Sip Benchmark III
Study Overview

ICT Coalition meeting

Brussels, May 16th 2017

Study on "Benchmarking of parental control tools for the online protection of children"
SIP-Bench III
SMART 2012/0044

Project Status

❑ Study implementation period: December 2012 - March 2017

❑ Four benchmarking cycles:

Cycle	Period	Report published
1st cycle	Summer 2013	Autumn 2013
2nd cycle	Winter 2013/2014	Spring 2014
3rd cycle	Summer/Autumn 2014	October 2016
4th cycle	**July - December**	April 2017

❑ Final Report submitted to the EC in April 2017

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Benchmarking testing cycles

❑ In total **18** PC tools, **19** Mobile tools, **3** tools for Game consoles and **10** Alternative tools

❑ From the 2nd cycle testing of tools for game consoles were not longer tested instead so called Alternative tools were included

❑ 5 PC tools, 2 mobile tools, and 1 Alternative tool have been tested repetitively over the four cycles

❑ Overview of the tested tools in the four benchmarking cycles

Cycle	Access device				TOTAL
	PC	Mobile devices	Game consoles	Alternative tools	
Cycle 1	13	9	3	0	25
Cycle 2	13	10	0	3	26
Cycle 3	10	10	0	5	25
Cycle 4	10	10	0	5	25

Key points of the Methodology

❑ **Functionality**

Checking against an open ended list of functionalities

❑ **Usability**

Expert review in laboratory: installation, configuration and usage, additional test with AttrakDiff on the hedonic value of alternative tools

❑ **Security**

Expert review regards de-installation, circumvention, and tampering to by-pass the tool

❑ **Effectiveness**

Automated test based on a test-bed of around 4.000 URLs (Adult Content, Violence, Racism, Self-harm, Gambling) 30 % UGC

Functionality PC Tools I

Area of need	Usage Restriction															
Functionality	Email	P2P		Personal data Provision	Safe search	Skype		Social Networks		Streaming		Web		Windows Life Messenger		
Specific Issue	Block email client and/or webmail access	Block the application	Monitor Downloads	Block	Availability	Block chat	Block video chat	Block Access	Monitor Usage	Block Access	Monitor Access	Block Access	Monitor Access	Block chat	Block video chat	Monitor
ContentBarrier X9	Y	Y	N	N	N	Y	N	Y	N	Y	N	Y	Y	Y	N	Y
F-Secure Internet Security	N	N	N	N	Y	N	N	Y	N	N	N	Y	N	N	N	N
Kaspersky Safe Kids	Y	Y	N	N	Y	Y	Y	Y	N	N	N	Y	Y	N	N	N
Mac Os X Parental Controls	Y	N	N	N	N	Y	Y	N	N	N	N	Y	Y	N	N	N
McAfee Total Protection	Y	Y	N	N	N	N	N	Y	N	Y	N	Y	N	N	N	N
Net intelligence Online Child Safety	Y	Y	N	N	N	N	N	Y	N	N	N	Y	Y	N	N	N
Norton Family Premier	Y	N	N	Y	Y	N	N	Y	Y	Y	N	Y	Y	N	N	N
Panda Global Protection (2016)	Y	Y	N	N	Y	N	N	Y	N	N	N	Y	Y	N	N	N
Qustodio_Qustodio Premium	Y	N	N	N	Y	N	N	Y	Y	N	N	Y	Y	N	N	N
Witigo Parental Filter	Y	N	N	N	Y	N	N	Y	N	N	N	Y	N	N	N	N
% of tools with function	90 %	50 %	0 %	10 %	60 %	30 %	20 %	90 %	20 %	30 %	0 %	100 %	70 %	10 %	0 %	10 %

