

Tech Brief

Cloudvue

Cyber Security Technical Brief



www.cloudvue.io

The power behind **your mission**



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Introduction

Cloud physical security services can provide powerful value as well as serious risk for customers and operators. These risks include cybersecurity (“surveillance cloud service hacked, service permanently shuttered¹”); corporate liability (“FTC files law suit against provider of surveillance cameras for software security breach²”); GDPR and personal data security (“school surveillance hacked, streams made public³”); hardware security flaws (“Mirai exposes millions of surveillance cameras⁴”); software security flaws (“Adobe Flash flaw, hackers could seize system and all data⁵”); and government regulation (“what the McCain National Defense Act means for surveillance⁶”) among others.

Selecting a trusted partner for cloud video surveillance with a background in cyber and data security has never been more critical than it is today. This technical brief will outline the key security components of Cloudvue from Johnson Controls.

¹<https://ipvm.com/reports/hikvision-online>

²<https://www.zdnet.com/article/ftc-files-lawsuit-against-d-link-for-router-and-camera-security-flaws/>

³<https://www.dailymail.co.uk/news/article-5432769/School-CCTV-systems-hacked-broadcast-online.html>

⁴<https://www.pcworld.com/article/3134039/hacking/chinese-firm-admits-its-hacked-products-were-behind-fridays-massive-ddos-attack.html>

⁵<http://bit.ly/2y5louJ>

⁶https://www.ngaus.org/sites/default/files/2018-08/FY19-Conference-NDAA_0.pdf

Security Overview

Cloudvue has leveraged its server management and video services expertise to create and implement industry-leading secure software development, operational management, and threat mitigation practices, helping it to deliver services that achieve higher levels of security, privacy, and compliance than most customers could achieve on their own.

Cloudvue surveillance services undergo regular verification by third-party audit firms. Cloudvue shares audit report findings and compliance packages with customers to help them fulfill their own compliance obligations. By verifying that its services meet compliance standards and demonstrating how compliance was achieved, Cloudvue makes it easier for customers to attain compliance for the infrastructure and applications they run.

Although the Cloudvue video surveillance platform is cloud agnostic, its standard services run on the Azure platform. Microsoft engages in industry-leading security efforts through its centers of excellence, including the Microsoft Digital Crimes Unit, Microsoft Cybercrime Center, and Microsoft Malware Protection Center. Cloudvue adheres to a rigorous set of security controls that govern operations and support and works with other entities within Microsoft such as the Microsoft Operational Security Assurance (OSA) group to identify risks and share information, supporting continuous improvement in operational controls. This increases the ability to prevent, detect, contain, and respond to security threats.

For data in transit, Cloudvue uses industry-standard transport protocols such as SSL and TLS between cameras, gateways, devices, and data centers, and within the data centers themselves. Data at rest, such as recorded video, is encrypted and can optionally be secured using 256bit SHA keys to validate anti-tampering. For data segregation and private clouds, Cloudvue offers private cloud services to provide unique physical cloud instances for each of its customers. It also offers multi-tenant services, meaning that multiple customers' deployments are stored on the same physical hardware. Cloudvue uses logical isolation to segregate each customer's data from that of others. This provides the scale and economic benefits of multi-tenant services while rigorously preventing customers from accessing other's data. For many customers, controlling the location of their data is an important element of data privacy, compliance and governance. Cloudvue customers can specify the geographic areas where their data is stored.

Cloudvue delivers a global 24x7 response service that works to mitigate the effects of attacks and malicious activity. The incident response team follows established procedures for incident management, communication, and recovery, and uses discoverable and predictable interfaces internally and externally to its customers.

Cloudvue also provides a global 24x7 access to our Product Security Incident Response Team (PSIRT) which includes a cyber security hotline for customers to contact Johnson Controls with issues or concerns around the clock and around the world.

Holistic Methodology

Johnson Controls' approach to cyber protection is aimed at providing peace of mind to our customers. Our holistic cyber mindset begins at initial design concept, continues through product development, and is supported through deployment, including a rapid incident response to meet the comprehensive and evolving cybersecurity environments. Our methods include the ability to provide cyber resilient systems with a range of capabilities to complement the diverse security needs of our customers.

Under the JCI Cyber Program, the internal conformance standards established are:

- Secure Communications Cryptographic Functions
- Third Party Penetration Testing Standard
- Open Source Code Security Standard
- Application Threat Modeling Standard
- Open Source Software Security Audit-Standard Operating Procedure
- Threat Intelligence Program Standard
- Product Security Patching and Updating Documentation Standard
- Vulnerability Management Standard

Secure Development

Baseline design requirements that address core cyber threat categories for elevated security. Dedicated in-house cybersecurity test labs focused on discovering and neutralizing concerns before they reach customers. Extended testing, including bug bounty programs and 3rd party penetration testing, provides verification and validation assurance. Solution designed features that enable easier compliance with corporate policies Certified and trained experts driving design decisions.

Deployment Services

Customer education to help drive more secure installation. Thought leadership to build a pragmatic approach to address cyber risk. Compliance assistance to help you comply with industry and organizational policies Security documentation for IT acceptance.

Rapid Response

Rapid incident response to quickly respond and advise on vulnerabilities. Preemption solutions driven by ongoing threat and trend monitoring. Incident response designed in conformance with ISO standards for accurate and consistent vulnerability handling and disclosure.

Disruption is Not an Option

Operational technologies often provide critical functions which, if disrupted, can impact operational efficiency and profits and result in disclosure of sensitive information. Cyber attackers whose aim is to cause disruption and loss have identified building and security systems as attractive targets. In today's environment, cybersecurity plays a very crucial role in protecting building and security systems. Unfortunately, many system providers do not address cybersecurity or fall short of providing sufficient support, leaving many buildings under protected.

