KIMBLE

A Technical Guide for Salesforce Administrators and Solution Architects

Contents

Introduction to Kimble

This guide provides a technical introduction to the Kimble application and is designed to give Salesforce administrators and solution architects a high-level understanding of how Kimble will fit in your current application landscape, both on and off the Salesforce platform.

Kimble PSA inherits all the essential benefits of a true native Salesforce application, built from the ground up using Salesforce.com application development and packaging tools, and is complemented by Kimble's own advanced administration framework that not only accelerates your implementation process, but also minimizes the amount of ongoing effort required to administer and maintain your Kimble system.

What follows is a short tour of Kimble's technical architecture including the use of Salesforce platform application services such as security, approvals, the Lightning UI, Chatter and Communities, together with an introduction to the powerful application management and monitoring tools Kimble provides to simplify the day-to-day administration of your PSA system.

The KimbleOne managed package

Kimble PSA is a single application that manages all the key processes required for the efficient operation of your services organization. Many of these processes are interrelated and the Kimble application ensures that the impact of an action performed in one area of the system is automatically reflected across the entire system, either in real-time or near real-time, using triggers and asynchronous queued jobs.

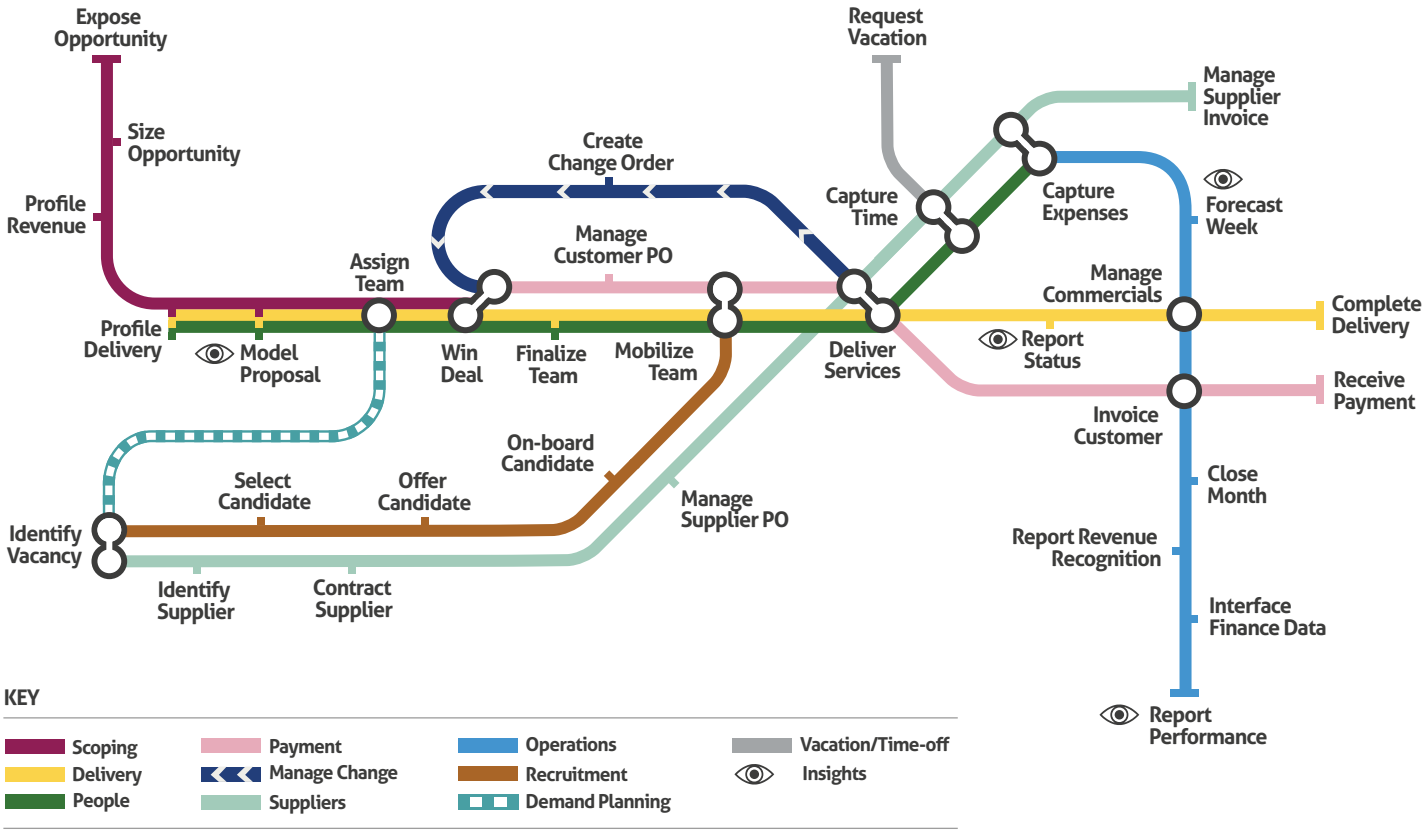

***Figure 1**: PSA processes managed within the Kimble application*

The Kimble PSA application is provisioned into your Salesforce org as a managed package, built and maintained using standard Salesforce.com platform packaging, patching and licensing methods. Kimble is one of the largest ISV packages currently available on the Salesforce AppExchange, comprising approximately 400 custom objects, 500 VisualForce pages, 100 Tabs, 270 Apex Triggers, 30 Custom Report Types, 100 Field Sets, 470 Permission Sets, 200 List Views and associated components such as validation rules, workflows, page layouts and Lightning components. These components are associated with the namespace KimbleOne and, being a published application on the AppExchange, do NOT count against the edition limits of your Salesforce org for Lightning apps, custom apps, objects, and tabs.

All data processed and maintained by the Kimble application resides on the Salesforce platform and is stored in managed custom objects within your Salesforce instance. For clients who are new to the Salesforce platform, an Enterprise edition instance will be created for you as part of the installation process. If you are already using Salesforce, then the Kimble support team will work with you to perform the installation of the Kimble package into your existing Salesforce org. Kimble uses the Salesforce managed package update mechanism to deliver application patches and fixes which are pushed weekly. Major releases are pushed twice a year and the Kimble support team works with your organization to schedule the upgrade at a time that minimizes impact on your day-to-day operations.

Salesforce administrators, used to working in CRM, will be familiar with adding custom fields or modifying page layouts to meet specific client needs. Similar configuration changes can be performed within Kimble, typically using Salesforce metadata such as fieldsets; however, to ensure the ongoing integrity of both your PSA data and the integrity of all related processes, administrator tools are provided to make these customizations in Kimble. For more complex administration functions such as security profile maintenance, approval process setup, and customer community management, the Kimble application includes purpose-built management tools which accelerate the implementation process and minimize the ongoing, day-to-day system administration workload.

Kimble offers two primary deployment methods: connected or standalone. Connected deployment means Kimble PSA is working alongside an existing Salesforce CRM implementation with shared Accounts and Contacts, and Opportunities in the Salesforce Sales Cloud are related to delivery engagements and proposals in Kimble. Standalone deployment is also 100% native on the Salesforce platform, also uses standard platform account and contact objects, but there is no connection of Kimble to Opportunities in the Salesforce Sales Cloud.

Lightning and Classic User Interface

Kimble is fully supported in both Classic and Lightning user interfaces. For those existing Salesforce platform users making the move from Classic to the Lightning UI, Kimble gives you the controls you need to manage that transition. For example, Kimble enables a phased rollout of the Lightning UI, allowing the change to be managed by department, region, or role, and you also have control over the use of specific Lightning features such as the adoption of Salesforce Files versus the old-style Notes & Attachments related list.

For new users of the Salesforce platform, you will be adopting the Lightning UI from day one, and Kimble provides a complete set of Lightning Apps by role, includes a comprehensive set of Lightning Home Page Components, and offers a Lightning Bolt solution template, described in more detail below, to enable an accelerated implementation of your Customer Community.