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Functionality PC Tools II

Area of need	Management			Filtering Customisation					Keywords			Time	Blocking Message		
Functionality	Management of User profiles	Monitoring	Remote Management	Topics	URLs Black List	URLs White List			Keywords			Time Limit Settings	Type		
Specific Issue	Create several profiles	Remote access to monitoring	Manage on various devices	Customisation of Filtering Topics	Creation of User's own Black List	Default White List	Modification OR Creation	Restrict Browsing to White List	Creation of a User's Black List	Creation of a User's White List	Default Black List	Set a specific time frame or web access duration	Ask for unblocking by parents	Redirect to safe resources	% function coverage
ContentBarrier X9	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	67 %
F-Secure Internet Security	Y	N	N	Y	Y	N	Y	Y	Y	Y	N	Y	N	N	37 %
Kaspersky Safe Kids	Y	Y	Y	Y	Y	N	Y	N	N	N	N	Y	N	Y	53 %
Mac Os X Parental Controls	Y	N	Y	N	Y	Y	Y	Y	N	N	N	Y	Y	Y	47 %
McAfee Total Protection	Y	N	Y	Y	Y	N	Y	N	N	N	N	Y	N	Y	40 %
Net intelligence Online Child Safety	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	N	N	47 %
Norton Family Premier	Y	Y	Y	Y	Y	N	Y	N	N	N	N	Y	Y	Y	57 %
Panda Global Protection (2016)	Y	N	N	Y	Y	N	Y	N	N	N	N	N	N	N	33 %
Qustodio_Qustodio Premium	Y	Y	Y	Y	Y	N	Y	Y	N	N	N	Y	N	Y	50 %
Witigo Parental Filter	Y	Y	Y	N	Y	N	Y	N	N	N	N	Y	Y	N	37 %
% of tools with function	100 %	50 %	80 %	80 %	100 %	30 %	100 %	50 %	20 %	10 %	0 %	90 %	40 %	60 %	

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PC Effectiveness – Content categories

TOOL	Adult content		Violence and Crime		Racist		Drugs & Self-Damage		Gambling	
	over blocking	under blocking	over blocking	under blocking	over blocking	under blocking	Over blocking	under blocking	over blocking	under blocking
ContentBarrier X9	27	34	7	61	12	47	17	47	28	34
F-Secure Internet Security	10	25	4	54	6	52	15	35	16	24
Kaspersky Safe Kids	5	64	3	67	4	66	4	62	7	61
Mac Os X Parental Controls	23	38	6	61	6	64	12	61	9	68
McAfee Total Protecti on	4	50	1	62	1	65	2	54	8	51
Neti ntelligence Online Child Safety	9	27	4	63	7	59	9	50	13	36
Norton Family Premier	11	18	15	57	12	51	10	37	19	21
Panda Global Protecti on (2016)	26	22	26	45	22	44	35	27	34	24
Qustodio_Qustodio Premium	5	34	1	68	1	67	6	46	18	28
Witi go Parental Filter	28	24	20	44	18	44	23	33	21	30

PC Effectiveness – Age

TOOL	≤ 12		≥ 13	
	over blocking	under blocking	over blocking	under blocking
ContentBarrier X9	22	42	22	41
F-Secure Internet Security	10	35	11	34
Kaspersky Safe Kids	5	65	5	64
Mac Os X Parental Controls	15	54	16	53
McAfee Total Protecti on	4	56	4	55
Neti ntelligence Online Child Safety	9	42	9	41
Norton Family Premier	13	32	14	31
Panda Global Protecti on (2016)	28	30	29	29
Qustodio_Qustodio Premium	6	46	6	44
Witi go Parental Filter	24	33	26	32

SECURITY OF PC TOOLS

TOOL	SCORE	SECURITY ISSUES	MITIGATION
ContentBarrier X9	1	Access to harmful content through Google translate	Black list google translate website
F-Secure Internet Security	1	Access to harmful content through Google translate, and web cache sites. Uninstalled without asking credenti als or pin	Black list google translate website and the web cache sites Restrict access on Windows Control panel
Kaspersky Safe Kids	1	Access to harmful content through Google translate	Black list google translate website
Mac Os X Parental Controls	4	**No major issues**	
McAfee Total Protecti on	1	Access to harmful content through Google translate Uninstalled without asking credenti als or pin	Black list google translate website. Restrict access on Windows Control panel
Neti ntelligence Online Child Safety	1	Access to harmful content through Google translate, and web cache sites. Uninstalled without asking credenti als or pin	Black list google translate website and the web cache sites Restrict access on Windows Control panel
Norton Family Premier	1	Access to harmful content through web cache sites. Does not fi lters pages inside an iframe	Black list web cache sites. No miti gati on for iframe problem.
Panda Global Protecti on (2016)	1	Access to harmful content through Google translate site Uninstalled without asking credenti als or pin	Black list google translate website Restrict access on Windows Control panel
Qustodio_Qustodio Premium	1	Access to harmful content through Google translate	Black list google translate website
Witi go Parental Filter	1	Access to harmful content through Google translate	Black list google translate website

