

REALPAGE INC
Form 424B5
May 21, 2018
Table of Contents

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-225074

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are part of an effective registration statement filed with the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS SUPPLEMENT (Subject to Completion)

(To Prospectus dated May 21, 2018)

6,500,000 Shares

COMMON STOCK

We are offering 6,500,000 shares of our common stock.

*Our common stock is listed on the Nasdaq Global Select Market under the symbol **RP**. On May 18, 2018, the last reported sale price of our common stock on the Nasdaq Global Select Market was \$59.55 per share.*

Investing in our common stock involves risks. See Risk Factors beginning on page S-4 of this prospectus supplement, beginning on page 3 of the accompanying prospectus and in our Annual Report on Form 10-K for the year ended December 31, 2017 and in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, which have been filed with the Securities and Exchange Commission and are incorporated by reference in this prospectus supplement and the accompanying prospectus.

PRICE \$ A SHARE

| | | <i>Price to Public</i> | <i>Underwriting Discounts and Commissions (1)</i> | <i>Proceeds to RealPage</i> |
|------------------|--|----------------------------|---|---------------------------------|
| | | \$ | \$ | \$ |
| <i>Per Share</i> | | | | |
| <i>Total</i> | | \$ | \$ | \$ |

(1) See *Underwriters (Conflicts of Interest)* for a description of the compensation payable to the underwriters. We have granted the underwriters a 30-day option to purchase up to an additional 975,000 shares of common stock at the public offering price less underwriting discounts and commissions.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on or about _____, 2018.

MORGAN STANLEY J.P. MORGAN WELLS FARGO SECURITIES RBC CAPITAL MARKETS

JMP SECURITIES

KEYBANC CAPITAL MARKETS

FIFTH THIRD SECURITIES

, 2018

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

| | Page |
|--|-------------|
| <u>About this Prospectus Supplement</u> | i |
| <u>Prospectus Supplement Summary</u> | S-1 |
| <u>The Offering</u> | S-2 |
| <u>Risk Factors</u> | S-4 |
| <u>Special Note Regarding Forward-Looking Statements</u> | S-5 |
| <u>Use of Proceeds</u> | S-7 |
| <u>Market Price of Common Stock</u> | S-8 |
| <u>Dividend Policy</u> | S-9 |
| <u>Description of Capital Stock</u> | S-10 |
| <u>Material U.S. Federal Income Tax Consequences to Non-U.S. Holders of Common Stock</u> | S-13 |
| <u>Underwriters (Conflicts of Interest)</u> | S-17 |
| <u>Legal Matters</u> | S-22 |
| <u>Experts</u> | S-22 |
| <u>Where You Can Find Additional Information</u> | S-22 |
| <u>Incorporation of Certain Information by Reference</u> | S-22 |

Prospectus

| | Page |
|--|-------------|
| <u>About this Prospectus</u> | 1 |
| <u>The Company</u> | 2 |
| <u>Risk Factors</u> | 3 |
| <u>Use of Proceeds</u> | 4 |
| <u>Ratio of Earnings to Fixed Charges</u> | 5 |
| <u>Description of Securities</u> | 6 |
| <u>Plan of Distribution</u> | 7 |
| <u>Legal Matters</u> | 8 |
| <u>Experts</u> | 8 |
| <u>Where You Can Find Additional Information; Incorporation by Reference</u> | 9 |

You should rely only on the information contained in or incorporated by reference in this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering. We have not, and the underwriters have not, authorized anyone to provide you with information that is different. We and the underwriters are offering to sell shares of common stock and seeking offers to buy shares of

common stock only in jurisdictions where offers and sales are permitted. The information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents, regardless of the time of delivery of those respective documents or sale of our common stock.

For investors outside the United States: we have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus supplement, the accompanying prospectus and in any free writing prospectus that we have authorized for use in connection with this offering in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering outside the United States.