A Higher-Level Commitment

Johnson Controls' approach to cyber protection is aimed at providing peace of mind to our customers. Our holistic cyber mindset begins at initial design concept, continues through product development, and is supported through deployment, including a rapid incident response to meet the comprehensive and evolving cybersecurity environments. Our methods include the ability to provide cyber resilient systems with a range of capabilities to complement the diverse security needs of our customers. We have invested in establishing a centralized dedicated Global Product Security team that is focused on managing our cyber practices with governance to enforce compliance. At Johnson Controls, we are disciplined in executing these as we understand what is at risk if we don't.

Expert Driven Designs

Having engineering teams trained in cybersecurity has given Johnson Controls an advantage in developing products that consider cybersecurity within its core design. Our certified cybersecurity experts (CISSP, CSSLP, CEH, CCSP etc.) work to validate designs using the latest recognized industry standards and practices. Expert driven cybersecurity designs provide the forethought required to reduce risk.

Lifecycle Management

Our cyber protection approach begins with the design and doesn't stop once a product is developed – a product secure today may not be secure tomorrow. Through the rapid incident response service, our dedicated cybersecurity team quickly assesses new threats and vulnerabilities and advises customers on how they may reduce their cybersecurity exposure.

Shared Responsibility

Since protecting against cyber threats is a shared responsibility, we engage in market facing programs to provide customer engagement, education, and thought leadership to help our customers achieve success in their mission of a more secure system.

Select Features

In addition to industry leading standards for cyber and data protection, Cloudvue also implements the following security features to support customer security:

- Encryption at rest and during transmission
- AES-192-CBC encryption for video security
- TLS 1.2+ encryption for network transport security
- No Plugins or Flash
- Strictly enforce strong user passwords
- Rotating strong device passwords unique per device
- Signed firmware from trusted sources for OTA updates
- Disable all ports/processes outside of Cloudvue services
- HTTPS/SSH only access to services
- Monitor all processes to detect intrusion/malware
- Two-factor setup authentication
- Latest and strongest cryptography technologies
- Internal security audits
- External third-party security audits
- External third-party pen testing
- SSL pinning
- Trusted Certificates
- Known Reciprocation
- No default usernames or Passwords allowed

Hosting Infrastructure

The Cloudvue software as a service platform runs on Microsoft's Azure global data center infrastructure. All aspects of data center security infrastructure are ISO27001 and SOC2 compliant operating under the shared responsibility model with Microsoft. Learn more here: <https://www.microsoft.com/en-us/trustcenter/Compliance/ISO-IEC-27001>.

Common Security Questions

1 Security policies and certificates	Answer	Details
Is a security policy available for the use of devices by employees?	Yes	Johnson Controls corporate policy
Are regular security awareness training sessions on data and information security carried out with employees? How regularly?	Yes	At least once per quarter
Is a CTO (Chief Technology Officer) or CSO (Chief Security Officer) available, who can be contacted regarding security-relevant topics?	Yes	Jason Christman (Johnson Controls Vice President, Global Products Cyber Security)
2 Physical data center and Service Delivery Locations		
Is video surveillance available along the entire perimeter?	Yes	
Is a building management system available?	Yes	
Is a burglar alarm system installed?	Yes	
Is the site monitored 24/7 by an onsite security service?	Yes	
Is there a staffed reception desk at which all visitors have to register?	Yes	
Is access to the data center and SDL logged automatically?	Yes	Our services and applications are hosted on Microsoft Azure. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Is two-factor authentication available for access to the data center and SDL? What factors?	Yes	Phone
Are the rooms in the data center and SDL divided into security zones? (e. g. general spaces, customer reception area, server room)	Yes	Our services and applications are hosted on Microsoft Azure. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Are access permissions for individual security zones granted based on the principle of least privilege?	Yes	Our services and applications are hosted on Microsoft Azure. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Are the data centers clustered? If so, how exactly? (e. g. continental, regional, metro or campus cluster)	Yes	Azure regions
Is clustering used to avoid data loss? (e. g. automatic replication)	Yes	We use Azure data centers. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Is the service provided internationally? Which data centers and SDLs are used for this purpose?	Yes	Azure has data centers in over 140 countries
Are the data centers and Service Delivery Locations used the property of the service provider?		We use Azure data centers. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Is the building secured against external forces in the event of force majeure? (e. g. tree falls on building, truck drives into building) – ISO 27001	Yes	We use Azure data centers. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Does the data center have windows?	No	We use Azure data centers. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Does the data center and SDL have a fire safety plan? (e. g. early detection systems, fire alarm system, smoke alarms, extinguishing equipment, regular fire drills)	Yes	We use Azure data centers. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Are server racks/rooms protected from physical access? (e. g. by a combination lock)	Yes	We use Azure data centers. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Can it be guaranteed that data processing is permanently carried out at the same location?	Yes	We use Azure data centers. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
Would customer be informed of changes to the data center infrastructure? How far in advance?	Yes	This can be discussed in the agreement, but in general it's between 30 - 60 days in advance

