Dependency Analysis

Module	Descripti on	version	Dep chain	Тор?	Make an issue?	SEC
tesla (npm,gh)	MVC Style Framewor k for Node.js	0.5.0	superagent(~0.18)-> qs(0.6.6)	Depends		
jsreport (npm, gh)	Open source platform for designin g and renderin g various reports.	0.1.14	jaydata(*)->qs(0.5.0)	Depends		
radiatus (<u>npm</u> , <u>gh</u>)	Radiatus is a web server for freedom.j s applications, built using node.js, express, and freedom-f or-node.	0.0.2	body-parser(~1.5.2)->qs(0.6.6)	Depends	gh uses body-pars er(~1.12.0)	
tarifa(npm, gh)	tarifa is a CLI on top of Apache Cordova. It aims at	0.2.5	restler(3.2. 2)->qs(0.6. 6)	Depends	latest version of restler -> no option	

	simplifyin g the Apache Cordova workflow and adding features to complete cordova toolchain					
ionic(npm, gh)	The lonic Framewor k command line utility makes it easy to start, build, run, and emulate lonic apps. In the future, it will also have support for our mobile developm ent services and tools that make lonic even more powerful.	1.2.8-beta 1	tiny-Ir-fork(0.0.5)->q s(~0.5.2)	downloads		
juice(<u>npm</u> , gh)	Given HTML, juice will inline your	0.5.0	superagent(0.18.2)- >qs(0.6.6)	downloads ,stars	resolved	yes, solved

	CSS properties into the style attribute.					
componen t(npm, gh)	Compone nt is a vertically integrated frontend solution, handling everythin g from package managem ent to the build process, handling everythin g including HTML, JS, CSS, images, and fonts. Think of it as an opinionat ed npm + browserify + rework-npm + grunt/gulp /broccoli all wrapped intocompon ent build.	1.0.0-rc7	tiny-Ir-fork(0.0.5)->q s(~0.5.2) superagent!!!	downloads		
feedparser (npm,gh)	Robust RSS,	0.19.2	resanitize(~0.3.0)<-validator(~1.5.1)	downloads ,stars	Yes, but on resanitize,	<u>No</u>

	Atom, and RDF feed parsing in Node.js				not in a vulnerable state	
juice2(<u>np</u> <u>m</u> , <u>gh</u>)	Juice inlines CSS stylesheet s into your HTML source.	1.3.0	superagent(~0.18.2) ->qs(0.6.6)	downloads		
ripple-lib(npm, gh)	A JavaScrip t API for interactin g with Ripple in Node.js and the browser	0.9.0-rc2	superagent(^0.18.0)->qs(0.6.6)	downloads ,stars		
harp(npm, gh)	Static Site Server/Ge nerator with built-in preproces sing http://harp js.com	0.14.0	terraform(0.9.0)<-m arked(0.2.9)	downloads ,stars		Yes, solved
atomify(np m, gh)	Atomic web developm ent - Combinin g the power of npm, Browserif y, Rework	5.0.0	• tiny-ir-f ork(0.0 .5)->q s(-0.5) 2 1 atomif y-css(^3.0.0) <-npm -less(^ 1.0.0) <-requ est(~2. 39.0)< -qs(~ 0.6. 0)	downloads ,stars		Yes, updated

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	and more to build small, fully encapsula ted client side modules					
loopback-c omponent- storage(np m, gh)	LoopBack storage compone nt provides Node.js and REST APIs to manage binary contents using pluggable storage providers, such as local file systems, Amazon S3, or Rackspac e cloud files	1.0.5	pkgcloud(~0.9.6)<-q s(0.6.x)	downloads	resolved	
shout(npm , gh)	The self-hoste d web IRC client http://sho ut-irc.com /	0.44.0	superagent(^0.18.2)->qs(0.6.6)	downloads ,stars	resolved	Yes, but not NSP
roots(npm, gh)	a toolkit for rapid	3.0.0-rc.1 0	charge(0.0.3)<-pathologist-middl eware (0.0.1)<-send(^0.3.0	downloads ,stars		

	advanced front-end developm ent http://root s.cx)		
open.core(npm,gh)	Common utility functionali ty used between multiple applications.	0.1.209	restler(>= 0.2.1)<-qs(0.6.6)	downloads	
quips(npm,gh)	a leak-plug ging layer on top of backbone .js	1.0.20	hem-haml- coffee(0.0. 3)<-hem(*)< -connect(~ 2.6.0)	downloads	
yogi(<u>npm</u> , gh)	Comman d Line Helper for YUI http://yui. github.co m/yogi/	0.1.13	yuidocjs(~ 0.3.31)<-marked (~0.2.8)	downloads	Yes, production tool!
sear(npm, gh)	SEAR: To brown very quickly by intense heat. This method increases shrinkage but develops	0.0.24	brucedow n(~0.1.1)<-marked (~0.2.5)	downloads	