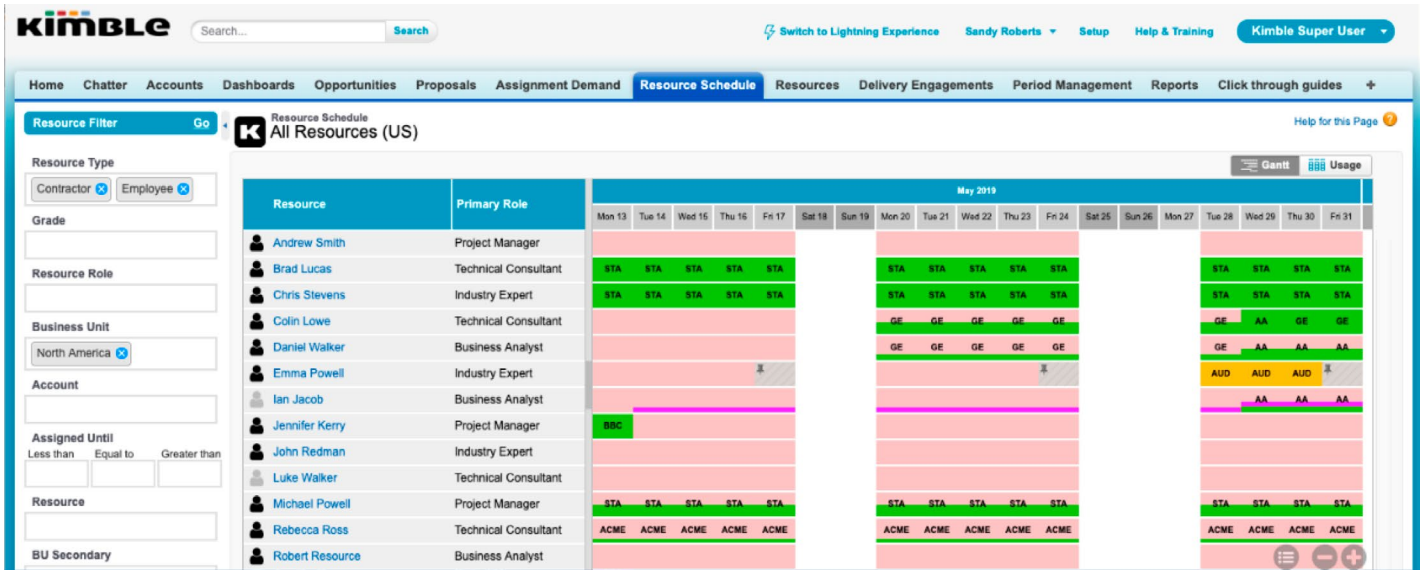

***Figure 2**: Kimble PSA in the Salesforce Classic User Interface*

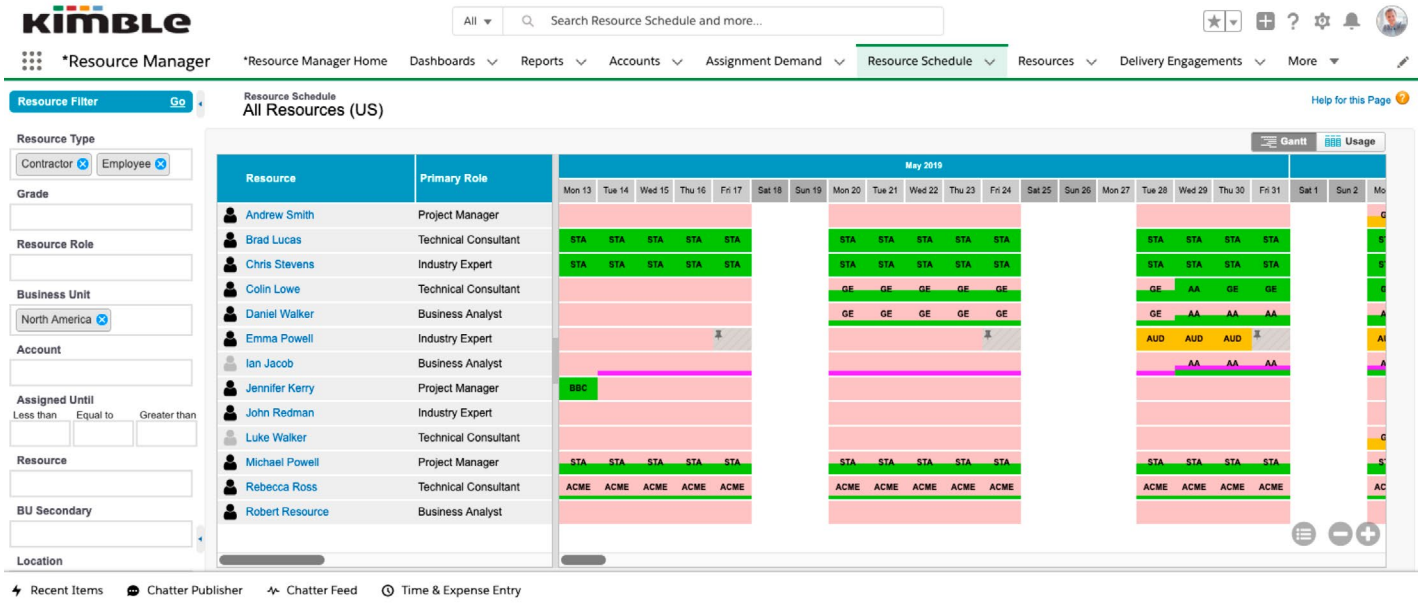

Figure 3: Kimble PSA in the Lightning Experience User Interface

For international deployments, Kimble offers English, Spanish, French, German and Portuguese language packs* and supports the Salesforce translation workbench which allows clients to perform their own translations for those languages not provided as standard.

**Kimble language packs availability expected from version 1.30 onwards.*

Reporting & Dashboards

Since all data processed by Kimble resides in managed custom objects within your Salesforce instance, that data is fully accessible to the standard Salesforce platform report writer and dashboard engine. A comprehensive library of reports and dashboards is provided which are categorized by business function i.e. finance, operations, delivery, resourcing, sales, and system administration. Each standard report is documented within the Kimble online help, together with object schema data models for each functional area. Administration reports, also provided as standard, provide operational details such as date and time of last report run, report type used, report folder, and identification of which reports are used in dashboards. User permissions and data sharing reports are also included, and these are described in more detail in the Access Control and Security section below.

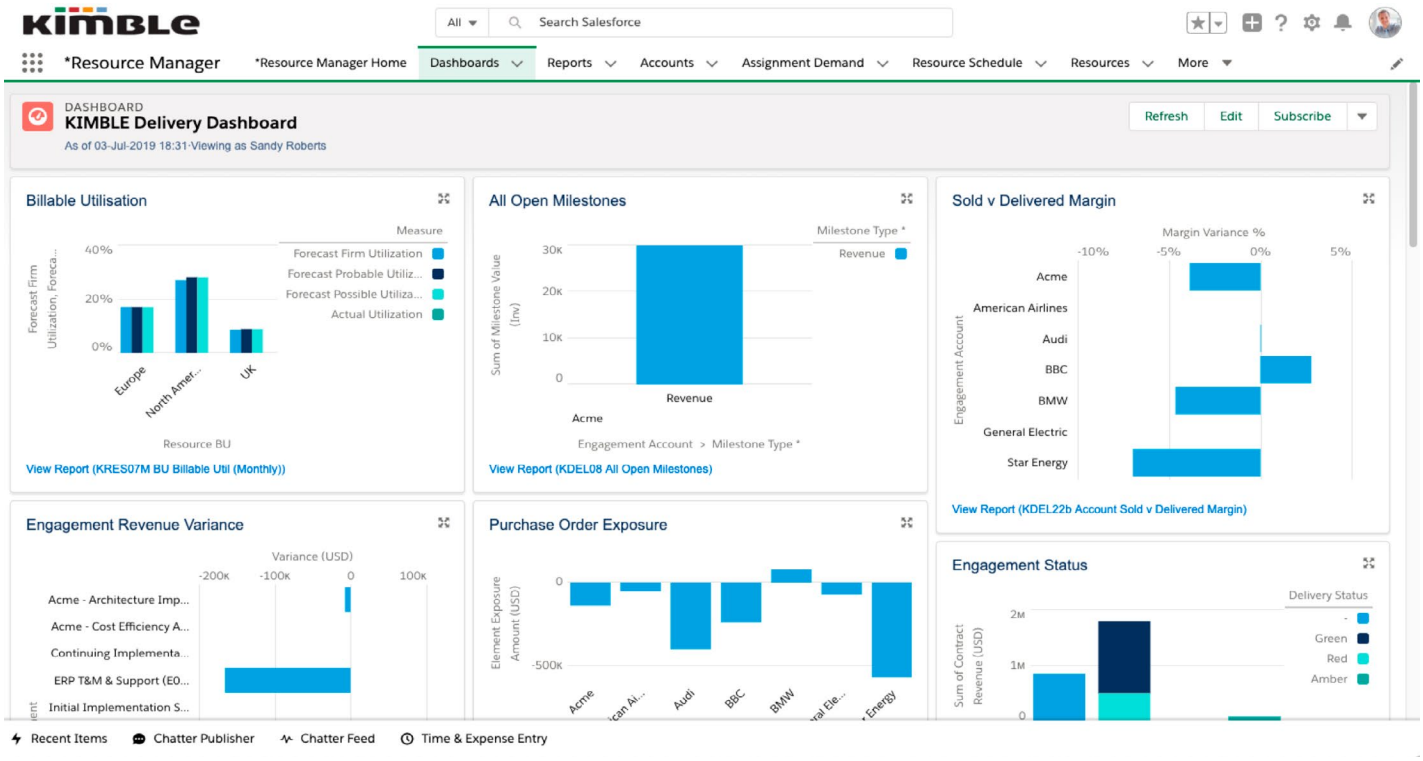

***Figure 4**: Delivery Dashboard in Lightning UI*

In addition to standard platform reports and dashboards, Kimble also provides purpose-built dashboard application pages for key PSA entities such as proposals, delivery engagements, delivery portfolios, and delivery programs. To ensure consistent and scalable response times, these dashboards display statistical summaries of timesheet, revenue and cost transactions which are automatically maintained by the Kimble application. Kimble dashboards are configurable, using drag and drop methods to position and hide dashboard components, and user preferences on dashboard layouts are stored for future use.