Is it possible to carry out preannounced audits in the data center or service delivery Locations?	Yes	We use Azure data centers. Please refer to https://azure.microsoft.com/enus/overview/trusted-cloud/
Is it possible to carry out preannounced penetration tests of the platform?	Yes	
3 Processes		
Is a change management process established and documented?	Yes	
Are change requests documented, approved by authorized persons and backed up? Is their scope of business impact evaluated?		
Are changes tested in advance in order to allow potential effects to be identified?	Yes	
Is a test environment available for change management and is it used for pre-testing?	Yes	We have multiple environments for development, QA, Staging, Pre-Prod and Production.
Are changes to the existing infrastructure (updates) and to the application (new version) communicated to customer? How far in advance?	Yes	This can be discussed in the agreement, but in general it's between 30 - 60 days in advance
Will the discontinuation of the service be communicated to customer?	Yes	This can be discussed in the agreement, but in general it's between 90 - 180 days in advance
Is a patch management process established and documented?	Yes	
Are all operating systems, applications and business-critical servers patched within 30 days of a release?	Yes	
Are software updates and patches pre-tested in order to enable the early identification of potential effects?	Yes	
Is a test environment available for pre-testing the patch management process?	Yes	
Is a security incident management process established and documented?	Yes	Please refer to Johnson Controls Cyber Security document (attached)
Are all system-relevant incidents that affect services and systems used for customer directly forwarded to customer?	Yes	
Describe your security response plan.	Yes	Please refer to Johnson Controls Cyber Security document (attached)
Can a report on security incidents be provided on a regular basis?	Yes	This can be discussed in the agreement
Is there 24/7 monitoring of the availability of infrastructure for services and resources?	Yes	
Are all SLA-relevant events recorded and retained for at least 90 days? Which parameters? (e. g. network capacity, latencies, etc.)	Yes	
Is the monitoring evaluated on a monthly basis in the scope of reports? (e. g. SLA report & capacity report)	Yes	
Are the activities of the cloud service provider's administrators recorded and monitored?	Yes	
4 Application		
Describe the solution architecture, multiple tiers (e.g. database, app, web), network, and technical security controls. Please provide a diagram.	Yes	Please see attached architecture document
Does your network have any single points of failure? If so describe them.	No	
Is a user management process established?	Yes	
Are account passwords able to conform to our password policy?	Yes	We enforce strong complex passwords with a minimum of 8 characters containing two upper-case, two lower case, one special character, and one number. We can extend our password policy to conform to customer's password policy.
Are generalized user accounts used for access to the systems?	Yes	
Will customer be granted control over the encryption keys?	No	
Can customer define the period for which data is retained?	Yes	
Is all access automatically logged within the application?	Yes	It is not automatically logged, however it can be easily setup.

5 Infrastructure		
Is a web application firewall used to protect the web infrastructure?	Yes	https://docs.microsoft.com/enus/azure/application-gateway/waf-overview
Are measures taken to protect against DDOS attacks? What measures?	Yes	We have rate limiting and IP whitelist/blacklist
Is network segmentation used between the management network and the live network?	Yes	
Is network segmentation used between the management network and the live network?	Yes	
Is it only possible to establish a secured connection to a remote access session? (e. g. SSH, TLS, IPSEC, VPN)	Yes	
Is encrypted communication between individual data centers guaranteed? (e. g. in the event that multiple data centers are used)	Yes	Our services and applications are hosted on Microsoft Azure. Please refer to https://docs.microsoft.com/enus/azure/security/security-network-overview
Is data only exchanged in encrypted form with external service providers that are necessary for the operation of the data center?	Yes	
Do firewall rules have to be activated for the use of the application? Which firewall rules?	No	Our systems communicate via HTTPS and TLS 1.2 over standard port 443.
Is there the option to establish a permanent, secure and encrypted connection between the designated data center and customer? (e. g. VPN via IPsec or MPLS)	Yes	This will require a dedicated cloud instance for customer and custom network security group setup with VPN
Is there a system in place to automatically recognize interrupted connections?	Yes	
Can a fixed bandwidth be guaranteed for customer?	Yes	This will require a dedicated cloud instance for customer.
Do database or web servers run on different, dedicated systems or virtual machines?	No	
Is it possible to operate all used systems in a dedicated way for customer? What are the exceptions?	Yes	This will require a dedicated installation instance for customer
Are all operating systems, applications and servers hardened? Or will this happen?	Yes	
Is the processed data stored in a partition that is independent of the operating system?	Yes	
Are the servers secured by a host based IPS?	No	
Do the servers support SSL Perfect Forward Secrecy?	Yes	
Are all virtual systems used implemented using certified software? (e. g. VM-Ware, MS Hyper-V)	Yes	
Are support contracts in place with responsible service providers for all software and hardware components used?	Yes	
Are the services provided protected against failure? How?	Yes	All services and applications in the cloud are protected against failure by leveraging Azure technologies. The gateway appliance server on customer site can be protected against failure using RAIDs and UPS battery.
Are backups carried out regularly? What is stored in the scope of a backup and how often?	Yes	All services and applications in the cloud have automatic backup and replication using Azure technologies. The gateway appliance server on customer site can backup data to our cloud.
Are backups retained? For how long (months)?	Yes	Depends on the use case
Can customer have an influence on the time and scope of the data backup? To what extent?	Yes	You can select and configure data retention and what data to backup to the cloud.
Is anti-virus software with current virus patterns in use within the environment infrastructure?	Yes	
Is incoming, processed and outgoing data checked for viruses?	Yes	

