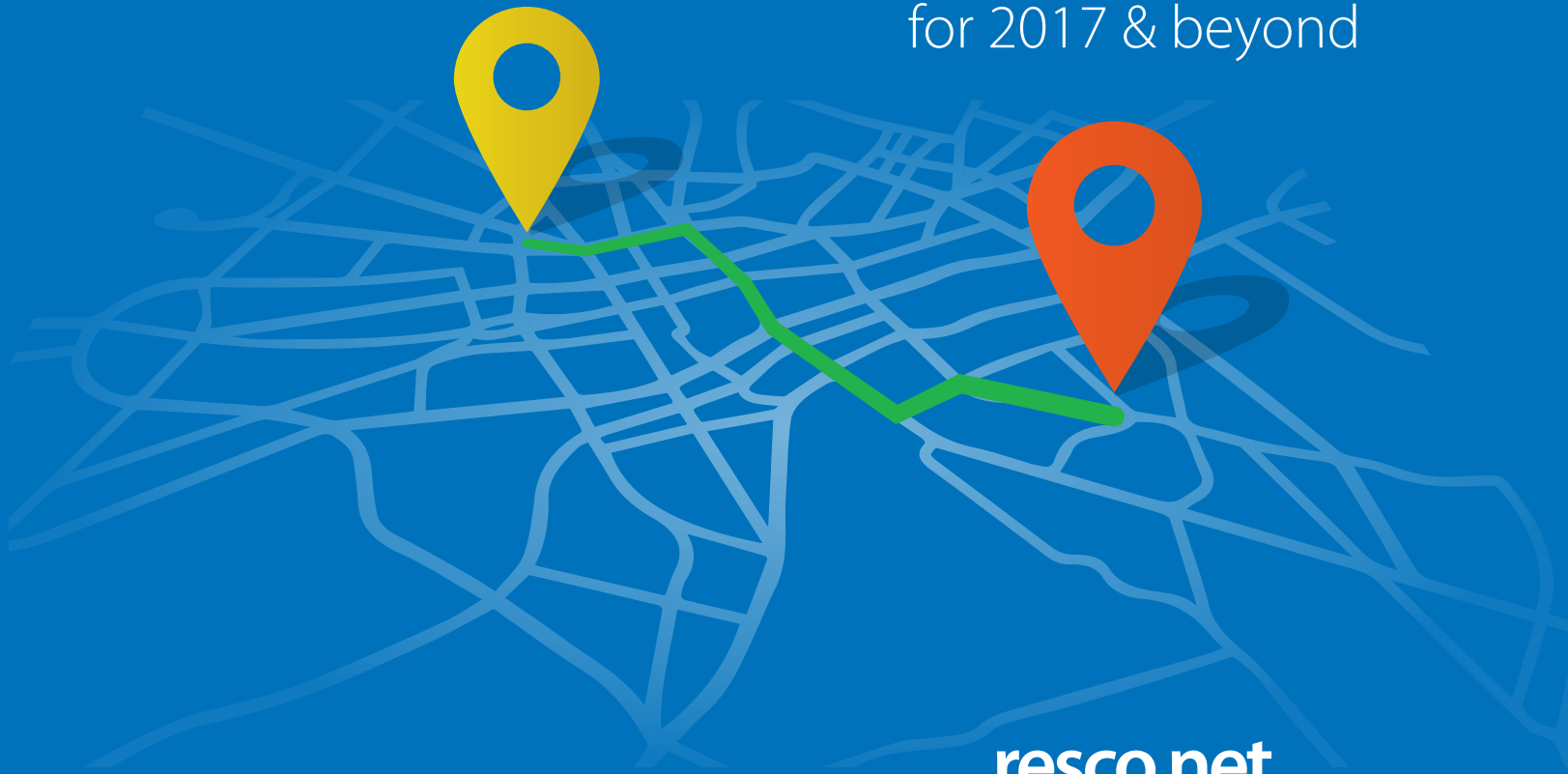


# Resco Roadmap

for 2017 & beyond



**resco.net**  
technology on the move

Revision: 1/20/2017

This document outlines the priorities for next development of Resco Mobile CRM.

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## Mission Statement

Resco's goal, to put it simply—is to provide the ultimate tool for mobile businesses and their processes. To provide an excellent, easy-to-use, visually appealing and full-featured tool for salespeople, service technicians, or anyone on the go. One app that will satisfy your mobile workforce by boosting productivity and increase effectivity of your overall business.

In the following years, the focus will shift from the mobile app to business **processes**. We have elevated our point of view and are looking at the situation from the perspective of the company as a whole rather than just the division or the group that requires mobility. What are the needs and requirements of a **sales** organization that relies heavily on the mobile workforce? What are the tools of a successful **field service** operation? What are the ideal channels to utilize the interactions of **customers** at a restaurant chain, **residents** of a city or virtually any other type of **external users**? We would like to help you answer these questions with the expertise and experience we have gathered throughout the years.

There are certain distinctive features that will be crucial in this pursuit. Resco's **customization & configuration** options and flexibility are unparalleled and we will make sure it stays that way. However, in a technology-infused world, where almost everything is—or contains—a computer, the question of **security** is an absolute necessity. Can we ensure that your device and sensitive data are protected—even when there is no connectivity? We will make sure the answer to this a resound, yes.

The moment security is not of worry; you may start looking at what technology can actually do for you. In addition, with mobility, we can answer some interesting and ever important questions of **adoption, usage, and behavior**. Are the users using the app in an intended way? Are they creating appointments at the customer's site or at home? How many customers have they really visited in person? We will give you answers to all these questions and more.