	flavor and improves appearan ce. Bake(r) was taken.				
sendwithu s(<u>npm,gh</u>)	Send With Us node client	2.5.0	restler(~3. 2.2)<-qs(0.6.6)	downloads	
taskcluster -base(npm ,gh)	A collection of common modules used many taskcluste r compone nts. Most of the modules in this base collection can be instantiate d by	0.6.0	superagent(0.18.2)->qs(0.6.6)	downloads	

gitbook(np m, gh)	Modern book format and toolchain using Git and Markdow n https://ww w.gitbook.	1.10	send(0.2.0)	stars		Yes
socketstre am(npm, gh)	A framewor k for Realtime Web Apps http://sock	0.3.10	connect(= 2.4.5)	stars	diff version on gh, but solved	Yes, but not NSP

everyauth- goellan(np m,gh)	Node.js auth package (passwor d, facebook, & more) for Connect and Express apps http://ever yauth.co m/	0.2.32	connect(> =1 <2)	stars	solved	Yes, solved
plupload(n pm, gh)	Plupload is a JavaScrip t API for dealing with file uploads it supports features like multiple file selection, file type filtering, request chunking, client side image scaling and it uses different runtimes to achieve this such as HTML	2.1.2	yuidocjs(0.3.x)<-mar ked(~0.2.8)	stars		

	5, Silverlight and Flash					
batman.js(npm, gh)	The best JavaScrip t framewor k for Rails developer s. http://bat manjs.org	0.15.0	connect(~2.7.4)	stars		
phpjs(npm , gh)	php.js implemen ts PHP functions in JavaScrip t http://phpj s.org	1.3.2	send(0.1.0)	stars	gh updated, but npm not	
cleaver(np m, gh)	30-secon d slideshow s for hackers	0.7.2	marked(~0 .2.9)	stars		
calipso(np m, gh)	Calipso is a simple NodeJS content managem ent system based on Express, Connect & Mongoos e.	0.3.50	connect(2. 3.x) qs 0.4.x	stars		Yes, but not NSP

restler(np m, gh)	REST client library for node.js	3.2.2	qs(0.6.6)	stars	gh updated, but not npm!! action: update the npm, then problem is solved!!	Yes
pump.io(n pm, gh)	Social server with an ActivityStr eams API http://pum p.io/	0.3.0	connect(1. x) validator(0 .4.x)	stars	Yes!	Yes, on website and some issues
styledocco (npm,gh)	Automatic ally generate a style guide from your stylesheet s. http://jacobrask.gith ub.com/st yledocco/	0.6.6	marked(0. 2.x)	stars		
connect-a uth(<u>npm</u> , <u>gh</u>)	Authentic ation middlewar e for connect.	0.6.1	connect(2. 7.x)	stars		Yes, but no action taken
locomotive (npm,gh)	Powerful MVC web framewor k for Node.js	0.4.2	syntax-err or(0.0.1)	stars		Yes, reported but no action

handlebar s-helpers(npm, gh)	Library of 120+ handlebar s helpers for any project: Assemble , Ghost, YUI This project is active and supported , we love contributo rs and appreciat e stars. http://assemble.io/helpers/	0.5.8	marked(~0 .2.10)	stars		Yes, had some breaking changes
matador(n pm, gh)	an MVC framewor k for Node http://med ium.githu b.io/mata dor	2.0.0-alph a.5	connect(2. 3.3)	stars	make an issues!!!!!	
yuidocjs (npm, gh)	YUI Javascript Document ation Tool http://yui. github.co m/yuidoc	0.3.50	marked(~0 .2.8)	stars	resolved	Yes
papery (<u>npm</u> , <u>gh</u>)	Papery - Create your	0.2.4-2	marked-toc(^0.2.6)< -marked(0.3.0)	stars		