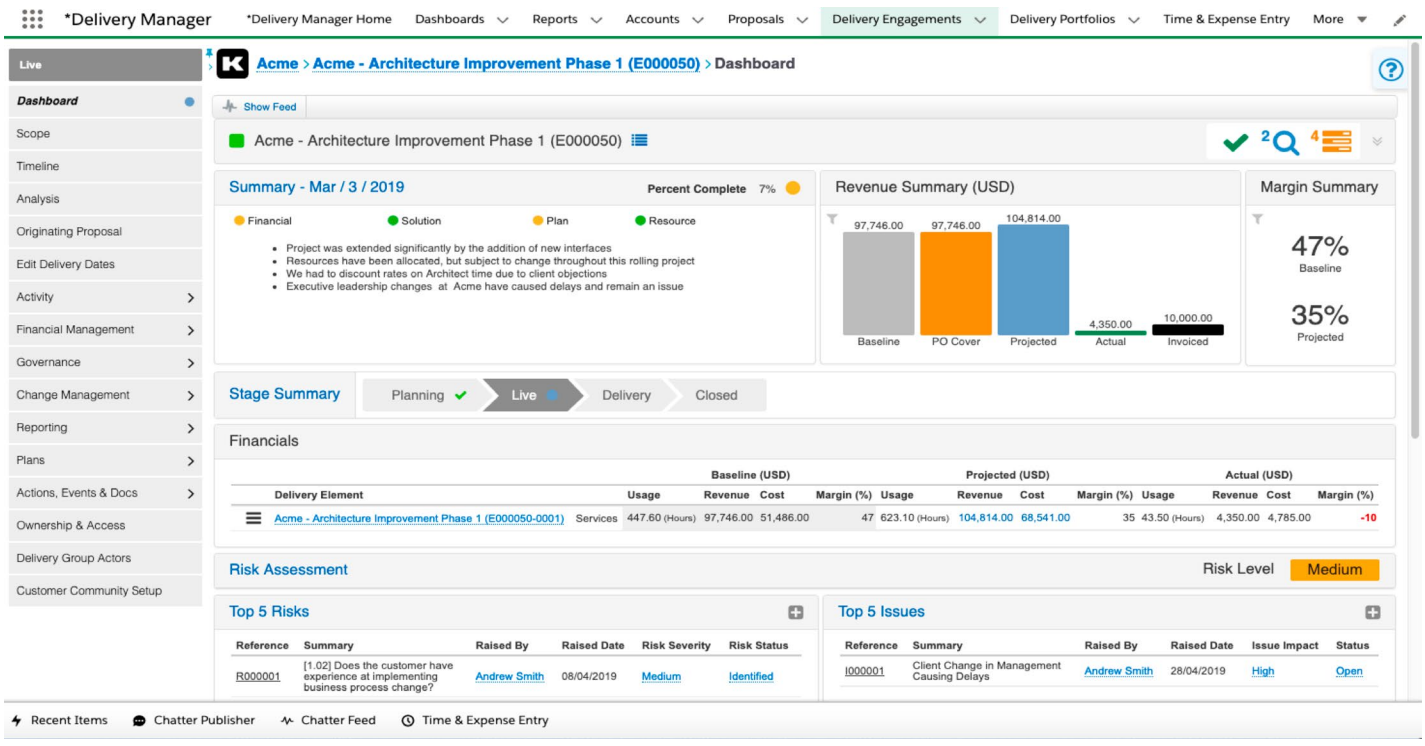

***Figure 5**: Kimble Delivery Engagement Dashboard*

Analytics & Intelligent Insights

While reporting and dashboards are essential day-to-day management and operational tools, the Kimble application also provides embedded intelligent insights that guide your services team to make better, informed decisions during the selling and delivery of their engagements. Accessed directly from Kimble dashboards, context sensitive intelligent alerts surface data at the appropriate time, raising potential issues in a timely manner, and guiding service managers on suggested corrective action. While other PSA solutions will rely on separate 3rd party analytics and AI tools to make predictions on business outcomes, Kimble has built statistical summaries and intelligent capabilities directly into the core PSA package so that insights are surfaced within the normal use of the Kimble application and provide an instantly available, intelligent aid to a user's daily workflow.

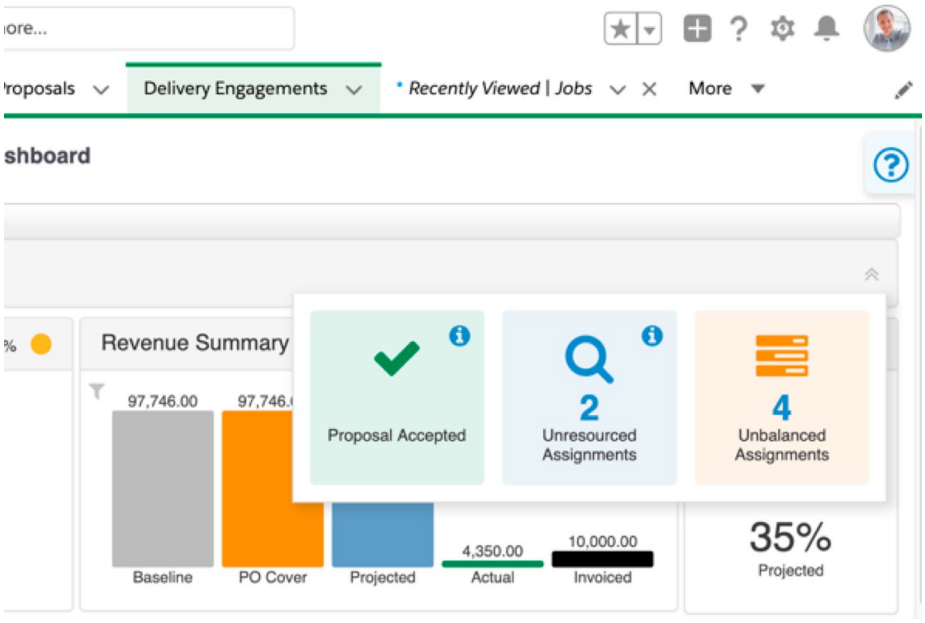

***Figure 6**: Intelligent Insights on Kimble Delivery Dashboard*

Chatter

Chatter is the enterprise collaboration and social network tool, included in the Salesforce platform, that connects employees, partners and customers with shared files, data, and subject matter expert groups. For many Salesforce users, Chatter is an essential communication tool that, unlike other enterprise collaboration tools, offers the key advantage of embedding business conversations within your application data so that the context of each conversation is clearly understood, and detailed audit trails are automatically maintained.

Chatter is available throughout the Kimble application and can be accessed through standard platform home page components, the Lightning utility bar, and Account and Contact page layouts. In addition, you can choose to enable or disable Chatter feeds on specific Kimble PSA objects such as proposals, delivery engagements, risks, assumptions and issues. Administrators can also control whether Chatter is visible on Kimble dashboards.

