

LegalThings software

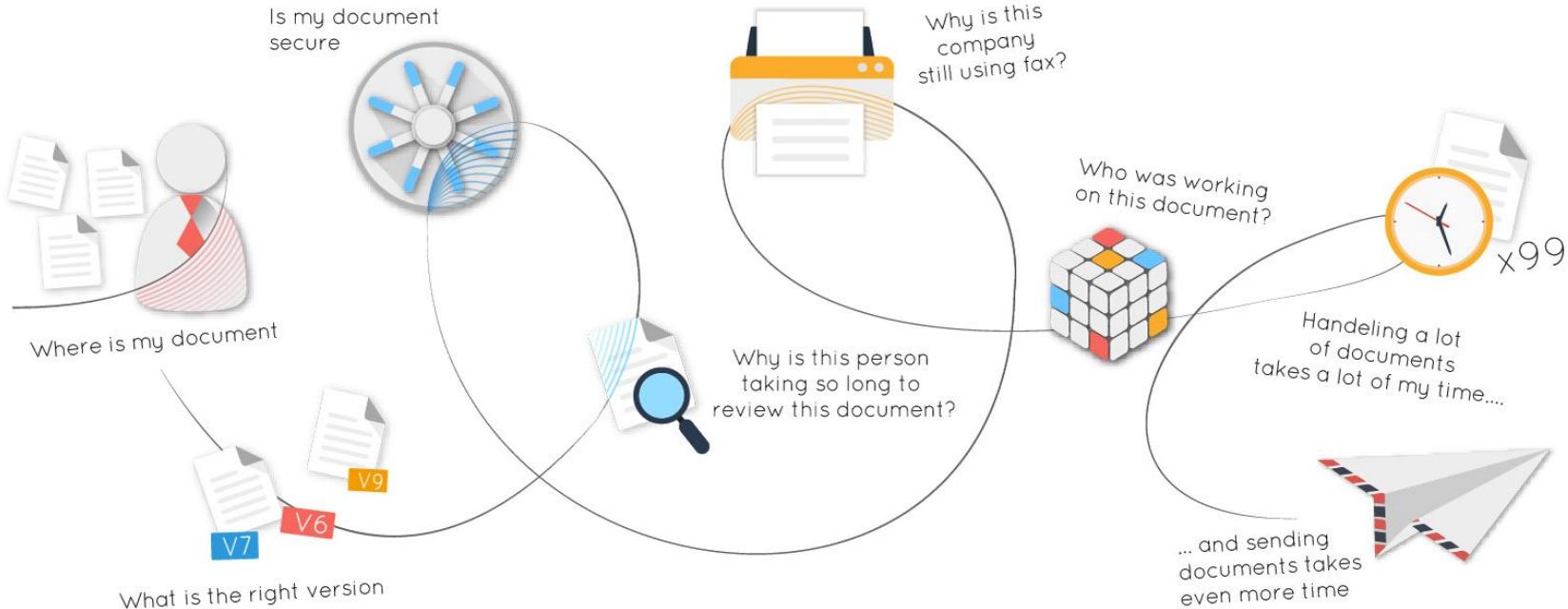
Automate your contract- and business processes

“LegalThings was born from a common pain to almost everyone who has worked in a corporate environment:

Despite working with smart and organised people, we are still spending too much time on process management and reproduction of the same content.”



Stop wasting time on process management, reproduction of the same content and time consuming 'old school' collaboration



Why you should use LegalThings..



Accelerate Your Digital Transformation

Accelerate digital transformation with LegalThings for intelligent process automation, contract drafting, -monitoring, -negotiation & signing.



One single point of truth

LegalThings includes blockchain verification of its digital signed contracts and gives you - or other professionals either in-or outside your organization - alerts when action is needed during the complete contract lifecycle.



Increase Customer Engagement

Deliver an exceptional customer experience by engaging them on a process that intelligently guides them through every step that results into the final version of a document.



Mobile, Tablet, Desktop....It Looks Awesome!

In the Netherlands we say: “The eye wants something as well”. That’s why we have made our application look awesome and intuitive.



Reduce Compliance Risks

One secure place to monitor contracts, compliance status and other corporate housekeeping documents per entity or business unit. Automated alerts, automated tagging, and AI recognition of important due dates.