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	simple, fast & elegant blog with plain text					
hem(<u>npm</u> , <u>gh</u>)	Bundler for Node/Co mmonJS/ Web Apps	0.3.6	connect(~ 2.6.0)	stars		
rrestjs(np m, gh)	High performan ce nodejs framewor k http://rrest .cnodejs.n et	1.3.5	qs(0.5.1)	stars		
express-a dmin (<u>npm</u> , <u>gh</u>)	MySQL, MariaDB, SQLite, PostgreS QL admin for NodeJS	1.2.5	connect-multiparty(1 .1.0)<-qs(~0.6.5)	stars		
hippie(np m,gh)	End-to-en d API testing made easy	0.3.0	qs(~0.6.5)	stars		
mailchimp(npm,gh)	A node.js wrapper for the MailChim p API.	1.1.0	qs(0.5.x)	stars		
shiny-serv er(<u>npm,gh</u>)	Host Shiny applicatio	0.3.6	send(0.1.x)	stars		

imager (npm,gh)	ns over the web. http://rstu dio.com/s hiny/serve r A node.js module to resize, crop and upload images to Rackspac e cloudfiles and Amazon S3 http://ima gerjs.gith ub.io/ima ger/	1.0.0-alph a1	pkgcloud(0.9.6)<-qs(0.6. x)	stars		
requester(npm,gh)	A simple network request helper that is geared towards crawling. (a few keywords GZIP, XML, JSON, PROXIES)	0.1.20	qs(~0.5.3)	stars		
doxx(<u>npm</u> , <u>gh</u>)	Generic, template based,	0.7.4	marked(~0 .2.9)	stars	resolved	Yes

	HTML output for Dox document ation generator http://twitt er.com/F GRibreau					
frontail(np m,gh)	realtime log stream in the browser	1.3.0	validator(1 .5.0)	stars	Yes!	
replpad(np m,gh)	Pipes content of files to a node repl whenever they change to enable a highly interactive coding experienc e. http://thlor enz.githu b.com/rep lpad/	0.12.0	marked(~0 .2.9)	stars		
glog(<u>npm</u> , <u>gh</u>)	git push blog server	1.4.0	marked(~0 .2.6)	stars		
percolator(npm,gh)	Percolator is a framewor k for quickly	1.5.0	detour(0.16.9)<-sen d(0.1.4)	stars		

	and easily building quality HTTP APIs in Node.js https://git hub.com/ cainus/pe rcolator#r eadme					
harmonic(npm, gh)	The next static site generator	0.0.9	markdown -extra(^0.1 .0)<-marked (~0.2.5)	stars		
spotify-we b-api-node (npm, gh)	A Node.js wrapper for Spotify's new Web API.	1.0.2	restler(~3. 2.0)->qs(0.6.6)	active		
wordpress -rest-api(<u>n</u> <u>pm</u> , <u>gh</u>)	A Node.js-b ased client for the WordPres s JSON API	0.3.0	superagent(^0.18.0)->qs(0.6.6)	active		
couchtato (npm, gh)	CouchDB database iterator tool http://blog .cliffano.c om/tag/co uchtato/	0.1.6	bagofcli(~ 0.0.5)<-val idator(~1.5 .1)	active	No! XSS not used gh update, npm not!! npm latest 2013!	

marked-to c (npm,gh)	Generate a TOC (table of contents) for markdow n files. https://git hub.com/j onschlink ert	0.2.6	marked(0. 3.0)	active (deprecate d now)		
datagen (<u>npm,gh</u>)	Multi-proc ess test data files generator. http://blog .cliffano.c om/tag/da tagen/	0.0.10	bagofcli(~ 0.0.8)<-val idator(~1.5 .1)	active	No! XSS not used gh update, npm not!! npm latest 2013!	
stardog (npm,gh)	Stardog JavaScrip t Framewor k for node.js and the browser - Develop apps using the Stardog RDF Database & JS. http://clar kparsia.git hub.com/ stardog.js	0.1.5	restler(~3. 2.0)->qs(0.6.6)	active		
nodeportal	nodeporta	0.2.3	validator(0	active	Yes!	

(npm, gh)	I(NP), inspired from Liferay is Portal platform built on Node.js		.3.9			
restling (npm, gh)	A nodejs library to make promise based asynchro nous http requests.	0.6.4	restler(^3. 2.2)->qs(0.6.6)	active		
hotplate(n pm, gh)	Framework to create multi-homed SaaS with NodeJs, Express, Dojo	0.3.35	send(0.1.x)	active	resolved	
xpush (npm, gh)	XPUSH is an realtime communic ation channel server for quickly, easily adding scalable functionali ty to web and mobile apps. http://xpu	0.0.14	send(^0.6. 0)	active		

	sh.github.i o/about				
rain(npm, gh)	RAIN is a highly scalable frontend platform that orchestrat es distribute d rendering of loosely coupled compone nts.	0.34.8	connect(2. 2.2)	active	
clever(np m,gh)	Node.js library for the Clever API	0.6.0	quest(~0.2 .4)<-qs(~0.5 .1)	active	
penguin (npm, gh)	Automatic ally generates administr ation pages based on your Mongoos e models.	0.2.1	body-parser(~1.5.2)->qs(0.6.6)	active	Yes, but not for the identified dep