Even though we firmly believe in our goal, please note that this roadmap might be subject to change. There are two main reasons why this might happen. The first is the ever-changing and fast-evolving mobile landscape. These forces constantly cause Resco to reconsider plans, to adjust and adapt to new technologies, operating systems, and challenges of the mobile ecosystem. The second and most important reason is based on the input we gather from our partners and customers—in a positive light. These individuals and parties see valuable trends day-by-day, whether it be from their clients and outside sources, they submit their requests, provide suggestions of new features, and hence affect the prioritization of tasks. We listen to and value our customers/partners—they push us forward and for that, we are very grateful. Since we strive for every implementation of Resco to be a success, these are important impulses for our plans and greatly benefit the overall picture and flow of operations.

## Our Promise

One of the most important aspects of Resco's mobile app is the ability to provide the same feature set across all major mobile platforms. This way you can focus on the business needs and not on platform specifics and mobile development.

Therefore, we are always on the lookout for the latest advancements in technology, operating systems and mobile devices. We want and need to have these covered before you even realize you need them. So be it the latest iPad, new Android phone, completely new mobile platform, or a new IoT device, we will be working diligently to have our app readily available on all platforms, as soon as possible. Thus, you can count on Resco that whatever new and latest technology you adopt, we will be there. That is our promise.


No SIM 10:17 AM 91%

### Order Buttons Replacement

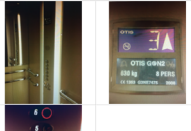
**Elevator Components**

EIGenX Control Panel	EUR968.00
1.00	EUR968.00
Fan DV200	EUR275.00
1.00	EUR275.00
Pushbuttons MT42	EUR72.00
1.00	EUR72.00
Pushbuttons OT12	EUR86.00
1.00	EUR86.00

**Signature** Clear



**Notes**



No SIM 12:05 78%

### Sales

All Sales

- December order** €25,912.32 (New)
- Invoice for Designer Bikes** \$598.51 (New)
- January order** €7,742.30 (New)

**Ace Bikes**  
100 Red Oak Lane 20313 Bratislava

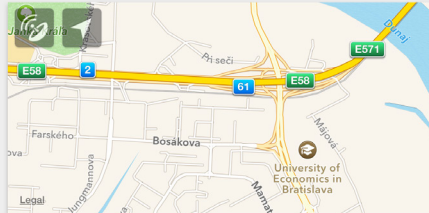
Adrian Haines Caroline Vicknair Glenn Trach Joe Healy

- New price quote** \$5,792.63 (Draft)
- Oppt#34** \$1,772.24 (In Prog...)
- Possible order** €16,588.32 (In Prog...)
- Quote for Adrian** €3,063.24 (Draft)
- Send invoice** \$3,022.14 (New)

No SIM 9:50 96%

### Crown Business Center


**Map**



**Service & Repairs** Default

<b>Emergency service</b>	Problem Solved	High
<b>Push buttons not responding prop...</b>	In Progress	Normal
<b>Routine maintenance</b>	Problem Solved	Normal