Never fill in the same information twice

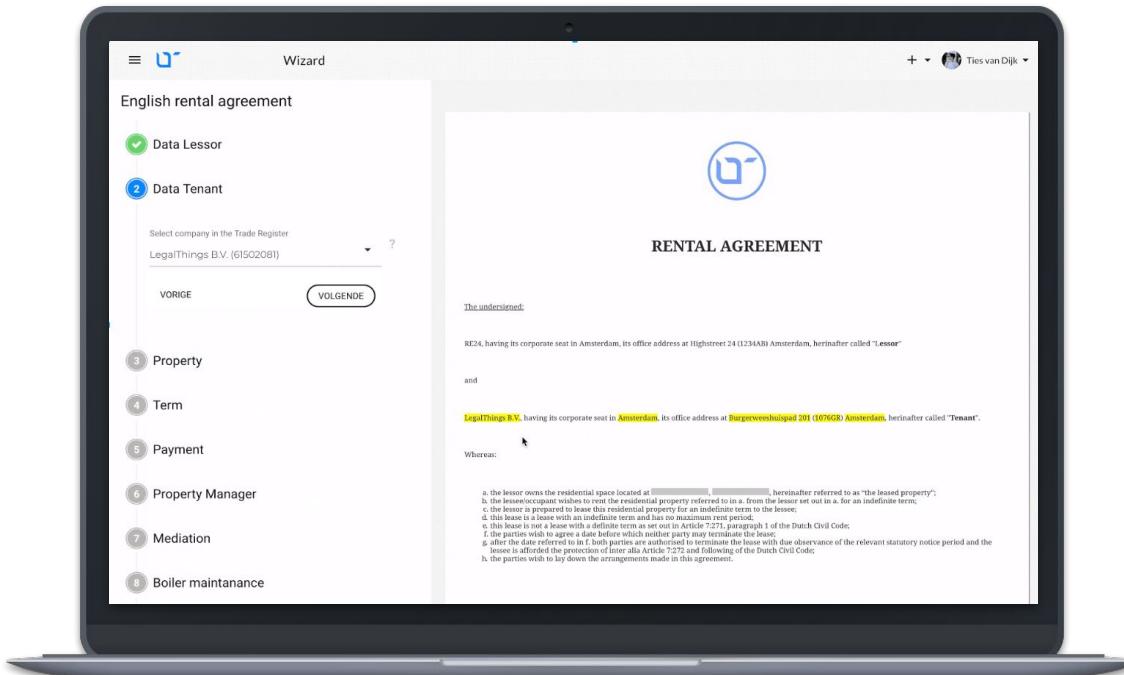
Despite modern tools and technologies, organizations are still filling in the same information over and over again, with hours of wasted time and possible human errors as a result.



The benefits you can experience today!

LegalThings a new type of business application that uses cloud-based software and services to digitally manage a wide range of document-centric processes involving people, documents, data and transactions

-  **Productivity increase:** Realize up to 40-50 % in time savings.
-  **Automated compliance:** Save up to 30-40 % on administrative overhead.
-  **Save 10-20% on OPEX:** Reduce print and document cost
-  **Data driven decision making:** All data that is processed is structured data.
-  **Minimize human errors:** Automation makes workflows less error-prone
-  **GDPR compliance:** Processes and interactions are GDPR and regulatory compliant



Smart Templates

Does your organisation manage all the templates centrally? Probably not.

This not only results in likely deviation from company standards, the scattered templates are also vulnerable to missing the latest changes in legislation.

With our Smart template builder, you are always ensured that contracts and documents are created according to company standards and up-to-date.

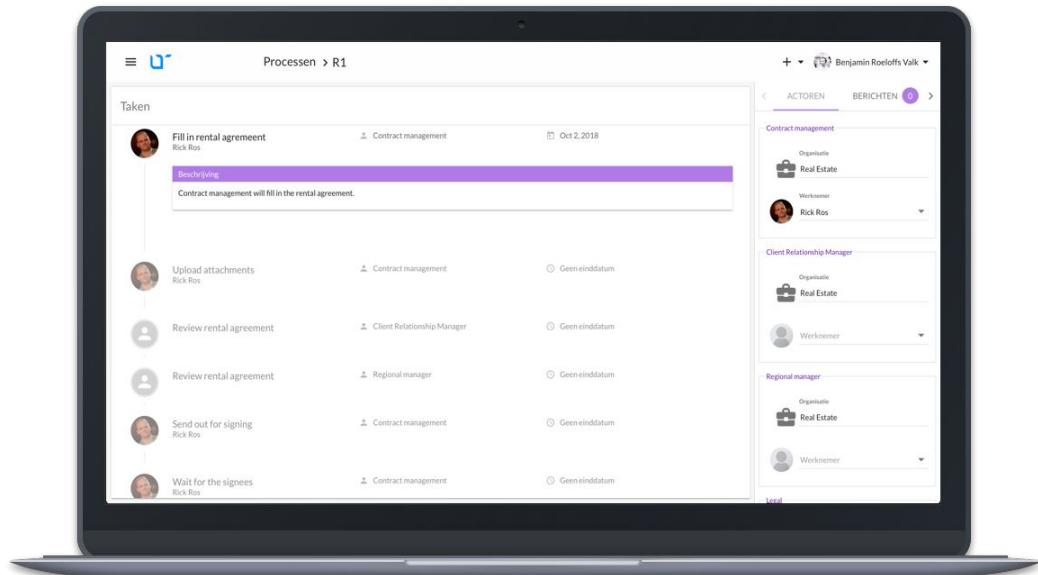


WorkFlow Management

It doesn't matter whether you are selling insurances, legal advise or mobile phone subscriptions, every business process has a beginning and an end.