webdriver- http-sync(npm,gh)	Sync http implemen tation of the WebDrive r protocol for Node.js	0.10.0	request-sy nc (0.0.5)<-qs (0.6.6	active	gh updated, not npm	
livewire(npm, gh)	Livescript microrouti ng library http://blog .153.io/20 14/07/15/ building-a -simple-re st-api/	0.6.0	qs(~0.6.6)	active		
bugsnag-n otification- plugins (npm,gh)	Notificatio n plugins for the Bugsnag error tracker https://bu gsnag.co m	1.22.1	qs(~0.6.6)	active		
cabbie(<u>np</u> <u>m,gh</u>)	WebDrive r for the masses	0.0.9	request-sy nc (0.0.5)<-qs (0.6.6	active	npm not updated, but gh	
voicetext(n pm,gh)	VoiceText Web API beta client for node.js	0.0.4	superagent(^0.18.1)->qs(0.6.6)	active		
gifsockets- server(np m,gh)	Never-en ding animated	0.38.1	marked(~0 .2.10)	active		

	GIFs as a chat system http://gifs ockets.tw olfson.co m/					
node-tvdb(npm,gh)	Node.js library for accessing TheTVDB API https://ww w.npmjs.o rg/packag e/node-tv db	0.4.2	superagent(^0.18.2)->qs(0.6.6)	active	resolved	
supermark ed(npm,gh)	marked with syntax highlightin g and LaTeX maths support	1.1.0	marked(~0 .2.6)	active	resolved	
netbug(np m, gh)	Network Debugger	2.0.1	connect(2. 3.6)	active		
bfydir (<u>npm,gh</u>)	http-serve r to browserify *.js in a dir https://np mjs.org/p ackage/bf ydir	1.0.1	st(0.2.4)	active	dep removed	Yes, local dev
hoist-js(np	The hoist	0.0.8-pre	superagent(^0.18.0	active		

<u>m,gh</u>)	client side library)->qs(0.6.6)		
sentry-nod e(<u>npm,gh</u>)	simple node wrapper around the Sentry API	1.0.5	quest(~0.2 .4)<-qs(~0.5 .1)	active	
pesapaljs(npm,gh)	Integrate PesaPal into your Node applicatio n	0.0.2-a	phpjs(1.3. 2)<-send (0.1.0)	active	
shipshape (npm,gh)	Local server for communic ating with shipshape .io	0.1.23	restler(3.2. 2)<-qs(0.6.6)	active	
apostroph e-twitter(<u>n</u> <u>pm,gh</u>)	A twitter widget for Apostroph e webpages	0.5.22	qs(~0.6.5)	active	
amorphic(npm, gh)	A front-to-b ack isomorphi c framework for developin g applications with node.js and mongoDB	2.6.2	connect(2. 6.2)	active	

node-linke din-simple (npm,gh)	Node.JS bindings for LinkedIn API	0.0.3	qs(~0.6.5)	active	gh updated, but not npm	Yes, reported and updated
okanjo (<u>npm</u> , <u>gh</u>)	Okanjo Node.js SDK - https://ok anjo.com/	0.1.17	qs(~0.6.6)	active		

What are we keen to know about?

- In principle, a security advisory serve as an indication that there is a security vulnerability, however is the functionality of the advisory used? How do the project maintainers find it useful?
- Does the nature of the advisory play an role whether its updated or not, most advisories are not critical in nature
- What is the migration path? removal of dependency, update to a new version
- is the feeling of knowing to not have a vulnerable version, important or whether the functionality is important? -> implies that the advisories have to be more intelligent?
- Why is github only updated and not npm? shows a clear indication that there has to better interplay between these two services
- in the dependency chain? who is to be blame, can we determine where in the chain should update the modules, maybe an alert system for this type of updates. This is particularly useful in large repositories
- the key problems: old projects that are popular, no manoeuvrability of moving to other versions, can we put pressure on updating modules?

what we can conclude is that we need to tool to:

- 1) intelligent advisories: we should identify code that is vulnerable
- 2) repository alert system: find modules that can risk being a threat for many modules, this is to avoid such as heart-bleed. By analyzing the dependency chain, we can determine who should do what. We could have a flagging system for library maintainers not doing their job
- 3) todays advisory systems are too slow, should maybe be integrated in the CI system

Core problems to solve

- overview of outdated modules
 - both indirect and cascading
- what modules are updated on github and not npm?