**Notes**



**Quotes**

Crown Bus

Contacts

Matthew Kraly Ma Bernak

Activities

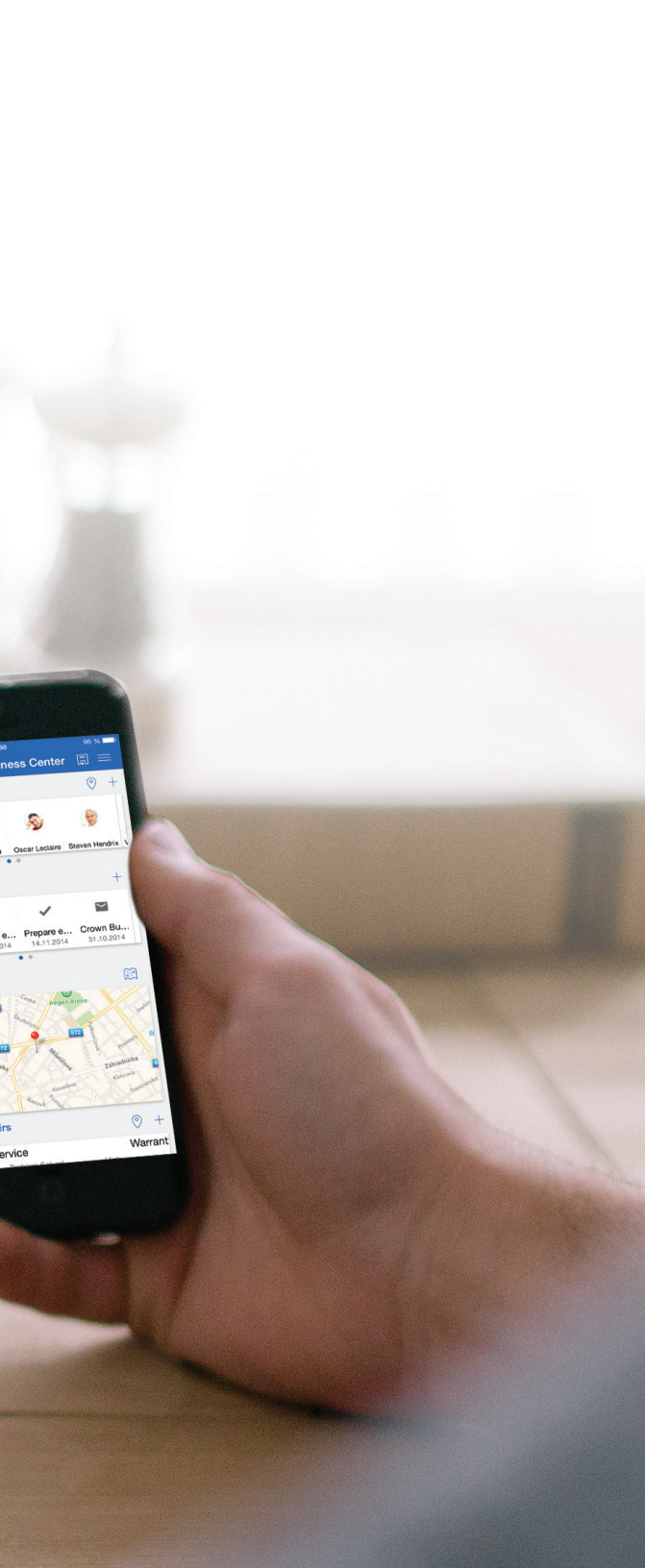
Matthew... 19.1.2019

Map

Service & Repairs

Emergency s





## Main Areas

### Sales

Mobile Sales has been one of Resco's main areas of expertise in recent years. We offer an excellent product in this regard, delivering most—if not all - the tools required to capture standard sales processes. Building on top of that, we want to provide a deeper **business intelligence**, richer immediate **communication** options and dedicated experience for **external users**, not solely the mobility aspect. Building complex **quotes** with product dependencies and relationships are also on our agenda of providing the best mobile sales experience on the market.

### Field Service

Effective Field Service is one of our top priorities in the coming months. That means efficient **planning** using a dispatcher console, direct interaction with **customers** via an app or a web portal, and utilizing the potential of **IoT** devices. All of that completely independent of the backend system, working with Dynamics CRM, Salesforce, or even Resco's own CRM.

### Customer Experience

Mobile applications for external users like customers, subcontractors, volunteers, partners, fans and the general public are a great way to increase engagement. Nevertheless, there are a number of scenarios where other forms of access would be desirable. A **web portal** providing the same functionality would expand the possible uses exponentially—and that is exactly what we are going to provide, with just one Publish in Woodford.

All service and sales organizations would benefit from customer experience and we want to ease, simplify and speed up the development process by creating ready-made **templates** for restaurants and municipalities. These could be used, as-is or modified beyond basic usages in these scenarios.

## Security

Mobile Device Security or Device Security Management is an extremely important topic these days. Resco will focus on **offline security**, making sure that the devices are safeguarded even when there is no connectivity. On top of that, we will add **security intelligence** so that irregularities in user behavior (like connecting from an unexpected location) can immediately be recognized as threats. To provide proof that our security is top quality, we are also going to provide the source code of our application to independent **security auditors**.

## Usage Monitoring & Statistics

Building on top of data collected by Mobile Audit (when, where, and what action has been performed by whom) we will add tools for meaningful data processing and visualization. Answering questions about usage and feature adoption will become simple with options that enable you to define location-based rules that restrict or enable certain actions based on the GPS position. Also, the user data usages may be fed into Google Analytics for further insight.

## Route Planning

Route Planning can be a huge productivity booster. We want to take our mobile route-planning component and introduce it on the **server side** as well. There, its capabilities can be extended—the planning can grow from one user to the whole team. We also want to introduce better **usability** and **optimization** options.

## Inspections

A process driven User Interface (UI) of some kind—inspection, wizard, and survey or business flow has been present in almost every implementation of our app. We are going to provide tools to design and model this type of UI with more ease, based on simple rules rather than using complex JavaScript. This will respect the usual requirements in these types of scenarios, like **different types of input** (even multimedia input), **data schema** definition or support for continuous flow through **multiple devices**.





## Mobile Sales

Effective mobile sales is the key ingredient Resco can offer to any organization. We have a solution that already covers all the standard needs of this type of business, and most non-standard, as well. Be it appointment planning and management via convenient calendars integrated with Exchange or Google. Or a full-featured email client intertwined with CRM data, accounts and contacts neatly organized on a map with the ability to plan the route, lead qualification and opportunity generation even in offline mode or documents synchronized with cloud storages—we already offer this, and much more.

A multitude of businesses use our solution this way, so we can confidently say - it is verified and tested in the field. Resco Mobile CRM brings tremendous benefits to most of the implementations and for many, it is even considered a crucial part of their operations—without it, they simply cannot provide their business services. Therefore, it comes as to no surprise that we will continue improving this area.

### Continuous Improvements

In the coming months, we will focus on expanding the area of **documents** and mobile generated **reports**, which as of now offers significant functionality, but lacks **charts & calculations** in reports, and would benefit from having a more transparent **signing experience**. Mobile **maps**—one of the most visually appealing features of our application, will be improved by a full **offline** mode. Maps and navigation always available without any connectivity, at all. We will also invest more in **email intelligence** providing greater insight into the received emails by data harvesting (offering options to create an appointment or a new contact when the app detects relevant information present in the email text) or sentiment analysis (evaluating the emotional charge of the email).

This is just the tip of the iceberg. Mobile Sales is our bread & butter, so it is vital for us to make sure it works seamlessly, offering state-of-the-art functionality. That is why we also encourage you to check the section, [Feature Improvements](#) where more features are presented that enrich and enhance the overall sales experience.

## Business Intelligence

With richer sales data at your fingertips, we can provide deeper **business intelligence**. Charts that enable data visualizations of performance areas and dashboards with deeper insights to make better and quicker decisions to close sales cycles faster. Complete with, an interactive **chat** that helps connect key people, right when they need it, able to collaborate, reveal or explain any missing information for closing deals, and more.

## Customer/Consumer Apps

This is not exclusively limited to internal employees. The entire sales scenario can cover **external users**, as well. Customers of a business can place orders and interact with the internal staff right out of an app—or via a web portal conveniently generated out of Woodford's project. With a few easy steps, businesses as well as their customers will be provided the quality to benefit from services as well as, partake in them.