With Legalthings Workflow Management you can create any workflow you want.

You can define actions, notification, payments, actors, messages, files, etc to tailor the workflow you require for your business.

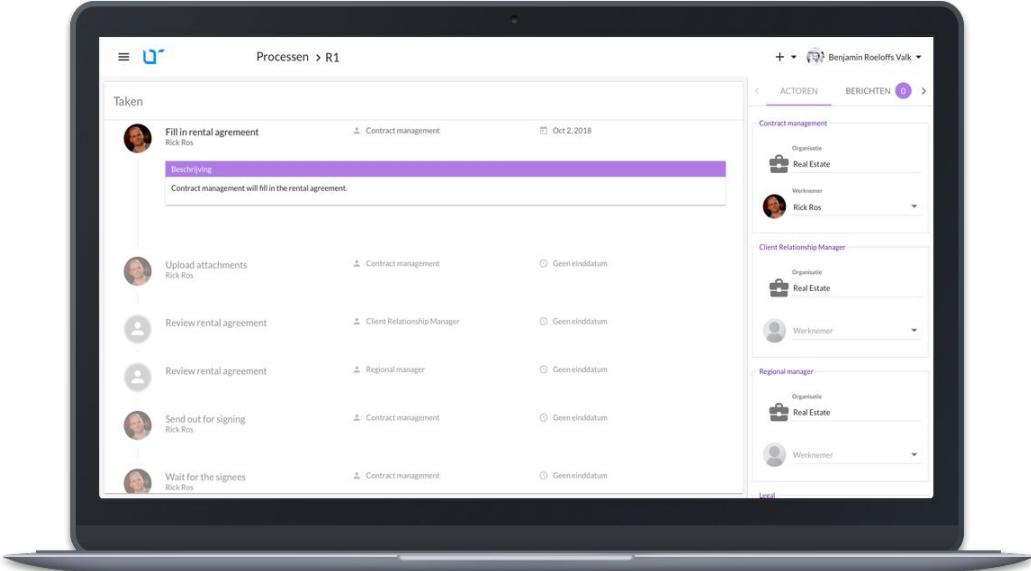




Task Management

Work with clients to speed up the process..... Tasks

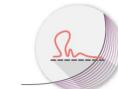
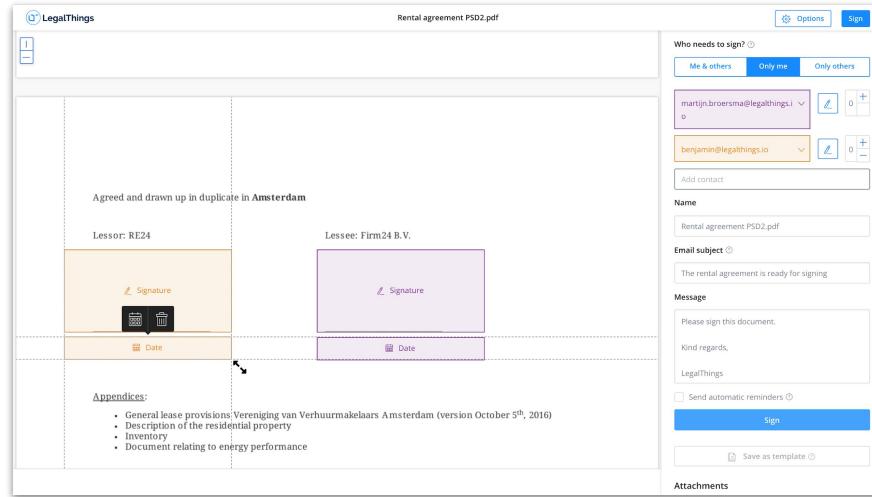
Deze nog ff doen



The screenshot shows a laptop displaying the LegalThings Task Management interface. The main window is titled "Processen > R1" and lists several tasks under the heading "Taken". The tasks are:

- Fill in rental agreement (Rick Ros) - Contract management, Oct 2, 2018
- Upload attachments (Rick Ros) - Contract management, Geen einddatum
- Review rental agreement (Client Relationship Manager) - Client Relationship Manager, Geen einddatum
- Review rental agreement (Regional manager) - Regional manager, Geen einddatum
- Send out for signing (Rick Ros) - Contract management, Geen einddatum
- Wait for the signees (Rick Ros) - Contract management, Geen einddatum

On the right side of the screen, there is a sidebar with sections for "ACTOREN" and "BERICHTEN". Under "ACTOREN", there are entries for "Organisatie: Real Estate" and "Werknemer: Rick Ros". Under "BERICHTEN", there are sections for "Contract management", "Client Relationship Manager", and "Regional manager", each with their respective "Organisatie" and "Werknemer" details.



Digital Signing

Want to be 100% sure that the right users signed the contract?

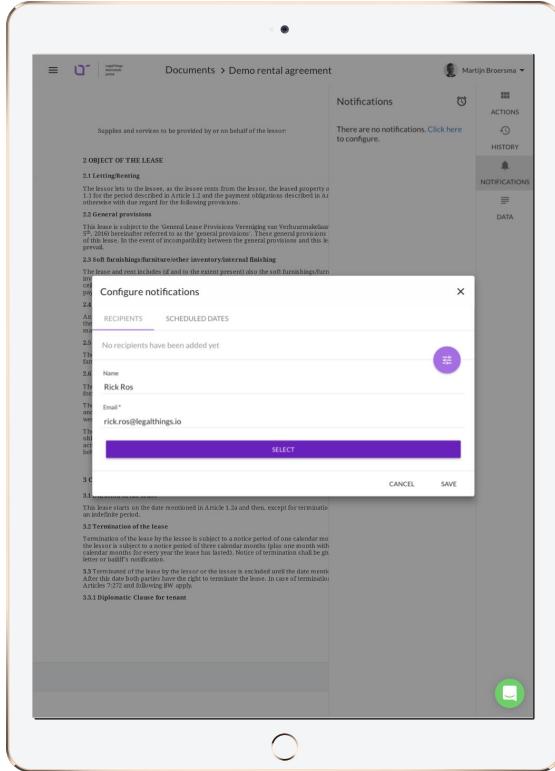
We have developed an advanced authentication method to validate ensure the identity of the signees.

LegalThings allows you to invite counterparties for signing, and offers both optimal security and compliance with EU legislation.

Anchoring these digital signatures on our own LTO Network global public public ensures immutability of the finalized documents.



Notifications: Never miss a deadline anymore



Alerts & Notifications

Missing a contractual deadline is annoying at best. Most of the times it's downright costly.

LegalThings software, allows you to receive automatic updates alerting you on the expiration of important periods in your contracts.

Through notifications and alerts you will always be kept up to date on what's happening. As a contracting party, but also as a stakeholder.

You can easily configure notifications and alerts with LegalThings. You can also choose how you want to be alerted – via email, text messages or an agenda alert.

Version Control: Keeping track of mark-ups has never been easier



Version Control

In contract negotiations it is important to keep track of all changes made to the contract.

LegalThings Version Control allows you to track changes for version comparison. If the versions are approved by all parties it can be shared for digital signing.

All separate versions are stored on the LTO Network blockchain, acting as a valuable audit trail for filing purposes.

The screenshot shows a digital document titled "Rental agreement Jo Bronckers rents" on a platform called "Version vs". The document is timestamped at "2018 Oct 24 10:40:48". It includes a circular watermark with "ct 2018" and "View in blockchain". The document is signed by "Rick Schmitz" with a fingerprint icon. The lease details include:

Rental Agreement Details:

- Leasee:** Jo Bronckers
- Lessor:** Hijn Broersma
- Address:** De Kruisweg 10, 3522 XH Utrecht
- Type:** Residential
- Period:** From 2018-10-24 to 2019-10-24
- Price:** € 1.000,- per month
- Deposit:** € 1.000,-
- Utilities:** Excluded from rent
- Condition:** Good condition
- Renewal:** Automatic
- Termination:** Mutual notice period of 3 months
- Lease Type:** Fixed-term lease
- Lease Status:** Active
- Lease ID:** 1234567890

Key Data in the Lease:

- 1.1 The leased property:**

The fully furnished dwelling with inventory, located legally in:
The Netherlands, Utrecht, De Kruisweg 10, 3522 XH Utrecht
Description: A fully furnished 1½ floor apartment consisting of a living room, kitchen, 2 bedrooms, bathroom, toilet and balcony.
- 1.2 Duration of the lease:**

A fixed-term lease with a commencement date of 2018-10-24 and a termination date of 2019-10-24.
- 1.3 Payment obligations:**