6 Business continuity management		
Is there a certified business continuity plan? What certification? (e. g. BSI standard 100-4 or ISO 22301)	No	
Are emergency drills for the failure of critical components (e. g. Internet connection, power supply, network) carried out regularly?	Yes	We use Azure data centers. Please refer to https://docs.microsoft.com/enus/azure/security/azure-physical-security
7 Contract design		
Are there regular audits and certifications to check and certify data protection with the contractor and the obligations towards the client?	Yes	
Is customer obliged to accept fixed service quotas?	No	
Will customer have access to data and services in the event customer fails to pay?	No	customer will have access to data that is stored locally on gateways, but may not have access to video stored on the Cloud.
May you please provided your data retention policy?	Yes	Events data are stored for up to 180 days (can be longer depending on customer needs). Video data are stored locally and/or in the cloud based on available disk space and customer needs.
Is it ensured that the data will actually be deleted upon customer's request?	Yes	
Is a source code deposit available?	Yes	
Is the software used linked to a specific platform? Which one?	No	
8 Service Level Agreement (SLA)		
Can it be contractually ensured that customer will be proactively informed of interruptions or failures that affect the infrastructure used by customer?	Yes	
Are specific maintenance slots and patch days defined for the designated infrastructure?	Yes	customer can schedule updates & patch fixes in coordination with Cloudevue
9 Data protection		
Has a company data protection officer been appointed in writing? (Please specify the contact details and list this person's fields of activity)	Yes	Johnson Controls has Chief Data Privacy Officer
Are employees obligated to comply with data and business confidentiality regulations?	Yes	
Are there any policies on data protection law and work instructions regarding the handling of personal data?	Yes	
Is it possible to restrict the location for data storage to US or other countries if required due to legal or governmental requirements of customer?	Yes	
Is a sufficient level of data protection provided even outside of the US?	Yes	
10 Cloud and eCommerce Services		
Are services expose to the Internet? If so list them. (Examples: HTTP(S), FTP, SSH, etc.)	Yes	HTTPS & SSH
Is Two-Factor Authentication offered? If so, what types?	Yes	Two-factor authentication via SMS and email will be released later this year
Is the service PCI compliant? If yes provide your PCI AOC. If your cart is third party, please provide the vendor's AOC.	Yes	We use Stripe for ecommerce (https://stripe.com/guides/pci-compliance)
Is the solution compliant with PCI standards for new deployments?	Yes	We use Stripe for ecommerce (https://stripe.com/guides/pci-compliance)
Do you use a separate gateway/payment processor?	Yes	We use Stripe for ecommerce (https://stripe.com/guides/pci-compliance)
Is the e-com platform hosted within a single tenant environment?	Yes	We support both single-tenant and multitenant deployments
Do you store any customer personal information? If so, please provide details on how this information is protected.	Yes	https://www.johnsoncontrols.com/legal/privacy
How is customer card information secure for data in use, transit, and rest?	Yes	We use Stripe for ecommerce (https://stripe.com/guides/pci-compliance)
Is Denial of Service protection is offered?	Yes	

Provide details how sessions are managed, specifically as they relate to transaction and/or shopping cart operation.	Yes	Sessions are managed through short-lived access token. The integration with Stripe is done only on our cloud backend using Stripe API.
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Open Source

Certain Cloudvue services include third-party code licensed for use and redistribution under open-source licenses. Below is a list of disclosures and disclaimers in connection with Cloudvue's incorporation of certain open-source licensed software into its services. Notwithstanding any of the terms and conditions of your license agreement with Cloudvue Corporation, the terms of certain open-source licenses may be applicable to your use of Cloudvue software, as set forth below. This list of open-source code was compiled with reference to third-party software incorporated into the services as of the date the list was generated. This list may be updated from time to time and may not be complete, visit www.cloudvue.io for updated information.

Software/Library	Manufacturer/ Author(s)	Version	Purpose	License
Alamofire	https://github.com/Alamofire/Alamofire	4.2.0	General networking, mainly for making http requests in Swift	MIT
alt	Josh Perez, Jonathan Lehman	0.18.6	A flux implementation	MIT
Angular	Google	1.5.0	AngularJS - HTML enhanced for web apps!	MIT
Angular-animate	Google	1.5.8	AngularJS module for animations	MIT
Angular-cookies	Google	1.5.8	AngularJS module for cookies	MIT
Angular-messages	Google	1.5.8	AngularJS module that provides enhanced support for displaying messages within templates	MIT
Angular-resource	Google	1.5.8	AngularJS module for interacting with RESTful server-side data sources	MIT
Angular-sanitize	Google	1.5.8	AngularJS module for sanitizing HTML	MIT
Angular-touch	Google	1.5.8	AngularJS module for touch events and helpers for touch-enabled devices	MIT
angular-translate	Pascal Precht	1.5.8	A translation module for AngularJS	MIT
Angular-ui-router	Google	1.5.0	State-based routing for AngularJS	MIT
angular-ui-sortable	AngularUI	0.13.4	This directive allows you to jQueryUI Sortable.	MIT
angularjs-datepicker	Filippo Oretti	2.1.23	A datepicker directive for angularjs.	MIT
archiver	Chris Talkington	0.9.1	Streams archive generation	MIT
async	Caolan McMahon	2.1.5	Asynchronous utilities	MIT
autoprefixer	Andrey Sitnik	6.4.2	Parse CSS and add vendor prefixes to CSS rules using values from the Can I Use website	MIT
Awesome typescript loader	Stanislav Panferov	3.0.0	Awesome TS loader for webpack	MIT
azure	Microsoft	1.2.0	Azure SDK for Node.js	MIT
Azure-keyvault	Microsoft	1.2.0	Microsoft Azure Client Library for node	MIT
azure-storage	Microsoft	1.4.0	Connects to Azure services and blobs	Apache 2.0
Azure-storage fornode	Microsoft	2.1.0	Microsoft Azure Storage SDK for Node.js	MIT
babel-preset-es2015	Babel	6.3.13	Babel preset for all es2015 plugins.	MIT
babel-preset-stage-2	Babel	6.24.1	Babel preset for stage 2 plugins	MIT
babel-register	Babel	6.24.1	babel require hook	MIT
babelify	Babel	7.3.0	Babel browserify transform	MIT
bcrypt	Solar Designer		Bcrypt password hash C library	MIT