## Advanced Quoting (CPQ)

This is one area that we see being a bit underserved—**complex quote building**. Currently, you can work perfectly well with quotes in our mobile app and even create new ones in offline mode. However, when it comes to complex product hierarchies with product dependencies, relationships and recommended products, here, we offer only the basics, for now. Thus, we would like to improve on this, and provide the tools that define these product relationships and rules, and at the same time offer meaningful visualization options to users.





## Field Service

For the area of Field Service, mobility was a blessing. It is now unthinkable to approach this process without some form of mobile technology in place—the sheer ineffectiveness of pen & paper and the absence of streamlined computerized tools means many wasted resources. Any such attempt on Field Service in the forthcoming years would simply render the business, non-competitive.

Our mobile technology is an ideal fit for these kinds of scenarios. Last year, we have extended Resco's coverage of Field Service features from Dynamics CRM to Salesforce and Resco Cloud, so it does not matter which backend you might be using—all are suffice. The list of supported features and implemented business logic still needs to be harmonized (e.g. for Salesforce), but that is one of our main priorities for 2017.

Overall, you can say that our plans in this area are daring. We understand that no Field Service process is complete without a **dispatcher console**, managing resources in the field. We want to empower **customers** to have direct access to their service data and be able to request a service appointment directly through a mobile app or a web portal. Another layer of efficiency is introduced by **IoT** and incorporating all the metering devices and other gadgets directly into the process. These are exciting times to be able to witness in the Field Service business!

### Planning & Dispatching

Planning is the heart of efficient Field Service business. The ability to define which technician will visit which customer at what time is the pre-requisite of effective allocation of resources. To which, we have already started working on a planning component for dispatchers, visually representing on a timeline when and where each resource is assigned. Rescheduling the planned visits, adding unscheduled last

minute calls or even an automated mechanism suggesting optimal appointment order or which technician should respond to which service request—all will be part of the package.

## Customer Access

Customers—and the respective business, can hugely benefit from direct access to CRM data via mobile app or web portals. The ability to see their respective data, request a service, see where the technician is on a map, initiate communication with the field technician or back office using an audio/video chat can all bring the customer's experience and satisfaction to the next level. Therefore, it is a logical next step of our involvement.

## Internet of Things (IoT)

Successful Field Service is all about efficiency. That is why the era of the Internet of Things can dramatically improve existing operations. Automatically being able to connect & read data from various devices via connection to a cloud (using IoT device cloud offerings like Amazon Web Services or Microsoft Azure IoT Hub) and define actions that trigger a service request without any human interaction. Field Technicians for example, can immediately know values from metering devices after entering the premises without human interference. This is just one of the many examples that can be achieved for a variety of different service sectors with Resco.



## Consumer-Oriented Apps (Mobile Apps)

Here at Resco, we firmly believe that external users—people outside of the internal structure of a company, like customers, subcontractors, volunteers, partners, fans and even general public—can hugely benefit from leveraging our technology. Not only them but also the businesses providing these kinds of channels and services.

One of the biggest improvements planned in this area is—the use of a Mobile Project that defines a mobile app to generate an **HTML app** with the same functionality. This would greatly extend the reach of our ‘mobile app’ scenarios, since you will be able to use the same tools to create not only mobile access but also a web portal with just a few clicks.

Mobile App or a web portal for external users can be a great complement for many, if not most of the sales and service scenarios. However, building such applications from scratch is not an easy task, especially in situations where the app should be available to the general public and there are enormous requirements in terms of a polished UI. That is why we will provide you at full disposal, a set of two **ready-made templates**, which you can utilize and modify as you see fit. One template targets restaurants and can actually be used as the basis for any other type of sales operation, and the other is for municipalities, with possible extensions to Field Service scenarios.

### HTML Application

Many of our partners and customers have asked about it, want it, need it, and it makes perfect sense. External user access is great, but having mobile access exclusively limits the areas and scenarios where it can be used. What would be an even more interesting scenario would be to create an HTML app with

the same features and same functionalities as the mobile app directly with the **Publish in Woodford**. Now that would expand the use cases exponentially!

This is our top priority in this area in the upcoming months. Building on top of the existing HTML app for Resco Cloud, we can automatically generate HTML files that may be used as a basis for a portal-like webpage for the external users. This way, users do not have to download the mobile app if that is not their preferred access method—they can just type a URL into the browser and get the same information and functionality.

## Sales & Service

For most sales organizations, it would be interesting to give their customers access to CRM data—to see their previous orders and possibly create a new one, to see new products and dedicated offers—and to create new, and very direct communication channels. The same applies to Field Service, where quick access to CRM for customers would mean a significant improvement in the service levels they are getting, being able to request an appointment immediately or seeing the technician position in real-time.

To reduce the time needed for development and deployment of these scenarios we are going to provide you two templates—mobile projects available as a starting point or just as an inspiration as to how this scenario can work:

### Restaurant template

Imagine a restaurant that would like to reach out to its customers by providing a mobile app (or a webpage) that would show the current menu (à la carte), current offers, the possibility to reserve a table or offer a loyalty program. Now imagine that there would be a template, where you would just put the restaurant's name, logo, and colors, import the products and set up any deals. And not only that—it would offer an HTML code of the app's UI that you can simply extend for more intricate requirements of a particular restaurant. Alternatively, you can quickly redo it for a retail store or another type of business. Now you can see what we have envisioned.

### Municipality template

You have most likely encountered this scenario in your lifetime. A city or a county trying to provide better services to its residents—by the means of a mobile app where you can report incidents, structural damages that need repair, or via a webpage offering the same.