Jo Bronckers shall pay the following amount of:
 - € 1.000,- monthly for the basic price, excl. VAT
 - € 1.000,- advance payment for supplies and services

Payments:

Payment period	Amount
Security deposit / Bank guarantee	€ 1.000,-

Explorer	Transaction details	
Transaction		
55a1vFo63S9k3inV4osF85G6Cz8nA8wZoubZ7ElaiIV		
Transaction info		
Type	15	
Timestamp	Oct 25, 2018, 12:12:20 PM	
Block	46440	
Fee	0.001	
Sender	3N42b1sqAmNlQ1aJYACtB7YQD4RUYBqL1qmE	
Signature	5mPq3UJ00X9v77a1yek6R1C9KeuLcwauhIcy3HjPCNFDPm6kYPuV8s3g5ewqSEWZ2Kfet7N6FP3SVpbyTFT	
Hash valid		
770d4851dec911fb88277b74df63afe91446a5d232a269431d6d2c0d691		
Transaction anchors		
Hex	Base64	Base6B
770d4851dec911fb88277b74df63afe91446a5d232a269431d6d2c0d691	deyEH5d3kR...	91b2hb4Q...
Transaction data		
{ "11b2hb4Qnh3N87u1mrwsAngtMC4759AXT:fMr7x75s" }		

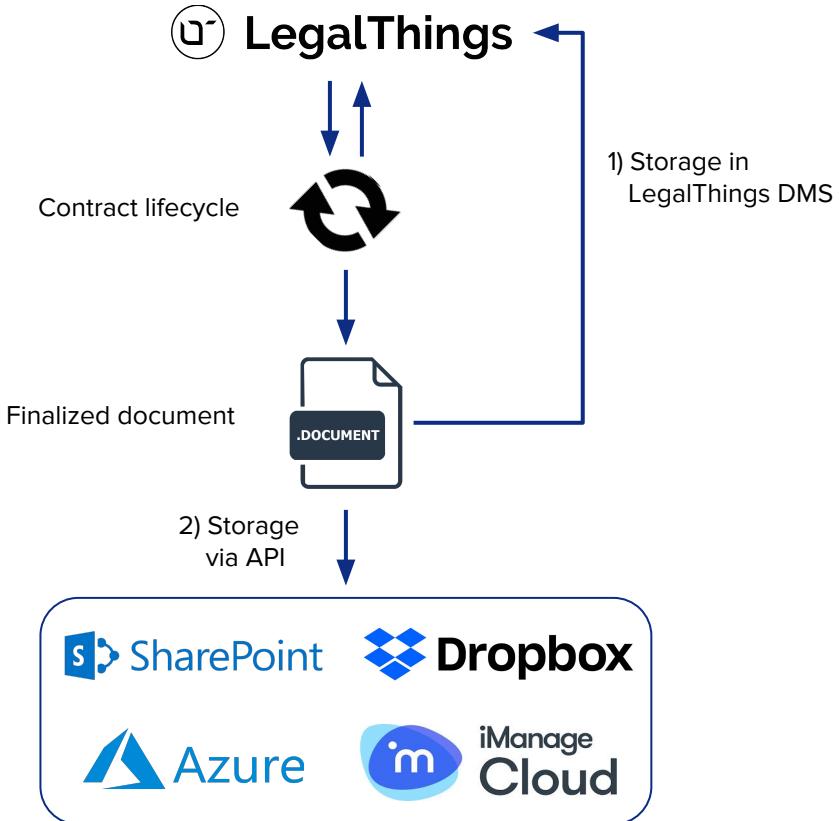




Document Management

There are two ways of managing your documents after their contract lifecycle.

- 1) Use the LegalThings document management system. Filter on meta data gained from data parameters from the agreement for effective monitoring and reporting.
- 2) Use your own, existing document management system. After finalizing the contract lifecycle API's write the document to any desired document management system.