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is this prospectus supplement, which describes the terms of this offering of common stock and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement. The second part is the accompanying prospectus dated May 21, 2018, which includes the documents incorporated by reference therein and provides more general information. To the extent the information contained in this prospectus supplement differs or varies from the information contained in the accompanying prospectus or the documents incorporated by reference herein or therein, you should rely on the information in this prospectus supplement. Generally, when we refer to the prospectus, we are referring to this prospectus supplement and the accompanying prospectus combined. You should read both this prospectus supplement and the accompanying prospectus, together with additional information described under the heading **Where You Can Find Additional Information**.

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and selected information contained elsewhere in or incorporated by reference into this prospectus supplement. This summary provides an overview of selected information and does not contain all of the information you should consider before deciding whether to invest in our common stock. Therefore, you should read the entire prospectus supplement and the accompanying prospectus carefully (including the documents incorporated by reference herein and therein), especially the Risk Factors section beginning on page S-3 of this prospectus supplement, and any similar section contained in the accompanying prospectus and the documents incorporated by reference herein, and our consolidated financial statements (which we refer to as our Financial Statements) and the related notes incorporated by reference in this prospectus supplement and the accompanying prospectus, before deciding to invest in our common stock. Unless the context otherwise requires, we use the terms RealPage, Company, we, us and our in this prospectus supplement and the accompanying prospectus to refer to RealPage, Inc. and, where appropriate, our consolidated subsidiaries.

Company Overview

We are a leading global provider of software and data analytics to the real estate industry. Our platform of data analytics and software solutions enables the rental real estate industry to manage property operations (such as marketing, pricing, screening, leasing, and accounting), identify opportunities through market intelligence, and obtain data-driven insight for better operational and financial decision-making. Our integrated, on demand platform provides a single point of access and a massive repository of real-time lease transaction data, including prospect, renter, and property data. By leveraging data as well as integrating and streamlining a wide range of complex processes and interactions among the rental real estate ecosystem (owners, managers, prospects, renters, service providers, and investors), our platform helps our clients improve financial and operational performance and prudently place and harvest capital.

As of March 31, 2018, over 12,400 clients used one or more of our on demand software solutions to help manage the operations of approximately 13.2 million multifamily, single family, and vacation rental units. Our clients include each of the ten largest multifamily property management companies in the United States, ranked as of January 1, 2017 by the National Multifamily Housing Council (NMHC), based on the number of units managed.

We sell our solutions through our direct sales organization. Our total revenues were approximately \$671.0 million, \$568.1 million, and \$468.5 million for the years ended December 31, 2017, 2016, and 2015, respectively. In the same periods, we had operating income (loss) of approximately \$30.0 million, \$31.2 million, and \$(11.6) million, respectively, and net income (loss) of approximately \$0.4 million, \$16.7 million, and \$(9.2) million, respectively.

Our company was formed in 1998 to acquire Rent Roll, Inc., which marketed and sold on premise property management systems for the conventional and affordable multifamily rental housing markets. In June 2001, we released OneSite, our first on demand property management system. Since 2002, we have expanded our platform of solutions to include property management, leasing and marketing, resident services, and asset optimization capabilities. In addition to the multifamily markets, we now serve the single family, senior living, student living, military housing, commercial, hospitality, vacation rental and homeowners association, or HOA, markets. In addition, since July 2002, we have completed over 40 acquisitions of complementary technologies to supplement our internal product development and sales and marketing efforts and expand the scope of our solutions, the types of rental housing and vacation rental properties served by our solutions, and our client base. In connection with this expansion and these acquisitions, we have committed greater resources to developing and increasing sales of our platform of data analytics and on demand solutions. As part of our strategy, we plan to continue to pursue acquisitions of complementary businesses, products, and technologies.