This provides a tremendous amount of added value to the municipality but also its citizens. People are being heard and matters can be taken care of in an orderly fashion. With a mobile project and some



HTML, you can utilize and extend this scenario as you please. That is not all though, this scenario can also provide tools for managing incoming reports from citizens; see statistics of performed actions—and this is where it starts to get exciting—request a service, a field technician to fix the problem and respond to the citizen's request right away. Connecting the dots between the users and a Field Service operation.



## Security

Security on mobile devices is a topic of ever-growing concern. Companies invest vast resources into securing their infrastructure, servers, mobile devices, and a typically considered danger is unsecured connectivity—e.g. intercepted sensitive data sent by a mobile device to the server.

Where Resco sees an exploit, is when the device is not connected to any form of internet, at all—standard tools can manage the device and applications when they are connected to the internet. Once that is lost, the device is in the dark. This is where we can help and ease the always-worried mind of a system administrator.

Resco's main focus is **offline security**—to secure the device when disconnected. Building on encrypted database and security profiles (e.g. delete data when the incorrect password was entered three times), we will make sure your data is safe even when you cannot access the device remotely. On top of that, we will add **security intelligence** based on user behavior, meaning that unusual behavior patterns (like connecting from an unusual location) will be reported to admins or even directly restricted. We will also enhance the security options within **Resco Cloud** and provide our mobile app for **certification** to a 3<sup>rd</sup> party security certification authority.

### Security Intelligence (User Profile & Irregularities detection)

Mobile usage data provides a great opportunity for advanced security. We will create a user profile based on the interactions with the app, which can be processed for behavioral patterns and irregularities. If the user has created an appointment in London (based on the GPS position of the device in that moment) and just a couple of minutes later he or she is updating an account from an address in New York, there is a good chance that security has been compromised. We can notify the administrator via a

security threats dashboard or perform a restrictive action right away—based on the settings. Moreover, the similar data set can be used to allow certain actions only in certain areas and respond to the user's actions in real-time (Geo Fencing).

## App Certification

To ensure that our mobile app is secure and that there are not any hidden threats, we are going to provide the source code of our application to an **independent security authority** for audit and certification. The application has already been revised for security concerns by a 3<sup>rd</sup> party, but it is always good to request additional validation by a certified authority. This way—with a certificate ensuring that our app is secure—we can provide proof of our top-grade security.

## Server Security

Our standalone CRM solution needs to be on the same page with the latest trends in server security. We are going to introduce **login monitoring** (storing information on who is connecting when, possibly from where), configurable **password policies** (types of allowed characters), and advanced **login statistics** to provide an integral security overview of the server access.

## Multi-Factor Authentication (MFA)

Another layer of security can be ensured by utilizing **Multi-Factor Authentication**—securing access to sensitive mobile data with not only a username and password, but also by another access token like a code delivered by SMS, or provided by an additional hardware device. This does not have to be limited to codes since we already provide login using **NFC tags** or **QR codes** as a means of advanced access. We also support MFA using OAuth authentication standard, which is going to extend to our server solutions, as well. Building on top of all these features it should be guaranteed, that no intruders or unwanted access to the local copy of the data is possible.



## Usage Monitoring & Statistics

Every implementation of an information system is different, but each and every one eventually asks the following questions: Is the system bringing in value? Is the system used as it should be? Are the users working with the system or working around it? Which parts of the system are problematic to users? And which ones are being used most often?

Resco can help answer these questions. Expanding on Resco's powerful **Mobile Audit**, the data collected by the mobile app (when, where, what action has been performed, and by whom) is used to build a powerful tool with a lot of insight. Do you want to know if your users are really visiting customers? If they are asking them the questions you want asked? Are they filling in the information only after they get home, so they don't recall half of the discussion? And how many customers were actually visited? Then read on.

### Statistics & Charts

Mobile Audit, a feature readily available at your fingertips, can track various types of information. Starting with tracking actions such as, record updating or creation, with attached time and even GPS positioning tracking the device's movements when the application is running, this is already a very insightful dataset. However, to answer the pressing questions, like how many appointments were created at a customer's site during a certain period, you would need to process this dataset, create intricate reports and statistics. That is why we are going to give you readymade **analytics tools** for processing—starting with simple statistics and charts (e.g. how many actions were performed at a location) to really complex insights configurable for the actual needs of a particular business.

## Location-Based Rules

This approach can be reversed and instead of passively monitoring usages, you will be able to actually **enforce some actions**. This way, you can ensure that appointments can be closed only near the customer's site, a record of a certain type can only be created in a certain area. These location-based rules will be entirely customizable with a range selection for actions and triggers.

## Google Analytics

Resco is not the only provider of insights. You will be able to send the collected data to Google Analytics for further processing, where you can utilize their existing visualization tools to make sense of your users' behavioral patterns. Are they visiting Account forms, but completely ignoring the Contacts? How come they are seeing synchronization errors so often? If they start on the Opportunity form, where do they end? These are all the questions you will be able to find answers to.



## Route Plan

Mobility means being on the go, in the field, at the site. Making appointments, visits or calls. All of which, requires some careful planning.

Route Planning—a feature that we introduced last year to much ado—has seen a lot of interest in the past few months. Rightly so, as it can be a huge productivity booster. We want to take this promise of high efficiency and go outside of mobility and standard CRM. The goal is to prepare ‘version 2’ of the route planner with more **attractive design & better use cases**, with automatic **route change notifications**, and visualization of **completed routes**. All of that on top of **offline maps**, with directions always available, and much more.