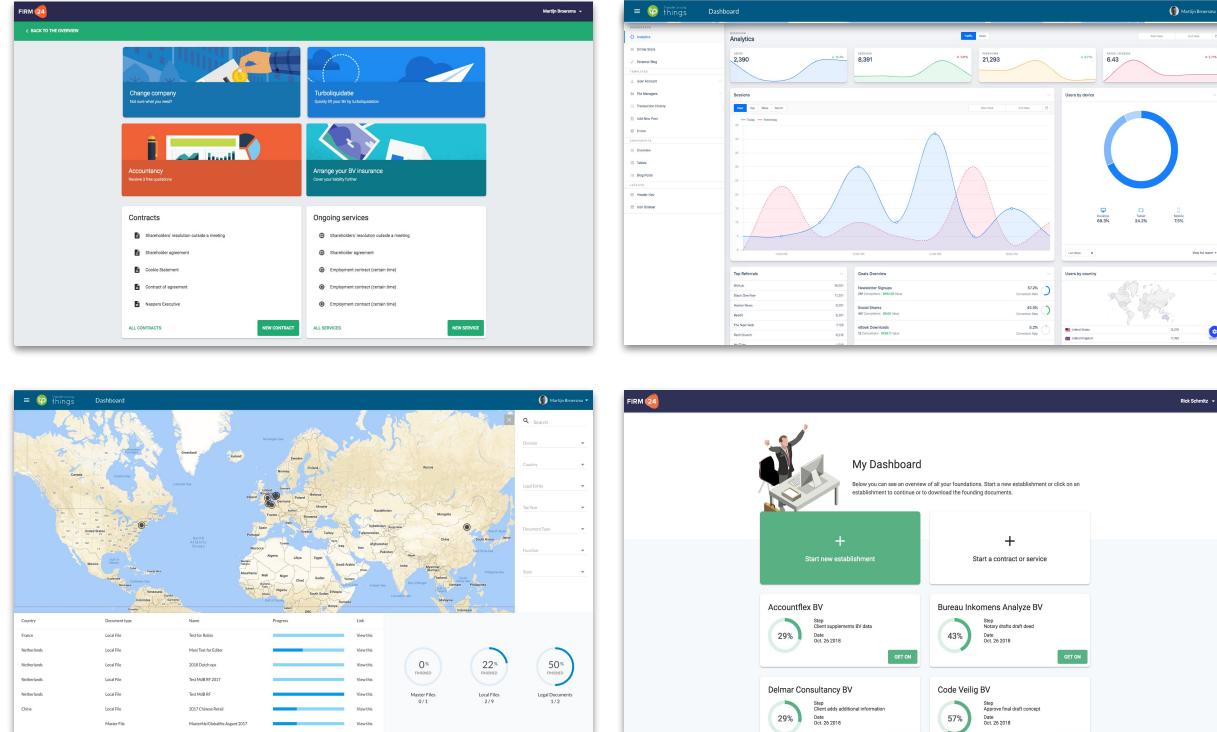


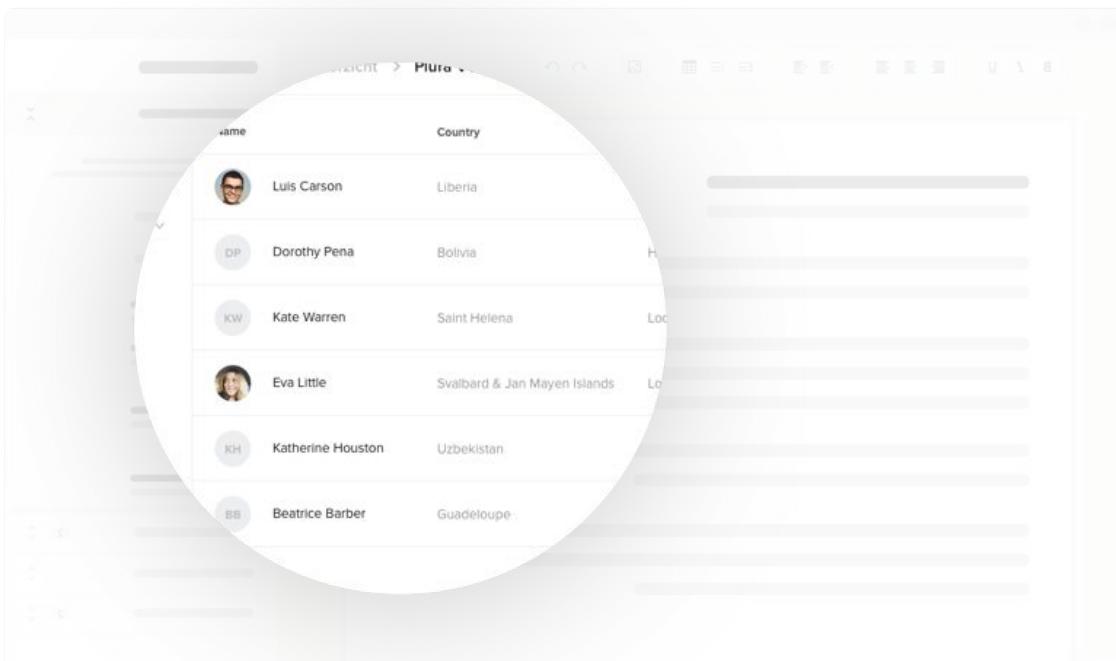
Custom dashboard

A dashboard typically consists of an overview of the most important tasks, processes and progress on certain workflows.