bluebird	Petka Antonov	3.5.0	Full featured promise library for Javascript	MIT
body-parser	Douglas Wilson, Jonathan Ong	1.17.1	Node.JS body parsing middleware	MIT
Browser	Dustin Diaz	1.6.0	Browser detector	MIT
browserify	Browserify	14.3.0	browser-side require() the node way	MIT
bufferutil	Einar Otta Stangvik	3.0.0	Websocket buffer utils	MIT
bunyan	Trent Mick	1.4.0	JSON logging library	MIT
bunyan-redis-stream	Harri Siirak	1.0.1	Transports bunyan data to redis	MIT
busboy	Brian White	0.2.14	Parses HTML form data	MIT
case sensitive paths webpack plugin	Michael Pratt	1.1.4	Enforces module path case sensitivity in Webpack	MIT
chalk	https://github.com/chalk/chalk#readme	1.1.3	Terminal string styling done right. Much color.	MIT
classnames	Jed Watson	2.2.5	A simple utility for conditionally joining classNames together	MIT
cluster	TJ Holowaychuk	0.7.7	Cluster server for Node	MIT
com.crashlytics.sdk. android:crashlytics	https://github.com/crashlytics/crashlyticservices	2.6.5	Collect analytic data	MIT
com.github.jjjobs: slideDateTimePicker	https://github.com/jjjobs/SlideDateTimePicker	1.0.2	Date picker for android	Apache-2.0
com.google.code. gson:gson	Google	2.6.2	Java Object to JSON converter	Apache-2.0
com.google.firebase: firebase-messaging	Google	10.2	Handle push notifications on the device side	Google
com.kaopiz:kprogres shud	https://github.com/Kaopiz/KProgressHUD	1.0.5	A neat and customizable heads up display view	Apache-2.0
com.squareup. retrofit2:converter-gson	https://github.com/square/retrofit/tree/master/retrofit-converters/gson	2.0.2	JSON serialization with retrofit	Apache-2.0
com.squareup. retrofit2:retrofit	https://github.com/square/retrofit	2.0.2	General networking, mainly for making http requests in Java	Apache-2.0
connect history API fallback	Ben Ripkens	1.3.0	Provides a fallback for non-existing directories so that the HTML 5 history API can be used.	MIT
connect-redis	TJ Holowaychuk	2.0.0	Redis session store for Connect	MIT
Convict	Mozilla	0.4.2	Config management	Apache-2.0
cookie-parser	TJ Holowaychuk	1.4.3	Parses cookies for node	MIT
Crashlytics	Fabric	3.8.3	Collect analytic data	Google
crypto	Irakli Gozalishvili	0.0.3	Cryptographic functions	BSD
css loader	Tobias Koppers @sokra	0.26.1	css loader module for webpack	MIT
D3	https://github.com/mbostock-bower/d3-bower	4.7.3	A JavaScript visualization library for HTML and SVG	BSD-3-Clause
d3-time-format	Mike Bostock	2.0.5	A JavaScript time formatter and parser inspired by strftime and strptime.	BSD-3-Clause
d3-tip	Justin Palmer	0.7.1	Tooltips for d3 svg visualizations	MIT
db-migrate	Tobias Gurtick	0.10.0	Database migration framework for node.js	MIT
del	Sindre Sorhus	2.2.0	Delete files and folders	MIT
detect port	https://github.com/node-modules/detectport	1.1.0	detect available port in webpack	MIT
dotenv	scottmotte	4.0.0	Loads environment variables from .env file	BSD-3-Clause
Dropbear	Matt Johnston	0.44	SSH server and client	MIT
EaselJS	https://github.com/CreateJS/EaselJS	0.8.2	Easel Javascript library	MIT
eslint	ESLint	2.2.0	An AST-based pattern checker for JavaScript.	MIT

eslint-config-angular	Dustin Specker	0.5.0	ESLint shareable config for Angular plugin	MIT
eslint-plugin-angular	Emmanuel Demey	3.0.0	ESLint rules for AngularJS projects	MIT
Express	TJ Holowaychuk	4.15.2	Fast, unopinionated, minimalist web framework	MIT
express-session	TJ Holowaychuk	1.6.5	Creates a session for an express app	MIT
EZAudio	https://github.com/syedhali/EZAudio	1.1.4	Real time graphics visualization of audio data	MIT
Fabric	https://fabrio.io/	1.6.11	Collect analytic data	Google
fbjs	Facebook	0.8.9	A collection of utility libraries used by other Facebook JS projects	MIT
ffmpeg	https://ffmpeg.org/about.html	3.2.4	Multimedia framework library and toolkit	LGPL2.1
file-encryptor	Brandon Cannaday	0.1.1	Encrypts files with node.js	MIT
File-loader	Tobias Koppers @sokra	0.10.0	file loader module for webpack	MIT
filesize	Jason Mulligan	3.5.4	JavaScript library to generate a human readable String describing the file size	BSD-3-Clause
Firebase/Core	Google	newest	Handle push notifications on the device side	Google
Firebase/Messaging	Google	newest	Handle push notifications on the device side	Google
fluent-ffmpeg	Stefan Schaermeli	2.0.1	FFmpeg abstraction layer	MIT
formidable	Felix Geisendorfer	1.0.17	Parsing form data and file uploads	MIT
Fs-extra	JP Richardson	2.0.0	fs-extra contains methods that aren't included in the vanilla Node.js fs package. Such as mkdir -p, cp -r, and rm -rf.	MIT
geopip-lite	Philip Tellis	1.2.0	A light weight native JavaScript implementation of GeolP API from MaxMind	Apache-2.0
getmac	Benjamin Lupton	1.0.6	Gets the mac address of the current machine	MIT
Gifu	https://github.com/kaishin/Gifu.git	newest	Display gifs in UIKit	MIT
globby	Sindre Sorhus	6.1.0	Extends `glob` with support for multiple patterns and exposes a Promise API	MIT
Googlelibphonenumber	Rui Marinho	2.0.11	Google's libphonenumber package for node.js	MIT
grafana	Grafana Labs	4.1.1	Metric and Data graphs for application data	Apache-2.0
guirc	Danier Beer	1.0	QR code library	MIT
gulp	Fractal	3.9.1	The streaming build system	MIT
gulp-angulartemplatecache	Mickel Andersson	1.9.1	Concatenates and registers AngularJS templates in the \$templateCache.	MIT
gulp-autoprefixer	Sindre Sorhus	3.1.1	Prefix CSS	MIT
gulp-babel	Babel	6.1.2	Use next generation JavaScript, today	MIT
gulp-concat	Contra	2.6.1	Concatenates files	MIT
gulp-cssnano	Ben Briggs	2.1.2	Minify CSS with cssnano.	MIT
gulp-eslint	Adametry	2.1.0	A gulp plugin for processing files with ESLint	MIT
gulp-htmlmin	Jon Schlinkert	1.3.0	gulp plugin to minify HTML.	MIT
gulp-load-plugins	Jack Franklin	1.5.0	Automatically load any gulp plugins in your package.json	MIT
gulp-ng-annotate	Kagami Hiiragi	2.0.0	Add angularjs dependency injection annotations with ng-annotate	CC0-1.0