### Optimization

Logical progression and the much-requested feature is route optimization, suggesting the optimal order of visits based on criteria like time or distance. For everyone who spent at least a little time studying computer science, it is clear that this is no trivial task. Therefore, we want to explore utilizing 3<sup>rd</sup> party optimization mechanisms as well as, investigate creating our own for ideal performance and provide the best options to the user, so they can really work effectively.

### Server Component & Team Planning

Route Planning should not be limited to mobile scenarios. There is an enormous request for our mobile component on the server side as well, for easier planning not only for one user but also for the whole team. Since this aligns well with Resco’s strategy to provide whole solutions, not just a mobile component, we have a server component on our to-do list already.



Search

4:11 PM

Today  
My Customers

11%

Oct 15, 2015



Total distance  
Driving time 5.58 mi  
40 min 30 sec

START  
Time  
Location 10:45 AM  
Home

1.74 mi (13m 25s)  
1. Check order arrival  
11:00 AM 12:00 PM

12:09 PM 1.37 mi (9m 43s)  
2. Meeting at Customer's  
12:10 PM 1:10 PM

1:20 PM 1.51 mi (9m 24s)  
3. Get new samples Zeppelin  
1:20 PM 2:20 PM

1704 yd (9m 31s)  
END  
Time  
Location 2:29





## Inspections & Process-Oriented UI

Inspection is a usage scenario we have seen too often. Performing a store inspection, a site compliance or a validity check, asking the right questions, and evaluating. And oftentimes, these were requested to be incorporated into the architecture from the very beginning, to help design not only the mobile experience but the whole data structure and to model the process.

That got us thinking. Maybe we can help define the whole process—and the process-driven experience that goes with it. Maybe we can put the pieces together and let the administrators focus on the logic rather than on expensive UI development. Making your life easier.

### Design

Our mission here is to provide a designer. A tool that would allow easy process definition, where you would define the **rules** that drive the process, that control the flow for the user, that define visibility. You would define the **data schema**, where the questions come from and where the answers are stored. All of that without the need to define additional entity representation, or to work with complex JavaScript.

The elements of the inspection do not have to solely be text inputs—we have seen the need to capture photos as a required step or to provide some other type of **multimedia input**. This will also be part of the design process, to request a signature, capture a photo, or even use a photo annotation.

### Process-Oriented UI

This approach can be extended to any process oriented UI—be it wizards, business processes or dialogs. Allowing some progress indication and making sure required data is completed. Defining the steps the users must take and not allowing them to take shortcuts. Focus on the process, rather than the data.

This does not have to end with one device, though. We want to make sure that if the process starts on one device, it can seamlessly continue on another (**multi-device support**). We will make sure that the state is preserved and the user (or a different one) can continue at the exact stage where the process was interrupted.



## Feature Improvements

Besides the main themes discussed earlier—like sales & field service processes, offline security, usage monitoring, route planning, and inspections—we are going to look at the core of Resco's mobile application: features that are already used by tens of thousands on a daily basis.

The main contenders in this regard are **documents and mobile reports**, where we are going to improve the signature capabilities, reporting in general (charts, calculations, etc.) and the overall process (automatic creation, queues, and approvals), then also **maps** (offline capabilities), **email intelligence** (data harvesting, sentiment analysis) and also very importantly Resco's own **chat** (audio & video calls, data triggers). We also have planned for tighter **phone integration** (caller identification), improved **business intelligence** capabilities and heaps of **other improvements** (lists & forms, synchronization, and more).

The general direction is clear—improve, fine-tune, polish, and enhance the existing features so that they provide all the functionality required by even the most innovative customers.

### Documents & Reports

Documents (and also other types of media content within Resco's app) have already received a fair share of our attention. Now they can be manipulated (edited, copied & pasted) and viewed with ease, naturally— as an integral and native part of the app. The result of enhancing the approach even further is Mobile Reports—the ability to generate documents of multiple file types (PDF, Word, Excel, HTML) based on the CRM data—directly on the device even in disconnected scenarios.

We see the following areas of improvement here—enhancing the report engine with **charts & calculations**, enriching and deepening the **signing experience**, automatic processes, as well as, queues and ap-

provals, but also improvements in the Report Editor in Woodford, for easier modification and creation of reports. Similarly, documents could benefit from one common and transparent approach & storage.

### Signing the Report

When it comes to signing the report document that was just generated on a mobile device we set out to achieve the following two challenges—provide the ability **to see the document that is being signed** (for final review) and provide the process for **digitally (cryptographically) signing a PDF** document using standard means.

For the first challenge, we are planning to create a component that shows a signature pad (the element on the screen where a signature can be provided) and the signed document at the same time. As soon as the signee enters the signature on the pad, it is inserted into the report document. This way, the actual signing experience—or verification of validity by signature—should be as transparent and straightforward as possible.

The second challenge is more technical. The PDF format provides a special kind of element—signature element—that can be detected by applications like Adobe Acrobat Reader. Automatically options to provide a signature (e.g. using an external signature device) are provided, which in turn also digitally signs and verifies the document. Here, the approach consists of two steps. The first step is to provide the ability to insert such a signature element into Resco's reports. Once this is complete, the resulting report PDF could be signed with an app like Acrobat Reader. Nevertheless, we want to take it a step further and provide the signing ability in our app directly, so no 3<sup>rd</sup> party apps or application switching should be necessary at all.

### Charts & Calculations

What sets reports apart from the standard documents are their relations and connection to CRM data—they reflect and summarize the records, providing additional and important insight. That is why we see as one of the priorities for our Mobile Reports engine to give you the tools and means to do just that. Specifically, this means the ability to **insert whole charts** into the reports, as well as, offer a flexible mechanism to **insert calculated fields** (e.g. sums of fields, averages) directly into report definition and consequently into the generated documents.