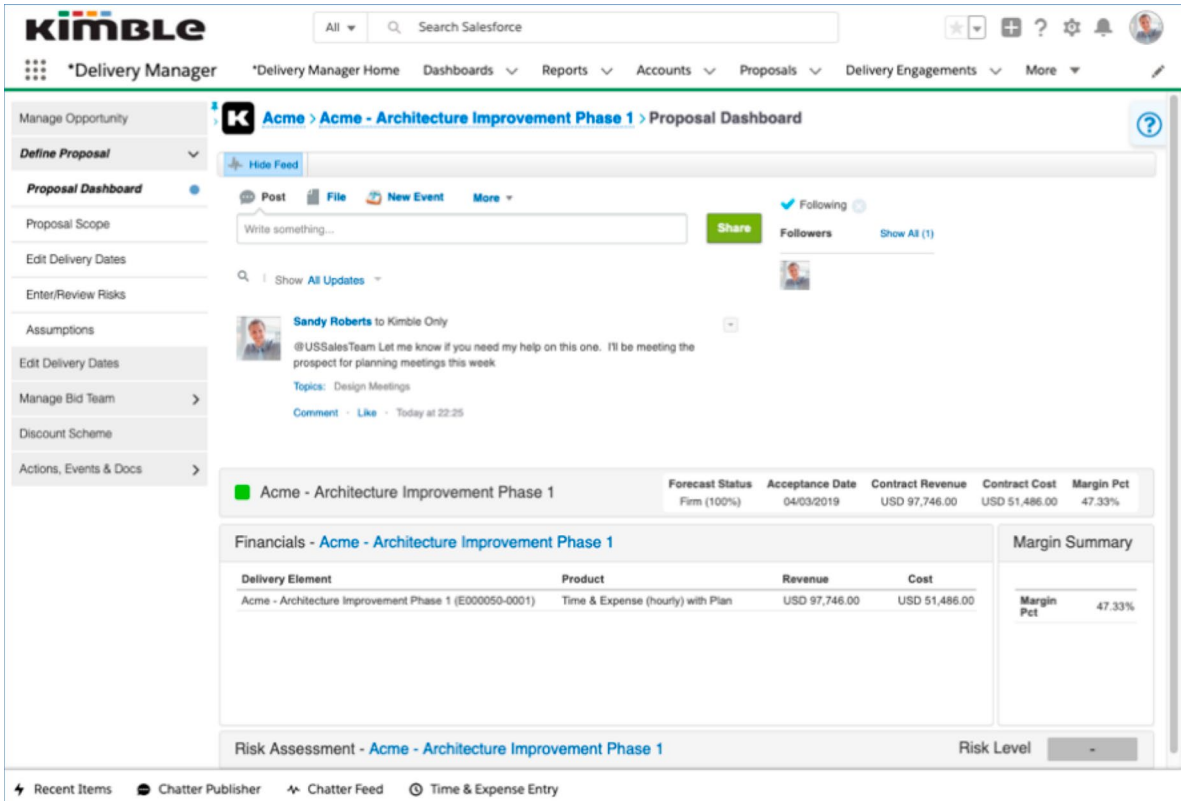

***Figure 7**: Chatter Conversations Embedded in Proposal Dashboard*

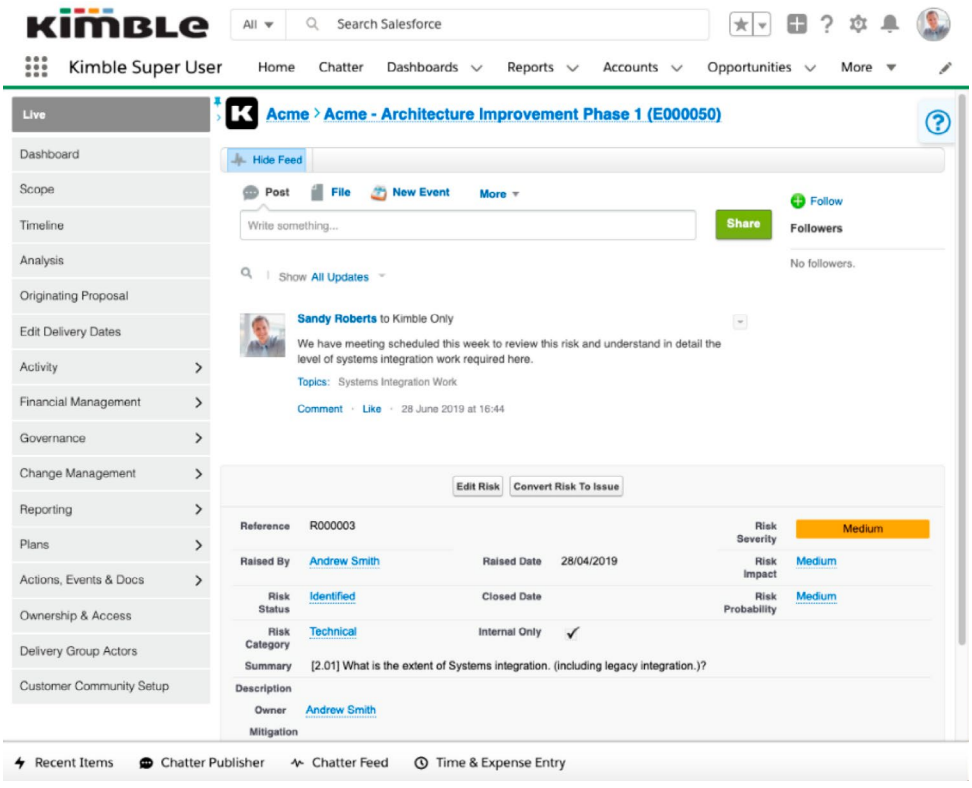

***Figure 8**: Chatter Conversations Embedded in Projects Risks*

Communities

Salesforce Community Cloud provides a secure framework to give customers and partners real-time, self-service access to selected live data within your Salesforce instance. For professional services organizations, customer communities provide an opportunity to collaborate with their clients in new ways, promoting trust and transparency during the scoping and delivery of client engagements based on a shared view of the latest project data.

Kimble provides a dynamic, flexible customer community template based on the Salesforce Lightning Bolt architecture. This templated, data driven approach jump starts your customer community project by minimizing the effort required to set up a new community and puts your delivery team in control of what engagement data they wish to make accessible to their customers. Delivery and project managers are able to manage customer community access through their Kimble dashboards, and they can choose to select which data items are visible on their engagements. Community user management and data access management can be a significant drain on the Salesforce system administration team and Kimble's templated approach, controlled from within their regular day-to-day engagement management screen, moves Community control away from a time consuming administration function and puts it into the hands of the people who are working directly with your customers.