gulp-ng-constant	Arturo Guzman	1.1.0	Gulp plugin for dynamic generation of angular constant modules.	MIT
gulp-ngdocs	nikhilmodak	0.2.13	gulp plugin for angularjs documentation	MIT
gulp-plumber	Vsevolod Strukchinsky	1.1.0	Prevent pipe breaking caused by errors from gulp plugins	MIT
gulp-preprocess	Jason Sandmeyer	2.0.0	Gulp plugin to preprocess HTML, JavaScript, and other files based on custom context or environment configuration	MIT
gulp-rename	Hector Guillermo Parra Alvarez	1.2.2	Rename files	MIT
gulp-rev	Sindre Sorhus	7.1.2	Static asset revisioning by appending content hash to filenames: unicorn.css => unicorn-d41d8cd98f.css	MIT
gulp-rev-replace	James K Nelson	0.4.3	Rewrite occurrences of filenames which have been renamed by gulp-rev	MIT
gulp-sass	David Manning	2.3.2	Gulp plugin for sass	MIT
gulp-sass-lint	Sass Tools	1.3.2	Gulp plugin for Sass Lint	MIT
gulp-sequence	Teambition	0.4.6	Run a series of gulp tasks in order.	MIT
gulp-sourcemaps	Florian Reiterer	1.12.0	Source map support for Gulp.js	ISC
gulp-uglify	Terin Stock	1.5.4	Minify files with UglifyJS.	MIT
gulp-util	Fractal	3.0.8	Utility functions for gulp plugins	MIT
gulp-webserver	Johannes Schickling	0.9.1	Gulp plugin to run a local webserver with LiveReload	MIT
Gzip-size	Sindre Sorhus	3.0.0	Get the gzipped size of a string or buffer	MIT
Html-webpackplugin	Charles Blaxland	2.28.0	Simplifies creation of HTML files to serve your webpack bundles	MIT
http proxy middleware	Steven Chim	0.17.3	The one-liner node.js proxy middleware for sconnect, express and browser-sync	MIT
Immutable	Facebook	3.8.1	Immutable persistent data collections for Javascript which increase efficiency and simplicity	BSD
influxdb	Influx Data	1.3.6	Metrics Database	MIT
Interact	Taye Adeyemi	1.3.0	JavaScript drag and drop, resizing and multi-touch gestures	MIT
io.socket:socket.ioclient	https://github.com/socketio/socket.ioclient-java	0.8.2	Socket.io library for Java	MIT
loredis	Zihua Li	3.0.0	Redis client for Node and io.js	MIT
Jade	Pug	1.11.0	HTML Templating	MIT
Jcrop	Tapmodo	0.9.12	Image Cropping Plugin for jQuery	MIT
jest	https://github.com/facebook/jest#readme	18.1.0	Painless JavaScript Testing.	BSD-3-Clause
Jquery	jQuery Foundation	3.1.1	JavaScript library for DOM operations	MIT
jquery-ui-dist	jQuery Foundation and other contributors	1.12.1	A curated set of user interface interactions, effects, widgets, and themes built on top of the jQuery JavaScript Library.	MIT
jscs	jscs-dev	2.3.5	JavaScript Code Style	MIT
json-2-csv	Mirco Zeiss	1.2.0	JSON parser for generating CARE API	MIT
Kapacitor	Influx Data	1.3.2	Triggers actions based off rules that apply to data stored in InfluxDB.	MIT
KeychainSwift	https://github.com/marketplacer/keychainswift	7.0.0	Access and store data into the Apple Keychain	MIT