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Mobile Effectiveness – Content categories

TOOL	Adult content		Violence and Crime		Racist		Drugs & Self-Damage		Gambling	
	over blocking	under blocking	over blocking	under blocking	over blocking	under blocking	over blocking	under blocking	over blocking	under blocking
Curbi	17	20	12	53	18	51	18	58	15	55
Familoop	11	39	8	62	8	63	8	59	10	59
F-Secure Mobile Security	9	27	6	57	3	53	12	41	14	31
Mobicip Safe Browser	13	36	2	68	1	69	1	67	1	72
Norton Family parental control	15	8	18	53	16	42	13	27	22	15
Parentsaround (mobile)	29	11	29	45	26	46	33	31	28	38
Qustodio (mobile)	15	36	14	56	13	56	16	44	16	45
Surfi e Kids	6	27	2	51	2	47	4	57	9	29
WebProtectMe Safe Browser	9	46	4	65	2	67	5	63	3	70
Xooloo (mobile)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

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Mobile Effectiveness – Languages

TOOL	English		German		Italian		Spanish		French		Polish	
	over blocking	under blocking	over blocking	under blocking	over blocking	under blocking	over blocking	under blocking	over blocking	under blocking	over blocking	under blocking
Curbi	17	38	12	46	12	43	15	40	23	31	11	44
Familoop	10	52	9	52	7	49	13	57	11	45	7	54
F-Secure Mobile Security	11	32	10	42	6	40	9	43	6	34	6	43
Mobicip Safe Browser	11	58	2	54	4	54	5	57	8	51	1	51
Norton Family parental control	13	18	16	25	19	24	16	28	12	24	17	27
Parentsaround (mobile)	32	25	25	33	25	30	27	35	34	18	16	31
Qustodio (mobile)	19	44	15	49	13	44	15	43	13	38	9	50
Surfi e Kids	2	41	5	35	5	38	7	41	11	31	1	35
WebProtectMe Safe Browser	5	60	4	54	6	57	2	63	10	53	3	57
Xooloo (mobile)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Mobile Effectiveness – Age

TOOL	≤ 12		≥ 13	
	over blocking	under blocking	over blocking	under blocking
Curbi	16	41	16	40
Familoop	9	53	10	52
F-Secure Mobile Security	8	39	9	37
Mobicip Safe Browser	6	56	7	55
Norton Family parental control	15	24	16	23
Parentsaround (mobile)	28	29	29	28
Qustodio (mobile)	15	46	15	44
Surfi e Kids	5	39	5	38
WebProtectMe Safe Browser	5	59	6	58
Xooloo (mobile)	n/a	n/a	n/a	n/a