As a team or project manager you want to track progress and make sure all tasks are followed up.

We created user dependable dashboard with customizable widgets you can choose from.





Name	Country
Luis Carson	Liberia
DP	Bolivia
KW	Saint Helena
Eva Little	Svalbard & Jan Mayen Islands
KH	Uzbekistan
BB	Guadeloupe



Identity Management

Legal processes are naturally sensitive and confidential; restriction of authorized data access is therefore critical

Authorization of users throughout all the LegalThings application can be done via role-based access control.

The actual checking of privileges is done by each application itself. The IAM handles identity management (users, organizations, teams, roles), authentication and session management.

A selection of our clients



Rijkswaterstaat
Ministry of Infrastructure
and Water Management



We join competitions in which we win awards

★ BLOCKATHON MINISTRY OF SAFETY AND JUSTICE:

LegalThings won the first ever blockathon issued by the Dutch government. During this blockathon we demonstrated that a whole law could be digitized as a Finite State Machine on a blockchain.

★ BLOCKCHAINGERS HACKATHON “BEST CODE TEAM”

At Blockchaingers, the world's biggest hackathon to date, the LegalThings team brought home the award for best and most sustainable code.

★ REAL ESTATE INNOVATION NETWORK COMPETITION

Out of 1600 applicants competing to decide which company delivers the best real-estate tech solutions, LegalThings eventually became runner up after a 6-month process of pitching all over Europe.

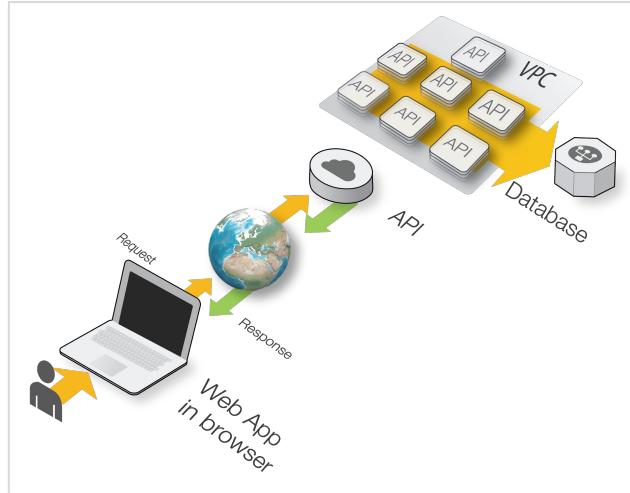
★ NEN STANDARDIZATION COMPETITION

The NEN is the organization that develops the standards for many enterprise certificates, which in Europe are called ISO certificates. Out of many applicants, LegalThings became runner up in the final.

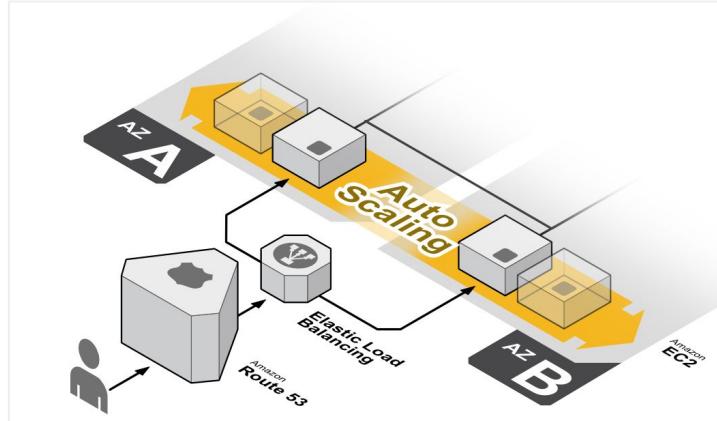
IT - Architecture

LegalThings software is created on the back of state-of-the-art technology and constructed in the most flexible way possible