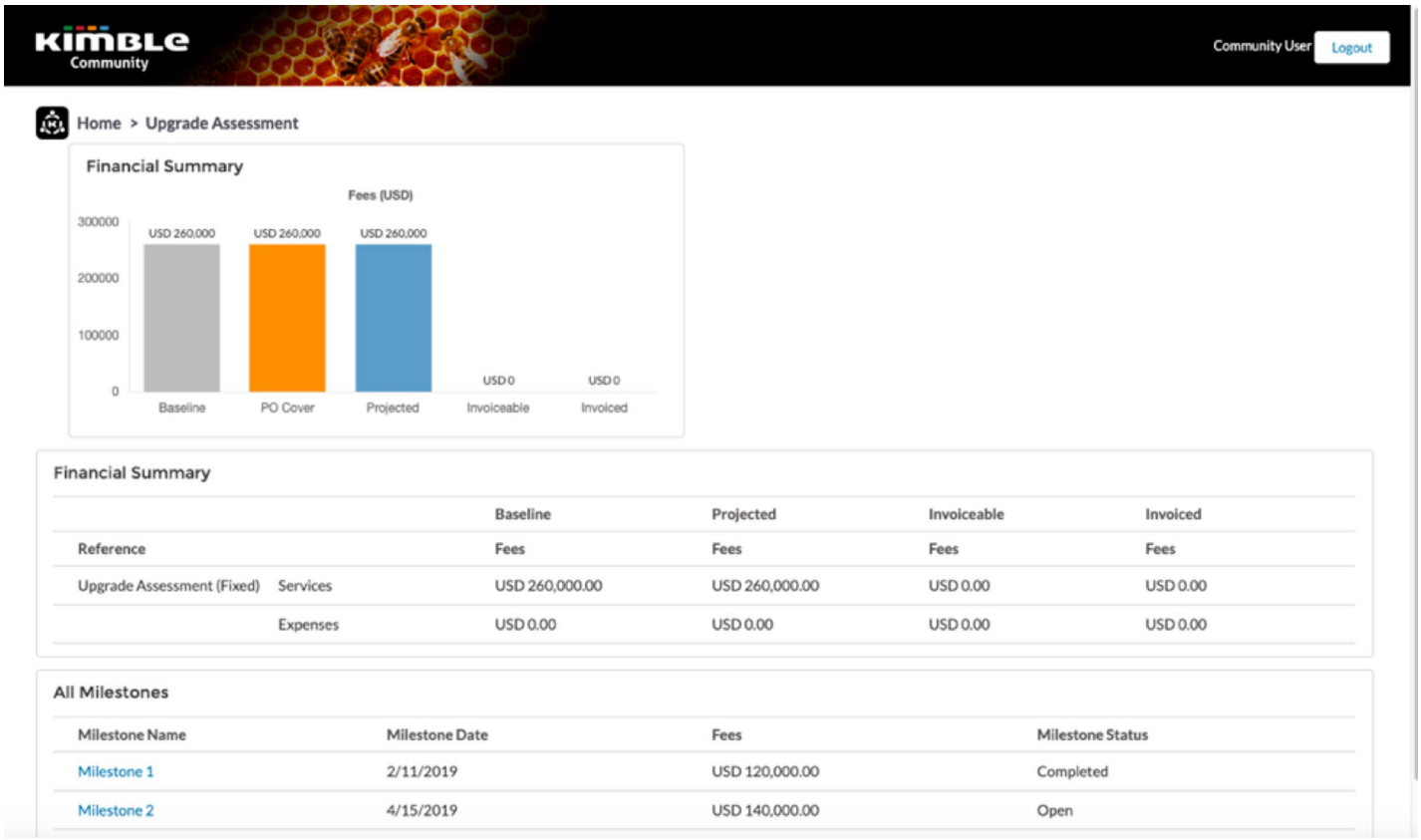

***Figure 9**: Live View of Services Engagement in Customer Community*

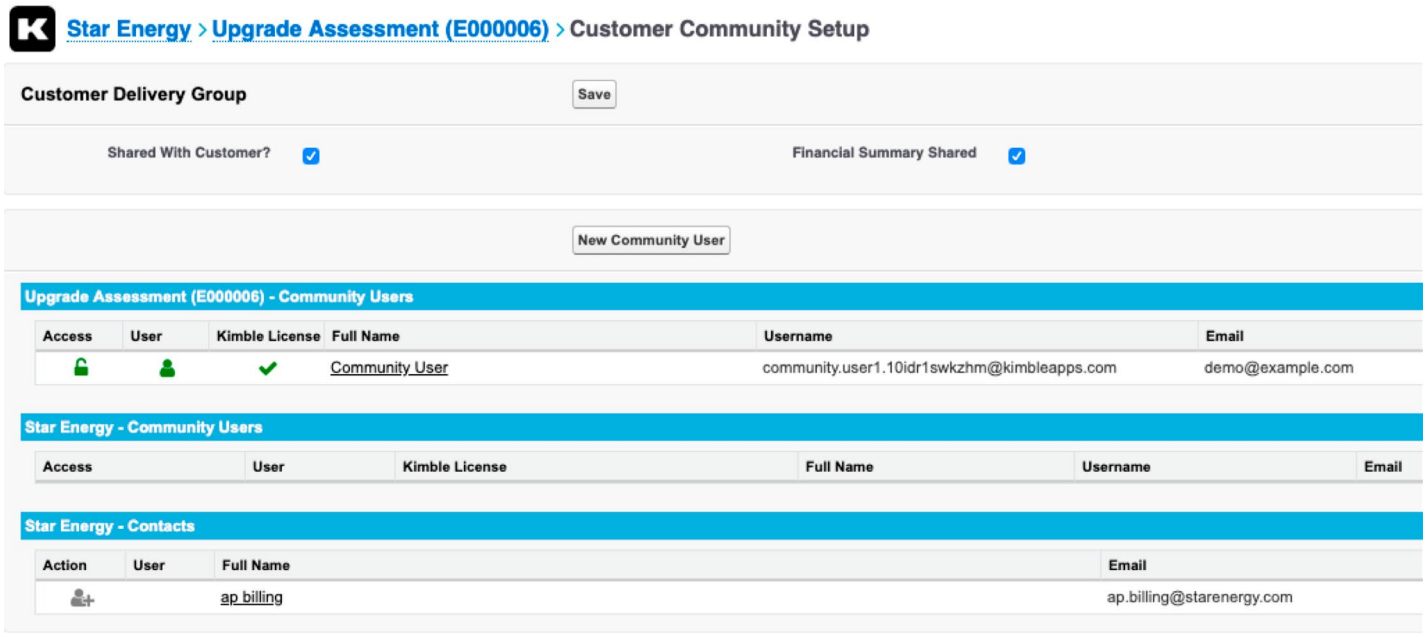

Figure 10: Project Manager Control of Customer's Community Access

Access control and security

As a 100% native Salesforce platform application, access to the Kimble application is controlled through the standard Salesforce security model. Login access, from browser and mobile devices, is via the standard Salesforce username and password login process and two-factor authentication is recommended in line with industry best practices. Overall access to the Kimble application is controlled by the standard Salesforce ISV package licensing mechanism with granular control of functional access managed via role-based permission sets which are delivered in the Kimble package.

Row level control of data access for PSA is more complex than the static sharing model typically used within Salesforce CRM, so Kimble provides an advanced, configurable sharing architecture as part of the standard package. This approach greatly accelerates the implementation process, simplifies ongoing maintenance, and removes the complexity of trying to use standard platform setup tools to define complex row level sharing rules across multiple objects.

Kimble provides a multi-layered data sharing framework where the required access level and row selection criteria for each role and object are defined in Kimble sharing rules. As PSA transactions are added, edited and shared, the Kimble application refers to these sharing rules to dynamically set the required permissions for all relevant objects and object data. Detailed reporting on sharing rules configuration and sharing history gives system administrators powerful tools to monitor and audit functional security and data access.

To minimize the risk of inadvertent or malicious updates to committed PSA transactions, Kimble employs object level triggers and a Unit of Work coding architecture to prevent uncontrolled manipulation of application data via direct SOQL queries. These triggers lock committed transactions once they have reached a confirmed state and ensure that any further updates are only possible through the secure application service layer.

