016	29/04/2016		Test_201			2
Req-Back_103	Functional	All peers shall recieve 3 randomly selected IP addresses of others peers upon start.	Client-Backend	21/04/2016	29/04/2016					3
Req-Back_104	Functional	All peers shall receive a list of published swarms upon start.	Client-Backend	21/04/2016	29/04/2016		Test_203			4
Req-Back_105	Functional	All peers shall receive a blacklist of IP addresses that have been banned from the service upon start.	Client-Backend	21/04/2016	29/04/2016		Test_204			5
Req-Back_106	Functional	All peers shall block communication with the IP adresses that are banned.	Client-Backend	21/04/2016	29/04/2016		Test_205			6
Req-Back_107	Non-Functional	All IP addressess except the default bootstrap server should have a validity time of 3 minutes.	Client-Backend	21/04/2016	29/04/2016		Test_206			7
Req-Back_108	Functional	All peers should refresh its validity time, this refresh should be done every 2 minutes and extend the validity time by a value of ? minutes.	Client-Backend	21/04/2016	29/04/2016		Test_206			8
Req-Back_109	Functional	All IP addresses that has exceeded their validity time shall be removed from the bootstrap.	Bootstrap-Backend	21/04/2016	29/04/2016		Test_302			9
Req-Back_110	Functional	All swarms without IP addresses shall be removed from the bootstrap server.	Bootstrap-Backend	21/04/2016	29/04/2016		Test_303			10
Req-Back_111	Functional	All peers and servers shall synchronize with a NTP-server and use the same timezone.	Bootstrap-Backend/Client-Backend	21/04/2016	29/04/2016		Test_209, Test_301			11
Req-Back_112	Functional	All peers should update their information from the bootstrap server every 3 minutes.	Client-Backend	21/04/2016	29/04/2016		Test_210			12
Req-Back_113	Functional	All peers which are not able to connect to the default bootstrap server, should connect to another bootstrap server. If that also fails, they should use the current data they have.	Client-Backend	21/04/2016	29/04/2016		Test_211			13
Req-Back_114	Functional	All peers which can not connect to a bootstrap server and does not have the necessary data shall shut down.	Client-Backend	21/04/2016	29/04/2016		Test_212			14
Req-Back_115	Functional	When a peer receives the 3 IP addresses of other peers it should establish a HTTPS connection with them.	Client-Backend	21/04/2016	29/04/2016		Test_213			15
Req-Back_116	Functional	If a peer can't connect to any of the IP addresses it receives it should recieve 3 new ones from the bootstrap server.	Client-Backend/Bootstrap-Backend	21/04/2016	29/04/2016		Test_214			16
Req-Back_117	Non-functional	A peer should at most have 3 connections to other peers at the same time.	Client-Backend	21/04/2016	29/04/2016		Test_215			17
Req-Back_118	Non-functional	The bootstrap servers should synchronize their data with eachother every 3 minutes.	Bootstrap-Backend	21/04/2016	29/04/2016		Test_304		What data should be synchronized?	18
Req-Back_119	Non-functional	All swarms shall be divided into blocks with a sequence of 1014-bytes.	System	21/04/2016	29/04/2016					19
Req-Back_120	Non-functional	All swarms shall have a message digest which uses SHA-?.	System	21/04/2016	29/04/2016				Which SHA version is not yet confirmed.	20
Req-Back_121	Functional	All peers that connects to an IP address should get a list of swarms available on that IP address.	Client-Backend	21/04/2016	29/04/2016					21
Req-Back_122	Functional	When a file has finished downloading the system shall recompute the message digest and verify the file is intact.	Client-Backend	21/04/2016	29/04/2016					
Req-Back_123	Functional	When a peer is uploading a swarm to another peer it should add their IP address to the metadata of the swarm.	Client-Backend	21/04/2016	29/04/2016					24
Req-API_124	Non-functional	The system shall communicate between user-to-user and user-to-server with a RESTFUL API with JSON data encoding	Client-Backend/Bootstrap-Backend	21/04/2016	29/04/2016					
Req-Sys_125	Functional	The system shall have an option to restart with encryption disabled.	System	21/04/2016	29/04/2016					36
Req-Sys_126	Non-functional	The system shall have encryption on all communication.	System	21/04/2016	29/04/2016					38
Req-Sys_127	Non-functional	The system shall support more than 2 peers.	System	21/04/2016	29/04/2016					37
User Requirements										
Req-Front_130	Functional	The peers shall provide an option to download a swarm in the GUI.	Client-GUI	21/04/2016	29/04/2016		Test_102			30
Req-Front_131	Functional	The peers shall provide an option to create swarms in the GUI	Client-GUI	21/04/2016	29/04/2016		Test_101			25
Req-Front_132	Functional	The peers shall provide an option to see a list of swarms in the GUI	Client-GUI	21/04/2016	29/04/2016		Test_101			26
Req-Front_133	Functional	The peers shall provide an option to search for swarms in the GUI	Client-GUI	21/04/2016	29/04/2016		Test_103			28
Req-Front_134	Functional	The peers shall provide an option to upload a swarm in the GUI.	Client-GUI	21/04/2016	29/04/2016		Test_104			29
Req-Front_135	Functional	The peers shall provide an option to delete a swarm in the GUI.	Client-GUI	21/04/2016	29/04/2016		Test_105			27
Req-Front_136	Functional	The peers shall provide an option to choose whether a swarm is dark or visible in the GUI.	Client-GUI	21/04/2016	29/04/2016		Test_106			31
Req-Front_137	Functional	The peers shall show the progress of uploads and downloads.	Client-GUI	21/04/2016	29/04/2016		Test_107, Test_108			32
Req-Front_138	Functional	The peers shall show the estimated time to complete downloads	Client-GUI	21/04/2016	29/04/2016		Test_109			33
Req-Front_139	Functional	The peers shall show the list of the IP addresses associated with a swarm	Client-GUI	21/04/2016	29/04/2016		Test_110			34
Req-Front_140	Functional	The peers shall show all IP addresses of connected peers.	Client-GUI	21/04/2016	29/04/2016		Test_111			35
Req-Front_141	Functional	The peers shall show an error message in case a file digest fails and provide an option to redownload the file.	Client-GUI	21/04/2016	29/04/2016					39
Needs work/unnecessary										
Req-Front_129	Functional	The peers shall provide an option in the GUI to set a file as public to upload its metadata to the default bootstrap server.	Client-GUI	21/04/2016	29/04/2016				Same as 136	21
Req-Front_128	Functional	The peers shall provide an option to make a set of files available for sharing in the GUI.	Client-GUI	21/04/2016	29/04/2016					