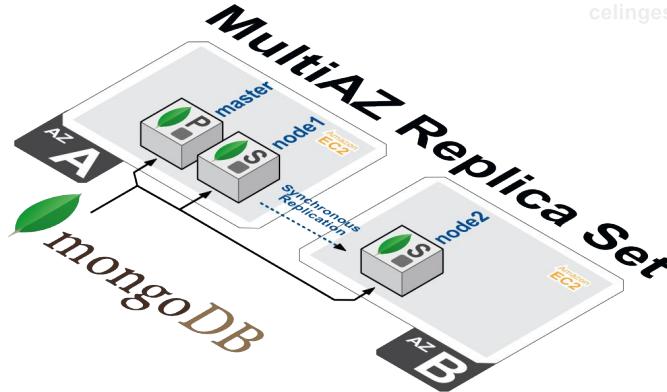




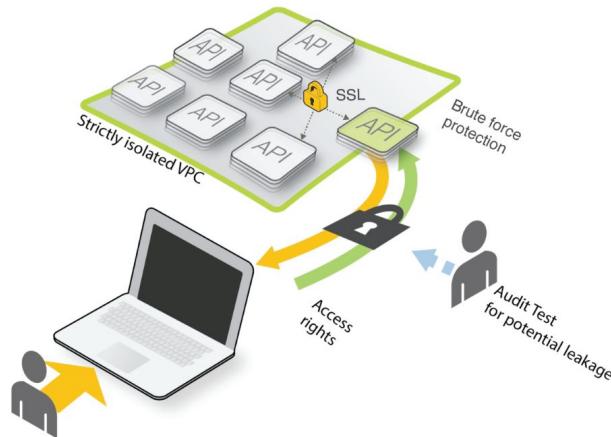
- LegalThings uses Amazon Web Services (AWS) to facilitate its PaaS (Platform-as-a-Service) setup. With AWS, we choose for quality and reliability. They are the absolute leaders in cloud infrastructure, and chosen as leader by Gartner for the 6th consecutive year (see the magic quadrant).
- The engine of the system is formed by the seven individual restless web services, communicating through API, creating an extremely stable and flexible core.
- Users can access the app through a AngularJS front-end user interface, which is build as a single web page application ensuring a fast browser experience. AngularJS is also well-known for responsiveness on all devices (desktop, tablet, mobile).



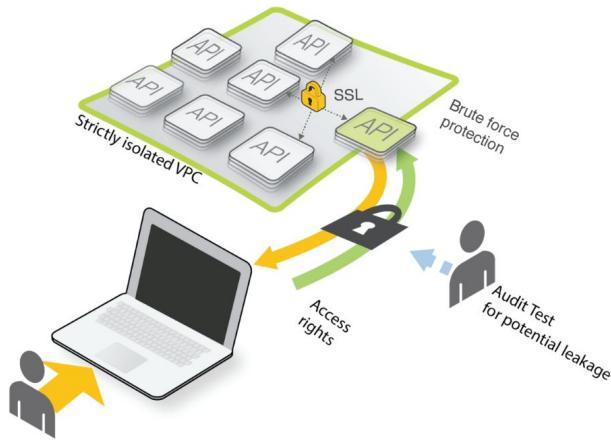
- In times of heavy load, the system will enforce Auto Scaling to maintain its high speed performance standards.
- Each system is running on its own cluster, and therefore can scale independently, making the setup extremely elastic.
- With Auto Scaling, additional server instances are automatically added to the infrastructure, each deployed with its required web service, without the need of a system administrator.
- Elastic Load Balancing automatically distributes incoming web traffic across the available server instances.
- This set-up makes the software apps so fast that the database is the weakest link, instead of the software.



- Both the database and the individual web services are continuously backed up by synchronous replication. We use three instances in two different regions. Instance 2 is just seconds behind each 1, and acts as a real time backup. Instance 3 is located in a different region and is one hour behind.
- Unique to other database structures, MongoDB, gives the possibility for Automatic failover: an exact replica of the dataset is automatically replaced, ensuring a continuous uptime.
- In case of a software update or release of new features, the system uses rolling upgrade, updating a single machine and then updating the next.
- Similar to the rolling upgrade technique, auto maintenance is deployed.



- LegalThings uses industry best practices with regards to coding standards, deployment, as well as security.
- It is not possible to get physical access to the production environment servers, nor via SSH. The Head of IT and the CTO are the only people with access.
- There is no system administrator or database administrator required as management, maintenance and updates are all automatically deployed.
- All data in transit is SSL encrypted. By natively encrypting databases on disk, we eliminate both the management and performance overhead of external encryption mechanisms. This new storage engine provides an additional level of defence, allowing only those with the appropriate database credentials access to encrypted data.



- Documents in the LegalThings (LT) system are stored in the Document Management Service (DMS). Documents uploaded to the DMS are always sent over an SSL encrypted connection as well as the meta data about the document.
- The DMS is completely stateless which means it does not store any data. The actual document data is stored using two separate services. The metadata (information about the document) is stored in our MongoDB database. Each LT customer has its own physical database.
- The actual documents are stored using AWS S3 in the AWS Ireland Region. The documents are encrypted using Amazon S3 server-side encryption which uses one of the strongest block ciphers available, 256-bit Advanced Encryption Standard (AES-256).

SUPPORT: High level support guaranty