### Automatic Creation, Document Queues, Approvals

Part of the workflow with documents and report documents especially is automatization where specific reports are **automatically generated** at certain times (monthly, quarterly, yearly) or at certain events (e.g. service work concluded). Combined with **document queues**, so that multiple users can share the

access to an array of documents and select which document they will process, can immensely streamline the existing processes within a company. On top of an effective **approval mechanism**, managers are instantly notified when they are expected to decide on a specific matter, which can include reviewing a document that would conclude the requirements of some demanding businesses.

### **Files Home Item and Open & Save Dialog**

As documents are currently scattered throughout the mobile app, the task of finding the right document might get tricky. Did I receive the document by email—should I check my emails? Or did I insert the document as a note to the Account? Or perhaps to the Opportunity?

That is why we are going to introduce the **Files item on the Home Form**, which would show the list of all the documents received by the application. This also includes cloud storages like DropBox or SharePoint, so that the actual location or source of the document is completely irrelevant to the user.

However, this would not be enough since you are not always accessing the documents from the Home Form. Perhaps you want to look up the document while composing an email. Or—more interestingly—you might want to save a document on a cloud storage. For all these situations, we are going to create a modified version of **open & save file dialog (or lookup)** for the documents, so you can perform all the necessary manipulations in one unified space.

## Maps

If we should name one feature that stands out when showing the app to the customer for the first time, it would be the map. The comprehensive view of all the records based on their geo-location provides an immediate sense of efficiency. With this understanding, we have a list of nice tweaks that could make this feature even more useful—like the ability to set the **initial zoom**, or **position** when the map is being loaded. Or display a multitude of records (pins) in one area as **stacked** pins rather than a hodgepodge of little icons. In addition, we have received requests to **customize the pin-click action** so that it does not have to open the form every time, but perhaps create an appointment if the business scenario requires so.

### **Open Street Maps, Map Box**

There is however, one drawback when it comes to the maps. Since we utilize the native map providers—Google Maps on Android, Apple Maps on iOS—this means that the maps are available only when there is connectivity. Yes, there are options on how a certain area can be cached or made available offline, but this requires preparation beforehand. That is not ideal, so we are already researching the use

of **Open Street Maps** since they provide offline access and even offer advanced features like using layers to draw additional info on top of maps, which is usually restricted by the standard providers. Also, these might be available in countries where native maps are not—and by building on top of technology like **Map Box**, we can even take this one step ahead and let customers insert their own maps, possibly even with additional information about the infrastructure of their interest.

## Email

Email is the workhorse of business communication and we have made sure that it is fully integrated into our mobile experience. That essentially means that we have implemented a full-featured email client into our mobile app, which has direct access to CRM. We still see room for improvement that could make this even more usable—like **server side search**, so if there is one elusive email you cannot find locally, you can find it on the server, or **location sharing** so it would be simple to send a map with a current position, or a position of a record via email.

### Email Intelligence

The real power though can be uncovered when we will employ the modern means of text processing over the email data. The straightforward approach would be **data harvesting**—so to detect meeting requests from the text of an email or obtain contact info from the correspondence and offer respective actions. Nevertheless, interesting results can be also offered by **sentiment analysis**, or simply put, figuring out if an email has mostly positive or negative connotation (emotion). This option would enable the user to quickly identify the conversation threads that require immediate attention.

## Messaging & Chat

We are excited about the possibilities of messaging and chat when it comes to business applications, especially when exercised fully. This could be a huge productivity booster as well as another dimension to already existing processes within the organization.

The Resco Chat has undergone two iterations and now offers a streamlined interface more focused on the business communication needs—be it direct interaction between users, or discussions about topics (e.g. “sales” or “company news”), up to informing about updates on certain records. The overall experience could benefit from minor improvements like **delivered & read notifications** and **typing indication**, but also from allowing **communication between external & internal users**, which hugely extends potential applications. What is also necessary for improving user adoption is **better visibility in the application**, which would mean showing notifications throughout the app so the user knows

there are unread messages right away, wherever in the application, regardless of screen or form you are on. Similarly, what can also extend use cases are **audio & video calls** that would allow for example, a field service technician to show an unexpected problem remotely to the headquarters to get immediate help.

### Data triggers

Human interaction is the core focus of messaging, but what happens if we spice it up with some automatically generated messages? Numerous scenarios would be greatly improved since users would be instantly notified of important events (e.g. state of opportunity changes) by automatically generated chat posts and would be able to act immediately.

### Phone Integration

Mobile devices—now ubiquitous and present—are more powerful and capable than ever. We want to tap into these possibilities and deepen our already quite tight integration with the underlying hardware and operating systems.

What we see as a nice perk would be **caller identification**, where our mobile application would be present on the call screen and would identify the calling number using the CRM database, even if that number were not present as a phone contact. Of course, this would be only possible on mobile platforms that support it, which would be Android at the moment and iOS possibly in the future.

Another extension of Resco's mobile app would be an array **widgets**, which can be placed directly on the phone screen to provide quick insight without the need to open the app. See today's performance with just one click? List of appointments just one swipe away? That opportunity I am working on? Yes, please!

### Business Intelligence

BI is an area that faces a lot of demand with the increased use and adoption of our solution and mobility, in general. Simply put, increasingly more work is being done on mobile devices, hence the need to make well-informed decisions based on charts, reports, and prediction data, rises.

To support this demand we will introduce **user charts**, the possibility to define a chart by a mobile user. This way the users do not need to file a request with administrators and can just visualize the data the way they need, immediately. There are also situations where current visualization options are not sufficient and that is why we want to introduce the likes of **map charts**, where records can be structured on a map view to represent their attributes grouped by location.