KineticJS	Eric Rowell	5.0.1	Browser 2D canvas manipulation	MIT
Kue	TJ Holowaychuk	0.11.5	Job Queue for Redis	MIT
Leaflet	https://github.com/Leaflet/Leaflet#readme	1.2.0	JavaScript library for mobile-friendly interactive maps	BSD-2-Clause
libboost	Boost.org	various	Boost libraries for C/C++	Boost-1.0
libcurl	https://curl.haxx.se/libcurl/	7.53.1	Multiprotocol file transfer library	MIT
libjpeg	https://ijg.org	6b	C library for reading and writing JPEG image files	IJG
libwebsockets	https://github.com/warmcat/libwebsockets	2.2.0	Library for lightweight websocket clients and servers	LGPLv2.1
Lint-staged	Andrey Okonetchnikov	3.4.0	Lint files staged by git	MIT
Lodash	https://github.com/lodash/lodash	4.17.4	Lodash makes JavaScript easier by taking the hassle out of working with arrays, numbers, objects, strings, etc	MIT
Loopback	https://github.com/strongloop/loopback	3.4.0	Node.JS RESTful API	MIT
loredis	Matt Ranney	2.7.1	Redis client library	MIT
malihu-custom-scrollbar-plugin	malihu	3.1.3	Highly customizable custom scrollbar jQuery plugin, featuring vertical/horizontal scrollbars, scrolling momentum, mousewheel, keyboard and touch support user defined callbacks etc.	MIT
MariaDB	MariaDB Foundation	10.1.22	Open Source database	GLPv2
Material-ui	Material-UI Team	0.18.3	React Components that Implement Google's Material Design.	MIT
mkdirp	James Halliday	0.5.1	Generates folders for vidos	MIT
mocha	MochaJS	3.4.2	simple, flexible, fun test framework	MIT
Moment	Iskren Ivoc Chernev	2.17.1	A lightweight JavaScript date library	MIT
moment-timezone	Tim Wood	0.3.0	Timezone support for moment	MIT
MongoDB	Mongo	3.4	NoSQL storage and queue	AGPL
msgpack	https://github.com/msgpack/msgpack-c	2.1.1	Binary serialization library	Boost-1.0
mysql	Andrey Sidorov	2.13.0	Mysql driver for node	MIT
net.protyposis.android.media:mediaplayer	https://github.com/protyposis/MediaPlayer-Extended	4.2.2	Robust video player for android	Apache-2.0
net.protyposis.android.media:mediaplayer-dash	https://github.com/protyposis/MediaPlayer-Extended	4.2.2	Robust video player for android	Apache-2.0
ng-file-upload	Danial Farid	3.0.7	angular-file-upload	MIT
ng-idle	Mike Grabski	1.1.1	Directives and services for responding to idle users in AngularJS	MIT
ng-redux	William Buchwalter	3.4.0-beta.1	Redux bindings for Angular.js	MIT
nginx	Nginx	1.11.3	Web Server	BSD-2-Clause
nib	TJ Holowaychuk	1.0.3	UI design for our admin tools	MIT
node	Joyent	0.12.7	Programming language + runtime	MIT
node sass	Andrew Nesbitt	4.5.0	Wrapper around libsass	MIT
node-upnp-ssdp	Barry Williams	0.1.1	SSDP detection client for node	MIT
Nodemailer	Andris Reinman	3.1.7	Email library for Node	EUPL-1.1
nsp	^lift security	2.8.0	The Node Security (nodesecurity.io) command line interface	Apache-2.0
nsp	The Node Security Platform	2.8.0	The Node Security (nodesecurity.io) command line interface	Apache-2.0
numeral	Adam Draper	2.0.4	Format and manipulate numbers.	MIT
object assign	Sindre Sorhus	4.1.1	ES2015 `Object.assign()` ponyfill	MIT

OpenCV	OpenCV.org	3.2	Open Source computer vision library	BSD-3-Clause
Openssl	The OpenSSL Project	1.1.0	General-purpose cryptography library	Apache-2.0
Path-exists	Sindre Sorhus	3.0.0	Check if a path exists	MIT
Pkgcloud	Charlie Robbins	1.4.0	An infrastructure-as-a-service agnostic cloud library for node.js	MIT
PKHUD	https://github.com/pkluz/PKHUD	4.1.0	A neat and customizable heads up display view	MIT
pl.droidsonroids.gif: android-gifdrawable	https://github.com/koral--/android-gifdrawable	1.2.3	Display gifs in android	MIT
Postcss-loader	Andrey Sitnik	1.2.2	PostCSS loader for webpack	MIT
Postcss-smartimport	Sebastian Werner	0.6.7	PostCSS plugin to import CSS/SugarSS files	MIT
Pre-commit	Arnout Kazemier	1.2.2	Automatically install pre-commit hooks for your npm modules.	MIT
precss	Jonathan Neal	1.4.0	Use Sass-like markup in your CSS	CCO-1.0
preprocessify	BiblioLabs LLC	1.0.1	Browserify preprocess transform	ISC
promise	ForbesLindesay	7.1.1	Bare bones Promises/A+ implementation	MIT
ReachabilitySwift	https://github.com/ashleymills/Reachability.swift	3	Check the network status of the iOS device	MIT
React	Facebook	15.4.2	JavaScript library for building user interfaces.	BSD-3-Clause
React DOM	Facebook	15.4.2	React package for working with the DOM."	BSD-3-Clause
React Redux	Dan Abramov	5.0.2	Official React bindings for Redux	MIT
React Router	Ryan Florence, Michael Jackson	3.0.2	A complete routing library for React	MIT
React-dev-utils	https://github.com/facebookincubator/create-react-app	0.4.2	Webpack utilities used by Create React App	BSD-3-Clause
React-tap-eventplugin	sOmeone	2.0.1	Facebook's TapEventPlugin	Apache-2.0
recharts	recharts group	0.20.5	React component chart library	MIT
Recursive-readdir	Jamison Dance	2.1.0	Get an array of all files in a directory and subdirectories.	MIT
redlock	Mike Marcacci	2.1.0	A node.js redlock implementation for distributed redis locks	MIT
Redux	Dan Abramov, Andrew Clark	3.6.0	Predictable state container for JavaScript apps	MIT
Redux Logger	Eugene Rodionov	2.10.0	Logger for Redux	MIT
Redux Thunk	Dan Abramov	2.2.0	Thunk middleware for Redux.	MIT
Redux-logger	Eugene Rodionov	2.8.2	Logger for Redux	MIT
redux-thunk	Dan Abramov	2.2.0	Thunk middleware for Redux.	MIT
request	Mikeal Rogers	2.81.1	node.js HTTP client	Apache 2.0
rimraf	Isaac Z. Schlueter	2.6.1	A deep deletion module for node (like `rm -rf`)	ISC
ryanmullins-angularhammer	Ryan S Mullins	2.1.10	Hammer.js support for Angular.js applications	MIT
sass-lint	Sass Tools	1.5.0	All Node Sass linter!	MIT
Sass-loader	J. Tangelder	4.1.1	Sass loader for webpack	MIT
sequelize	https://github.com/sequelize/sequelize	4.0.0-2	ORM for Node integration with Microsoft SQL server	MIT
Serialport	Chris Williams	4.0.7	Access to hardware serialport	MIT
socket.io	Guillermo Rauch	1.7.3	Websocket integration for events	MIT
socket.io-client	https://github.com/socketio/socket.io-client	1.7.2	Client framework for socket.io	MIT
Socket.IO-Client-Swift	https://github.com/socketio/socket.io-client-swift	8.2.0	Socket.io library for Swift	MIT
sqlite3	Konstantin Käfer	3.1.8	Sqlite Node manager	BSD