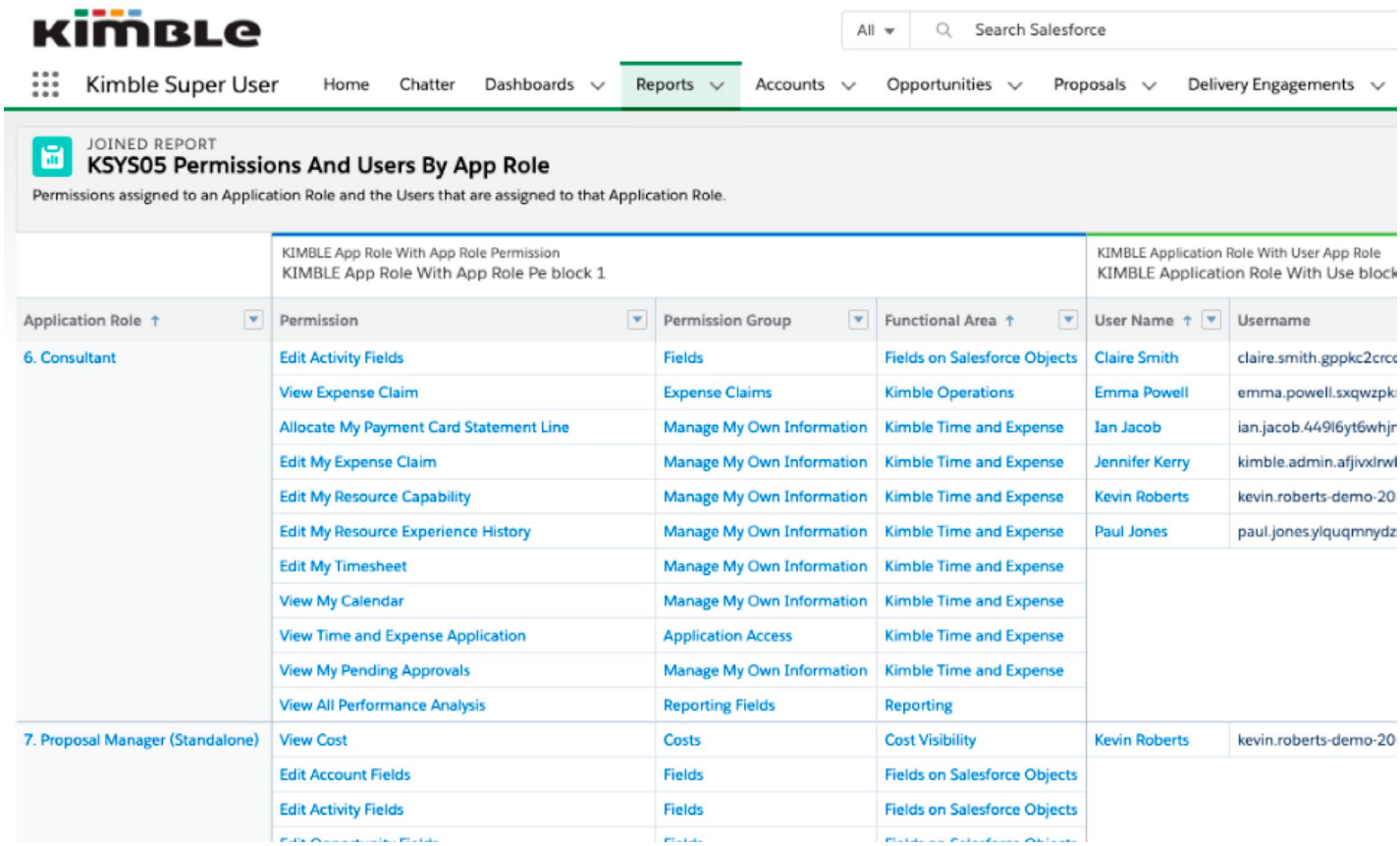

Figure 11: Report of Permissions by Role and User

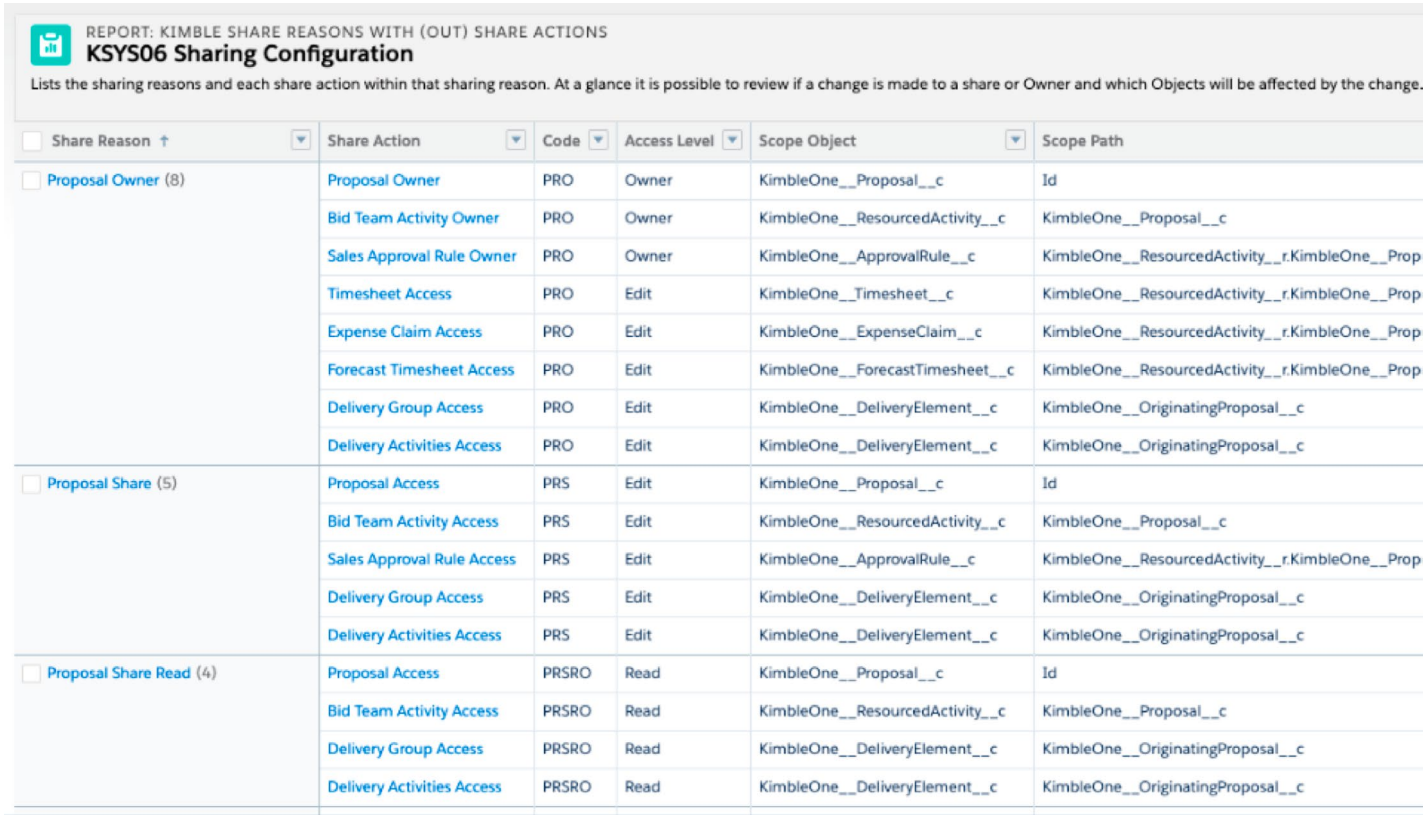

Figure 12: Data Sharing Configuration

Approval Management

Approvals are implemented widely throughout the Kimble application for all key processes requiring an audited sign-off process. The Salesforce platform approval engine is used to manage these approvals; however, Kimble simplifies initial setup and ongoing maintenance by delivering pre-defined, data driven approval rules.

As PSA transactions are system generated or entered by end users, Kimble dynamically determines the required approvers based on rules defined for the specific engagement. The transaction is then passed to the platform approval engine for manager acceptance or rejection in the usual way. This data driven, templated approach reduces the burden on the system admin team during initial setup and eliminates the need for administrators to be involved in maintaining approval processes as they evolve. The services team are empowered to update approval rules in line with the specific requirements of their customers while ensuring compliance with in-house policy. Policies can vary by services product, engagement and transaction type, and may require a single approver, two approvers, or can allow automatic approval.

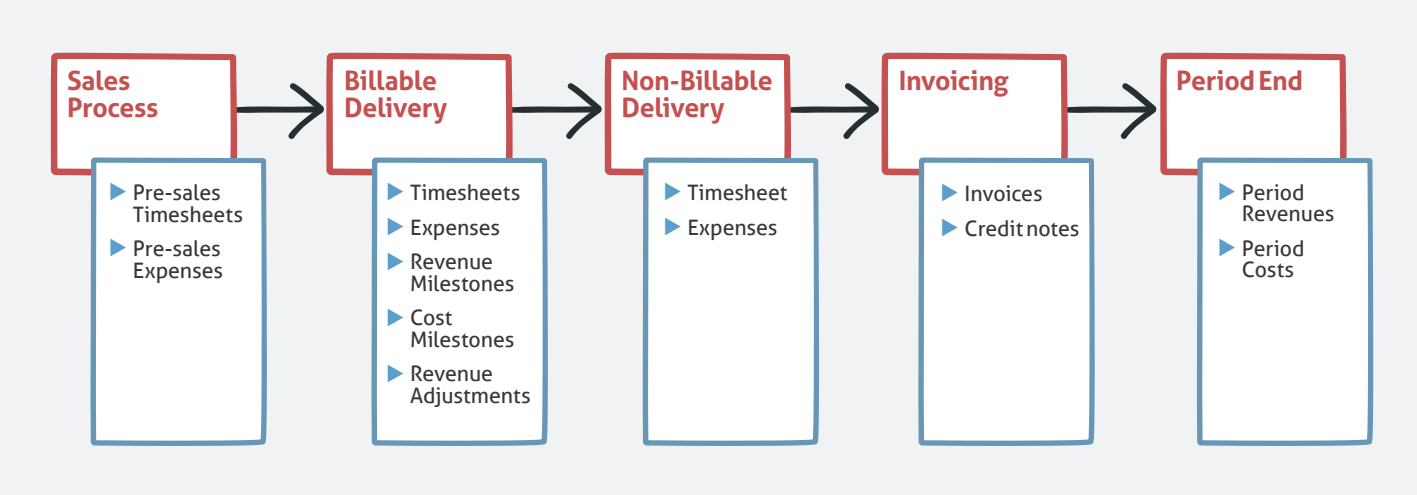

***Figure 13**: Standard Approval Processes in Kimble*

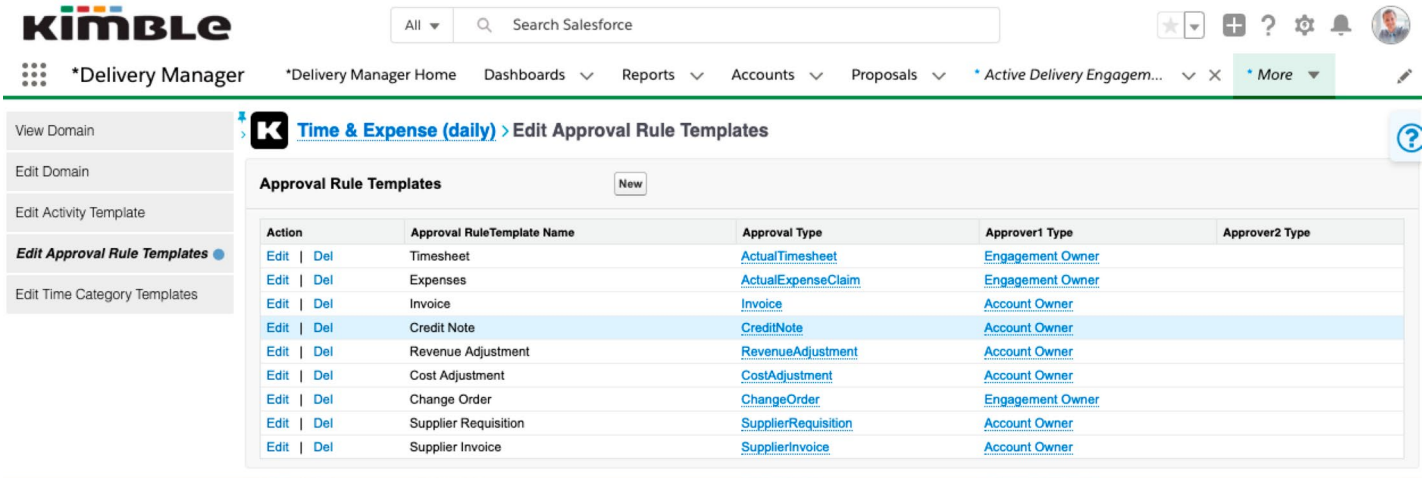

***Figure 14**: Kimble Approval Rule Template*

In global service organizations approval requests can be complex, multi-threaded, collaborative processes that the standard Salesforce approval engine is not designed to handle. For these more advanced requirements, Kimble provides its own, enterprise scale, event driven, workflow engine which allows multiple requests to be managed as a single operation while automatically tracking the elapsed times required to complete each workflow stage.