S-1

Table of Contents**THE OFFERING**

| | |
|--|--|
| Common stock offered by us | 6,500,000 shares |
| Common stock to be outstanding after this offering | 91,007,545 shares |
| Option to purchase additional shares | 975,000 shares |
| Use of proceeds | <p>We estimate that the net proceeds from this offering will be approximately \$ million (or approximately \$ million if the underwriters exercise in full their option to purchase additional shares), after deducting underwriting discounts and commissions and estimated offering expenses payable by us.</p> <p>We intend to use the net proceeds from this offering primarily for the repayment of our indebtedness outstanding under our revolving facility in an aggregate amount of approximately \$150 million and for general corporate purposes, including working capital, sales and marketing activities, research and development activities, general and administrative matters and capital expenditures. We may also use the net proceeds from this offering for acquisitions of, or investments in, technologies, solutions or businesses that complement our business, although we have no present commitments or agreements to enter into any such material acquisitions or investments. See Use of Proceeds for additional information.</p> |
| Conflicts of Interest | <p>Because an affiliate of Wells Fargo Securities, LLC acts as administrative agent and lender and an affiliate of J.P. Morgan Securities LLC acts as a lender under our existing credit facilities and will receive 5% or more of the net proceeds of this offering due to the repayment of our indebtedness under our revolving facility, Wells Fargo Securities, LLC and J.P. Morgan Securities LLC are deemed to have a conflict of interest under Rule 5121 (Rule 5121) of the Financial Industry Regulatory Authority, Inc. (FINRA). Accordingly, this offering is being made in compliance with the requirements of Rule 5121. The appointment of a qualified independent underwriter is not required</p> |

in connection with this offering as a bona fide public market, as defined in Rule 5121, exists for our common stock. See Underwriters (Conflicts of Interest).

Nasdaq Global Select symbol

RP

S-2

Table of Contents

Risk factors

See Risk Factors beginning on page S-3 of this prospectus supplement and the other information included and incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of factors you should consider carefully before deciding to invest in our common stock.

The number of shares of common stock to be outstanding after this offering is based on 84,507,545 shares of common stock outstanding as of March 31, 2018, and excludes:

870,168 shares of common stock issued pursuant to acquisition agreements dated as of April 19, 2018 and additional shares of common stock issuable pursuant to such acquisition agreements;

1,942,031 shares of common stock issuable upon the exercise of outstanding stock options as of March 31, 2018, with a weighted-average exercise price of \$19.13 per share;

4,882,655 shares of common stock reserved for future issuance under our existing equity incentive plans; and

the shares of common stock reserved for issuance upon conversion of our convertible debt securities.

Unless otherwise indicated, all information in this prospectus supplement assumes no exercise of the underwriters option to purchase additional shares of common stock.

Table of Contents

RISK FACTORS

Investing in our common stock involves high degrees of significant risk. You should carefully consider the following risks, the risks described in our Annual Report on Form 10-K for the year ended December 31, 2017 and in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, as well as other information in this prospectus supplement and the accompanying prospectus, including information incorporated by reference herein and therein, and any free writing prospectus that we have authorized for use in connection with this offering, before you invest in our common stock. If any of these risks actually materializes, our operating results, financial condition and liquidity could be materially adversely affected. As a result, the trading price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to this Offering

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our business, financial condition or results of operations or enhance the value of our common stock. We intend to use the proceeds from this offering primarily for the repayment of our indebtedness outstanding under our revolving facility in an aggregate amount of approximately \$150 million and for general corporate purposes, including working capital, sales and marketing activities, research and development activities, general and administrative matters and capital expenditures. We may also use the net proceeds from this offering for the acquisition of, or investment in, technologies, solutions or businesses that complement our business, although we have no present commitments or agreements to enter into any such material acquisitions or investments. The failure by our management to apply these funds effectively could result in financial losses that could harm our business and cause the price of our common stock to decline.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering contain forward-looking statements that are based on our beliefs and assumptions and on information currently available to our management. Discussions containing these forward-looking statements may be found, among other places, in this prospectus supplement, the accompanying prospectus, in any free writing prospectus we may authorize for use in connection with this offering, in the sections titled **Business**, **Risk Factors** and **Management's Discussion and Analysis of Financial Condition and Results of Operations** incorporated by reference from our most recent Annual Report on Form 10-K and in the sections titled **Risk Factors** and **Management's Discussion and Analysis of Financial Condition and Results of Operations** incorporated by reference from our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, as well as any amendments thereto reflected in subsequent filings with the Securities and Exchange Commission, or SEC.