stream-buffer	https://github.com/samcdday	1.0.0	Stream Buffer	Unlicense
Strip-ansi	Sindre Sorhus	3.0.1	Strip ANSI escape codes	MIT
Stripe	Stripe	newest	Integrate with Stripe for billing	MIT
Style-loader	Tobias Koppers @sokra	0.13.1	style loader module for webpack	MIT
stylus	TJ Holowaychuk	0.47.2	CSS superset for UI	MIT
Superagent	TJ Holowaychuk	3.5.0	HTTP Request Library	MIT
SwiftJSON	https://github.com/SwiftyJSON/SwiftyJSON	3.1.3	Using JSON in Swift	MIT
td-agent	Treasure Data	2.3.4	Pushing logs to our centralized log server (Log Shipping)	Apache-2.0
tedious	Mike D Pilsbury	1.15.0	Database connection to SQL Server	MIT
Telegraf	Influx Data	1.4.6	Pushes metrics and stats to InfluxDB	MIT
temp	Bruce Williams	0.7.0	Creates temporary files and directories for temporary video	MIT
through2	Rod Vagg	2.0.3	A tiny wrapper around Node streams2 Transform to avoid explicit subclassing noise	MIT
toastr	http://www.toastrjs.com	2.1.2	ToastrJS is a JavaScript library for Gnome / Growl type non-blocking notifications	MIT
tough-cookie	https://www.npmjs.com/package/toughcookie	2.3.3	This is an indirect dependency from request node module	BSD-3-Clause
tslint	palantir	4.4.2	An extensible static analysis linter for the TypeScript language	Apache-2.0
tslint eslint rules	Vitor Buzinaro	3.4.0	Improve your TSLint with the missing ESLint Rules	MIT
Tslint-loader	William Buchwalter	3.3.0	tslint loader for webpack	MIT
Tslint-react	palantir	2.4.0	Lint rules related to React & JSX for TSLint	Apache-2.0
Twilio-node	Kevin Whinnery	2.11.1	Twilio library for node	MIT
Typescript	Microsoft Corp.	2.5.2	language for application scale JavaScript development	Apache-2.0
Ubuntu	Canonical	14.04 LTS	Linux OS	GPL
underscore	Jeremy Ashkenas	1.8.3	Functional programming utilities for JS	MIT
Url-loader	Tobias Koppers @sokra	0.5.7	url loader module for webpack	MIT
Uws	https://github.com/uNetworking/uWebSockets		High performance websocket library	zlib
validator	https://github.com/chriso/validator.js	7.0.0	String sanitization	MIT
Videogular	https://github.com/2fdevs/bowervideogular	1.4.4	HTML5 video player for AngularJS	MIT
Videogular-buffering	https://github.com/2fdevs/bowervideogular-buffering	1.4.4	Videogular buffering plugin	MIT
videojs-contrib-hls	Brightcove, Inc	5.3.3	HLS library for video.js	Apache-2.0
vinyl-buffer	Hugh Kennedy	1.0.0	Convert streaming vinyl files to use buffers	MIT
vinyl-source-stream	Hugh Kennedy	1.1.0	Use conventional text streams at the start of your gulp or vinyl pipelines	MIT
vinyl-transform	Hugh Kennedy	1.0.0	Use standard text transform streams to write fewer gulp plugins	MIT
Vjs-video	Lonny Gomes	0.1.10	An angular js directive for video.js	MIT
Webpack	Tobias Koppers @sokra	2.2.1	Packs CommonJs/AMD modules for the browser.	MIT
Webpack-dev-server	Tobias Koppers @sokra	1.16.3	Serves a webpack app. Updates the browser on changes	MIT
Webpack-manifestplugin	Dane Thurber	1.1.0	webpack plugin for generating asset manifests	MIT

Whatwg-fetch	https://github.com/github/fetch#readme	2.0.2	A window.fetch polyfill.	MIT
winston	Charlie Robbins	2.3.1	Logging	MIT
wolfssl	Todd	3.10.2	Small, fast, portable implementation of TLS/SSL for embedded devices	Commercial
ws	https://github.com/websockets/ws	2.2.1	Websocket client/server	MIT
XCGLogger	https://github.com/DaveWoodCom/XCGLogger	4.0.0	Comprehensive logging	MIT
xml2js	Marek Kubica	0.4.17	Job Queue for Redis	MIT
xml2json	Buglabs	0.11.0	Converts xml to json and vice-versa, using node-xml2js.	MIT
zlib	Jean-loup Gailly, Mark Adler	1.2.11	Compression library	MIT
zmq	ZeroMQ.org	4.2.2	Lightweight messaging library	LGPLv3