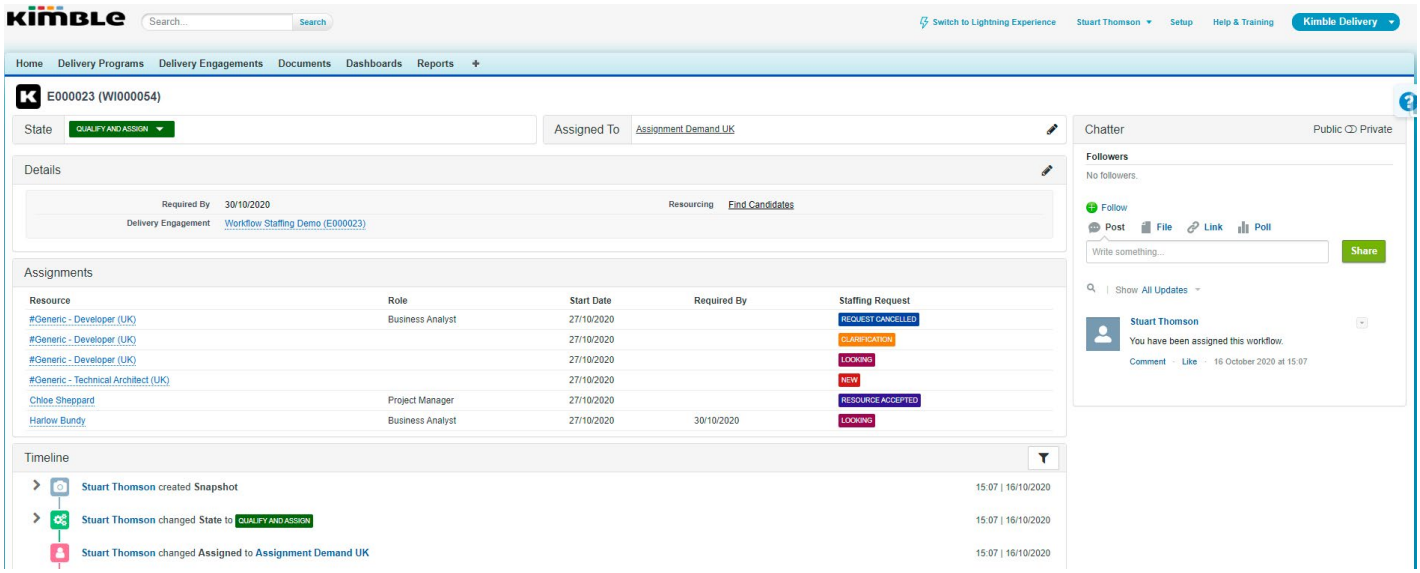

***Figure 15**: Kimble workflow engine managing multi-threaded assignment requests*

Interfaces & APIs

As described earlier (Figure 1), the Kimble package supports all the essential PSA processes for sales, resourcing, delivery, time & expense, billing and operational analysis and reporting. While Kimble may be deployed as a single standalone application, it is more commonly implemented with integration to Human Resources and Financial applications. These third-party applications could be on the Salesforce platform, or running on a different cloud architecture, or could be on-premise applications in a client's own data center.

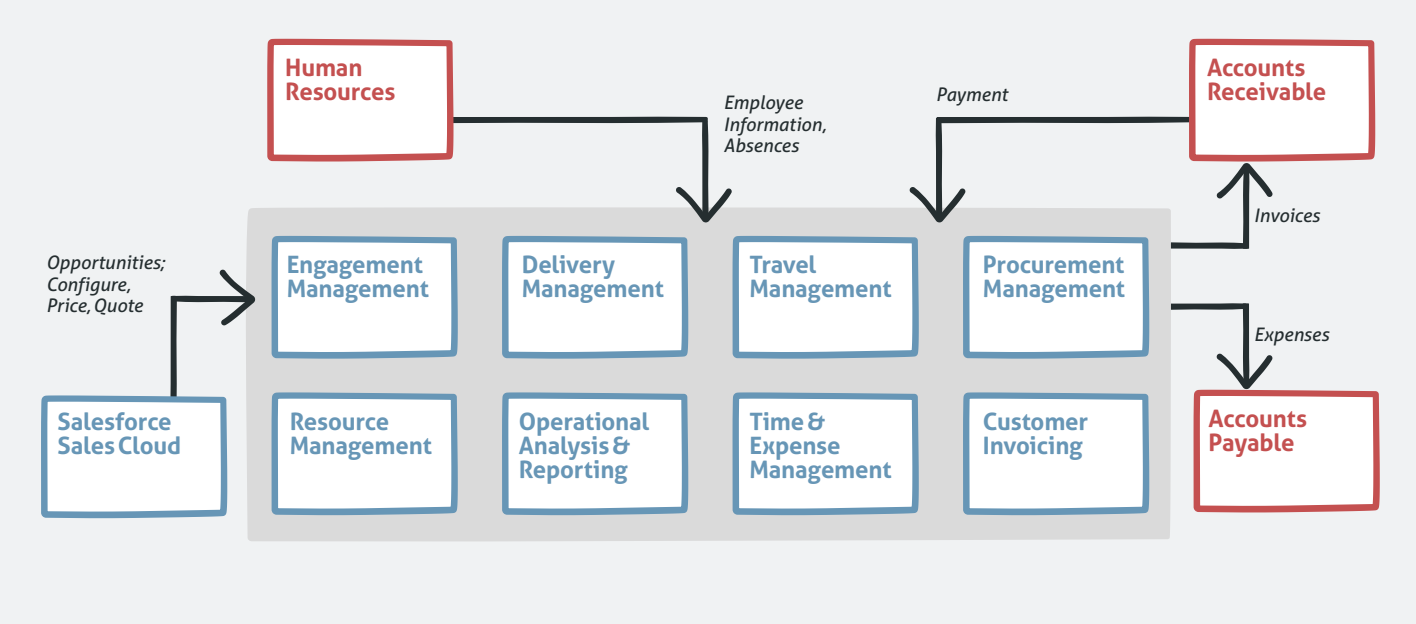

***Figure 16**: Typical Kimble Integration Points*

To manage the transfer of required data between these integrated systems, Kimble provides an interface framework which observes the following principles:

1. Integration is loosely coupled using an integration services layer rather than a tight integration tied directly to the data object schema.
2. Interfaces are orientated to business events and processes rather requiring low level knowledge of the many underlying data objects used to represent an event or process.
3. Interfaces use an asynchronous approach implemented via a queueable job framework which delivers predictable, scalable performance while observing the runtime limits of the Salesforce Apex engine.
4. Interfaces are maintained through configuration screens provided within the Kimble application rather than requiring object level customization.
5. Support for leading middleware integration tools through adoption of open standards and industry best practices i.e. choice of CSV or JSON data formats for input and output and support for REST web services to GET and POST Kimble transaction data.

Access to this framework is available via generic, configurable interface types used to send or receive those business events most commonly integrated with CRM, HR, Projects and Finance applications. In addition, Kimble provides pre-configured interface types and adapters for popular Financial and Expense Management applications such as Sage Intacct, NetSuite, Xero, QuickBooks, and SAP Concur.