The need to make well-informed decisions can be supported by a **prediction and analytics engine** that can spot trends before they are immediately apparent to the users. Tapping into the power of a growing set of available artificial intelligence, machine learning, and data processing systems this area will see a lot of enhancements in the months to come.

Quick and direct visualizations of **key performance indicators** on dashboards and within the app can also help to keep users on track. Topped with the **Power BI integration** this can mean that all the important factors for making the right decision will be available at your fingertips.

## Other Improvements

We like the idea of **Favorites**, but the usability can be extended by storing them in an entity. When the user utilizes more devices or loses data, favorites will persist. Favorites should be also available in lookups as a quick selection, visible on the map, and even on the dashboard.

What will greatly improve the user experience is **global search**, simplifying searches as a whole throughout the entire application, rather than looking for a specific entity that might contain the information. We also want to define **common actions** available directly on the home screen (e.g. create a new account) so that the most frequently performed tasks are immediately available.

**Lists** have received a lot of work recently - adding the much sought after feature of editing directly in the list, without the need to open a form. There is a lot of work under the hood to be done, such as, the ability to define **editable list validations** (to check the input) or **view selection for lookups**, but we also want to look at the **headers and footers** on lists, so that they can show some summaries/column headers. What makes a lot of sense is to make **hubs available as associated views**, so multiple associated entities can be viewed simultaneously, in one view.

Similarly, there is some work left on the **forms** aspect, like the **HTML Item** (so you will be able to host Offline HTML in a field rather than a dedicated tab) or **image item with the edit** (click to select/take a picture). Also, the flexi forms would benefit from a more **precise way to define the design**, almost to the pixel level.

Let us not forget about our constant improvements in **synchronization**. An area perfected with each of Resco's releases. We want to provide options **to sync at a specific hour, define note filter per entity** (and not just one global filter) or provide a **custom sync order** for special scenarios where you need to ensure that certain entities reach the server before others.



The **Salesforce Integration** will also be improved, by providing direct support for chatter, tapping into the approval process and bringing it to the mobile device (think notifications with the option to approve or not) and preparing the package which can be just imported into Salesforce with all the Resco goodies.

And did we mention our own business card OCR or voice control for Android? There is a lot to look forward to!



ONLINE MODE ONLY:   
HAS LOOKUP LABELS:   
PERMISSIONS:  Read  Write  Create  Delete  
CONFLICT STRATEGY:

- Home
- System Tools
- Storage
- Network
- Security
- System

	Enabled	Type
Integrated Events	<input checked="" type="checkbox"/>	Single Line of Text
Status	<input checked="" type="checkbox"/>	Status
Status Reason	<input checked="" type="checkbox"/>	Status Reason

65,921,936 bytes Sessions Count: 10 items Sessions Size: None bytes





## Configuration & Customization

One of the key differentiators of Resco's technology is its unparalleled customization and configuration abilities. Simply put, the flexibility of the solution and how much it can be modified to meet your requirements is one of our main selling points.

At the heart of this is Woodford, the customization and administration tool. Also, here we have a lot prepared up our sleeve. Let us start with **previews** a feature that will allow you to preview the customizations without synchronizing the mobile application at all. This will be available thanks to the slow abandonment of the Silverlight platform in which, Woodford is currently written in, and gradually moving towards **HTML and Typescript** components and eventually the entire application.

Last year we introduced project hierarchy, the ability to create projects derived from each other, sharing the customizations. Here we see potential for many improvements, but the most requested is improved **granularity** (what is considered a change) so that you can reuse even more between projects. Additionally, **visualizing** what comes from the parent and what is overwritten would be much welcomed.

Partners working with our tool and creating their own solutions can look forward to a **marketplace**. This way, a partner can create a base solution for their vertical or area of expertise that can be offered to customers via a dedicated Resco Partner Add-on Marketplace. Then, customers can build on top of those, with the core areas of the base project locked, so no unwanted modification can be performed.

### Better Support by Partners

With partners in mind, we want to enhance also the support process. Providing first-level support for customers and users of our mobile solution is not an easy task since the projects have become quite complex with many specifics and intricacies. To make it more streamlined, we will create a **new section**

**in Woodford**, where the partner's support department would immediately see the synchronization status of all the devices that are connecting to a specific organization and see all the errors that occurred—all of this without the user visiting the About section in the mobile app and sending the log file. This should significantly improve the time required to identify problems, as partners can proactively find problematic devices and detect issues even before the customer reports them.

Moreover, we want to explore a **Team Viewer API** in our app, so remote screen viewing sessions will be available. This should make even the most cumbersome support situations easier to solve.

Furthermore, we think that our partners will benefit from the **management console**, so they can manage the licenses more easily and move licenses between the test, development, and production environments without contacting Resco. On a similar note, we are also looking at better support for **migration** between development and production environments with tools to make this process automatic, store metadata in a mobile project to detect migration problems and offer change tracking.

### Extended API (Rules, JavaScript)

Our ever-evolving API consisting of rules for forms, views, and others and JavaScript makes the task of implementing business logic simple enough. To make sure it stays that way we will keep expanding the possibilities—like adding the capability to save entity variables as records or adding comments for better clarity.

We also envision JavaScript Bridge 2.0, written in Typescript, providing easier access to objects like EntityForm or Metadata and with a generally re-thought approach. We also want to improve the examples so that they are more self-explanatory and didactical.

## Afterword

The years spent building our Mobile CRM have been very busy, but also very rewarding. What started as a simple application that has grown into a powerful tool with almost unlimited customization options. In the coming years, we want to move our solution to the next level, building the ultimate mobile business tool. We hope that you will accompany us on the way.