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Usability – Comparison of results over 4 test cycles
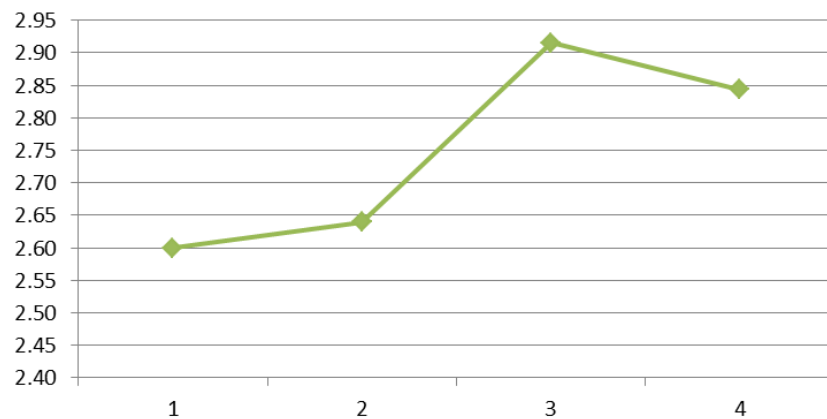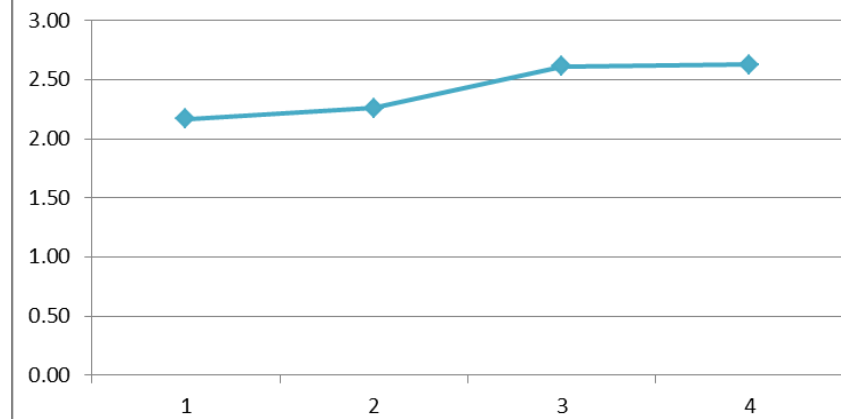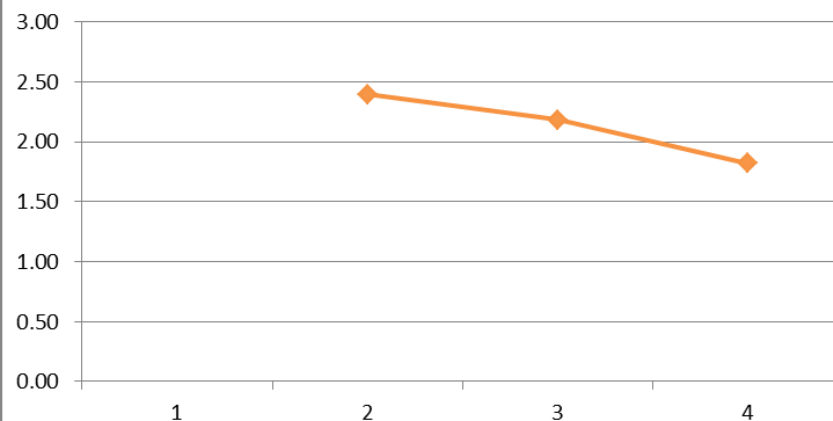
Benchmarking of parental control tools for the online protection of children

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SIP-BENCH III

Safer Internet Programme
Empowering and protecting children online

Find YOUR Tool!

| Start | SIP-Bench Project | Find the right tool | Recommendations | Previous results |

Parental control tools

Parents should be aware of possibilities and threats brought by the Internet and discuss it with children.

In addition to that, there are software solutions protecting children/teenagers from online threats (e.g. pornography, violence, self-harm, illicit act incitement, sexting, cyberbullying, pedophilia, etc.). These tools are known as parental control tools.

Read more...

About SIP-Bench

The European Commission has been successful in placing the issues of developing a safer internet firmly on the agenda of the EU and the Member States since 1996, through the successive Safer Internet programmes.

The study aimed at providing guidance to parents and child carers, in particular to improve awareness of solutions and promoting best practices.

Read more...

Funded by
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General findings

❑ Functionalities of Parental Control Tools are focused on filtering content

❑ Parental Controls work best on English language content, they fail most other languages

❑ Parental Controls work properly on adult content, they are less good on violence, racism, self-harm, gambling, etc.

❑ Parental Controls do not work properly on User Generated Content

❑ Parental Controls fail on communication and interaction among young users

❑ In the benchmark study no tools were identified addressing adequately harmful behavior, i. e. content and communication in chat, live-streaming and other interactive applications

Study on
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SIP-Bench II
SMART 2009/0047

The digital environment of children

Neither the tools nor the testing methodologies in use so far are fit for purpose for the digital environment children are living in today