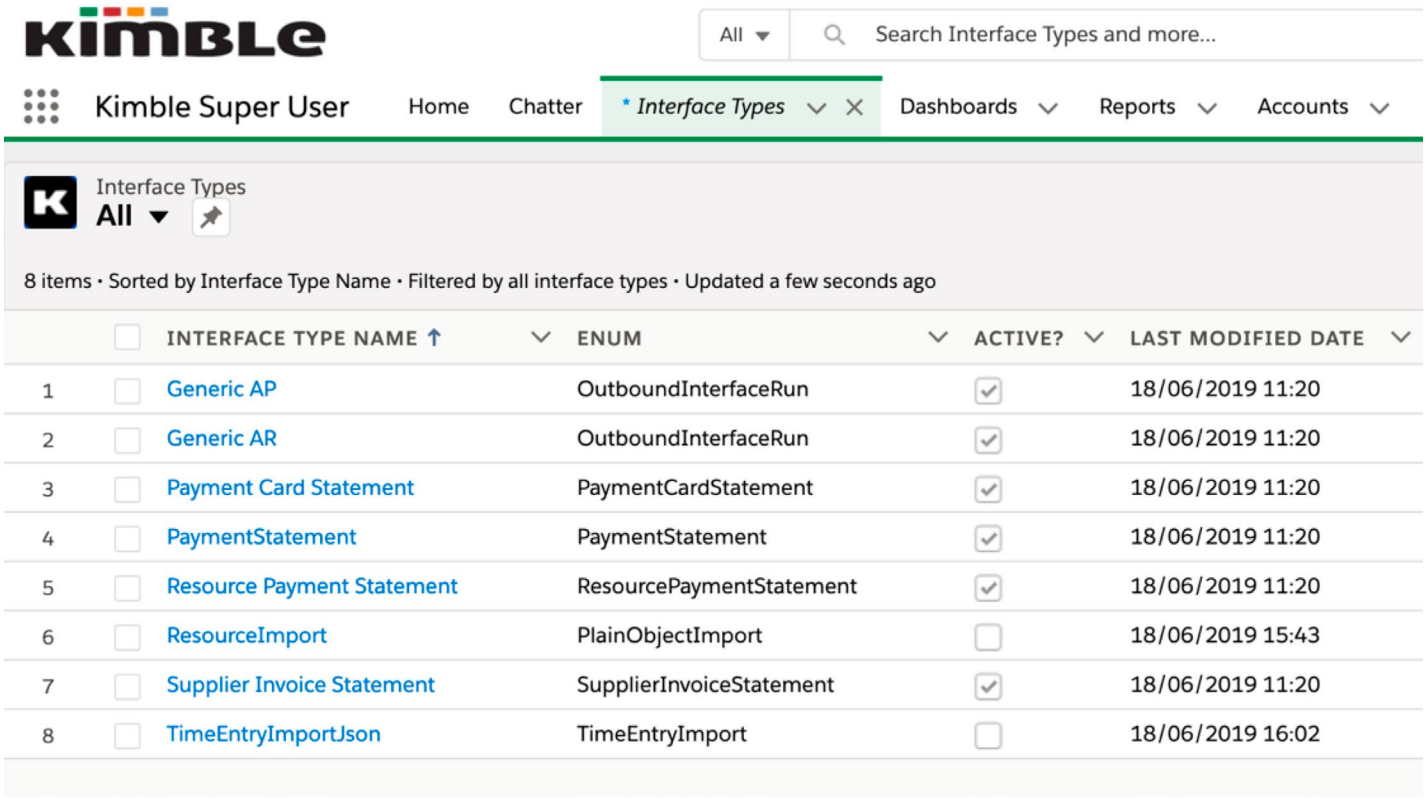

***Figure 17**: Kimble configurable interface types*

Scalability & Throughput

Kimble is a sophisticated, scalable, proven business application that makes extensive use of the Salesforce Apex runtime engine to manage interrelated business processes and ensure the integrity of interconnected object data. As with any native platform application, Kimble must work within code execution limits that ensure no single piece of code or application monopolizes shared resources of the Salesforce multi-tenant platform. Kimble's advanced queueable apex job architecture ensures consistent throughput and application page response times as transaction volumes and user counts grow to meet the demands of the largest services organizations. Job profiles allow jobs to be dynamically prioritized at certain times such as raising the priority of key period close processes at month end.

Kimble's automated testing and monitoring tools enable detailed benchmarking analysis that demonstrate predictable, scalable application performance across all key PSA processes including proposal creation, assignment creation, timesheet submissions, and element activation.

The results of these benchmarks demonstrate a proven ability for the Kimble PSA application to meet the demands of a growing services organization whether that growth is seen in an increasing number of active users, number of service engagements managed, the complexity of delivery models, or a combination of all these dimensions.

While Kimble makes extensive use of Apex batch processing to optimize and tune performance, a unique batch job framework architecture ensures that the Kimble package has a minimal impact on the number of concurrent Apex Jobs running in your Salesforce org. Only a single Scheduled Apex Job is required to run all of Kimble's background processes.

Action	Benchmarked throughput (per hour)
Activity assignment creation	12,000 activities
Proposal creation	2,000 proposals created
Proposal win	160 proposals won
Timesheet creation	10,000 timesheets
Element activation	400 elements
Job Scheduler	60,000 jobs
Proposal Modeling	500 months of assignments

***Table 1**: Benchmarked Kimble Application Benchmarks for Core PSA Functions*

Support

Support desk access is provided as part of your subscription to Kimble PSA, giving you the ability to ask questions or raise issues via the support portal at any time. Dedicated product support professionals are located in both the US and the UK and provide expert, 24x7 assistance with adherence to agreed service level agreements and support processes that follow ITIL best practices.

In addition to a team of product experts, Kimble provides access to a comprehensive support knowledge base that offers video explainers, articles, training collateral and best practice guides.

The support team is also actively keeping track of your implementation via the Kimble Sense monitoring tool. Kimble Sense runs periodically in the background to track key usage metrics that reflect the ongoing health of your Salesforce org and provides alerts to the Kimble support team so that they can proactively solve issues before they cause operational holdups.

Latest Measure Values

Status	Measure Name	Current Value	Threshold	Date Measured
✓	Duplicate Reference Data	0.00	0.00	20 Nov 2018 10:51
✓	Remaining Forecasting Periods	0.00	0.00	20 Nov 2018 10:51
✓	Unseeded Kimble Scheduled Jobs	0.00	0.00	20 Nov 2018 10:51
!	Upgrade Scripts Pending	2.00	0.00	20 Nov 2018 10:51
✓	Using Application Roles	0.00	0.00	20 Nov 2018 10:51
!	Failed	1540.00	0.00	20 Nov 2018 10:51
!	RMI	101.00	0.00	20 Nov 2018 10:51
!	Open Forecasting Periods	35.00	2.00	20 Nov 2018 10:51
!	Open Tracking Periods	114.00	8.00	20 Nov 2018 10:51
✓	Data Storage (%)	31.90	95.00	20 Nov 2018 10:51
✓	File Storage (%)	0.21	95.00	20 Nov 2018 10:51
✓	Apex Job Performance (ms)	0.00	3000.00	20 Nov 2018 10:51
✓	SOQL Performance One (ms)	6.00	0.00	20 Nov 2018 10:51
✓	SOQL Performance Two (ms)	8.00	0.00	20 Nov 2018 10:51
✓	Active User Counts	1882.00	0.00	20 Nov 2018 10:51
✓	Fully Flex User Count	174.00	0.00	20 Nov 2018 10:51
!	Valid Kimble Admin User	0.00	0.00	20 Nov 2018 10:51

***Figure 18**: Kimble Sense Health Monitoring Dashboard*

Next Steps

In this guide we've described how Kimble has been designed and architected to be a trusted, scalable, native Salesforce.com application, with embedded configuration and management tools that minimize the effort required to implement your initial PSA configuration, but also minimize the ongoing administrative effort required to support and maintain the needs of your services organization as they evolve.

Kimble has the flexibility to work alongside your other core business applications whether they are running natively on the Salesforce platform or via integration to other cloud or on-premise architectures.

While we've tried to answer the most common questions a Salesforce administrator or systems architect may have, we know you are likely to have additional questions or concerns. We're here to support your evaluation and look forward to answering those questions so that you have a complete understanding of how Kimble PSA will support the needs of your services organization today and into the foreseeable future.

Kimble Applications helps professional service organizations run their project-based businesses better. Global leaders in consulting, software and hi-tech such as NTT Data, TCS, Sage and Canon use Kimble to optimize resource utilization, profitability and business scalability. Kimble is the only leading software vendor that focuses exclusively on professional services automation (PSA), putting all its energy into innovating features and easy-to-use functionality that improve team collaboration and efficiency around the key services processes. Built to work seamlessly with CRM, Kimble drives a forward-looking focus and more timely decision making with intelligent insights and guidance.

Kimble Applications Limited
100 Union Street
London SE1 0NL

Tel: +44 (0) 203 006 9222

www.kimbleapps.com