Given these risks, uncertainties and other factors, you should not place undue reliance on these forward-looking statements. Also, these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus supplement. You should read this document completely and with the understanding that our actual future results may be materially different from what we expect. We hereby qualify our forward-looking statements by these cautionary statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

Forward-looking statements may include, but are not limited to, statements about:

our ability to develop or acquire new and enhanced products that achieve market acceptance in a timely manner;

our ability to maintain our growth amid fluctuations over time in our sales cycle, client base and revenues;

our expectations regarding the benefits, financial performance and integration of recently-acquired businesses and our ability to make future acquisitions and successfully integrate any such future-acquired businesses;

our research and development efforts and our ability to achieve market acceptance of our new technologies and products;

our ability to maintain, develop and protect our intellectual property;

our ability to retain key employees;

our ability to protect client data and our ability to prevent breaches of our software or client data;

our dependency on third party hardware and software providers;

our ability to defend ourselves in litigation;

our dependency on key customers and our ability to retain customers at historical levels; and

our ability to forecast and respond to trends in our industry.

In some cases, you can identify forward-looking statements by terminology such as anticipate, aspire, believe, can, continue, could, estimate, expect, intend, may, might, plan, potential, predict, project, seek, negative of terms like these or other comparable terminology, and other words or terms of similar meaning. These statements reflect our current views with respect to future events, are based on assumptions and are subject to risks and uncertainties. Given these risks

Table of Contents

and uncertainties, you should not place undue reliance on these forward-looking statements. We discuss in greater detail, and incorporate by reference into this prospectus supplement in their entirety, many of these risks and uncertainties under the section titled "Risk Factors" contained in this prospectus supplement, the accompanying prospectus, in any free writing prospectus we may authorize for use in connection with a specific offering, in our most recent Annual Report on Form 10-K and in our most recent Quarterly Report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. You should read this prospectus supplement, the accompanying prospectus, together with the documents that are incorporated by reference herein and therein, and any free writing prospectus we have authorized for use in connection with a specific offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

Table of Contents

USE OF PROCEEDS

We estimate that the net proceeds from the sale of shares of common stock in this offering will be approximately \$ million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise in full their option to purchase additional shares, we estimate that the net proceeds will be approximately \$ million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. However, we intend to use the proceeds from this offering primarily for the repayment of our indebtedness outstanding under our revolving facility in an aggregate amount of approximately \$150 million and for general corporate purposes, including working capital, sales and marketing activities, research and development activities, general and administrative matters and capital expenditures.

On September 30, 2014, we entered into an agreement for a secured credit facility that matures on February 27, 2022 (the Credit Facility). The Credit Facility includes a revolving facility that allows for aggregate borrowings of up to \$350.0 million and under which we have borrowed approximately \$150.0 million. For additional information related to our outstanding indebtedness, including the interest rate and maturity of our indebtedness under the Credit Facility, see Management's Discussion and Analysis of Financial Condition and Results of Operations Liquidity and Capital Resources Contractual Obligations, Commitments, and Contingencies and note 7 to our interim financial statements included in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.

We may also use the net proceeds from this offering for the acquisition of, or investment in, technologies, solutions or businesses that complement our business, although we have no present commitments or agreements to enter into any such material acquisitions or investments. We will have broad discretion over the uses of the net proceeds from this offering and investors will be relying on the judgment of our management regarding the application of the net proceeds from this offering. Pending these uses, we plan to invest the net proceeds that we receive in this offering in short-term interest-bearing obligations, investment-grade investments, commercial paper, certificates of deposit, or direct or guaranteed obligations of the U.S. government, among others.

Table of Contents**MARKET PRICE OF COMMON STOCK**

Our common stock is traded on the Nasdaq Global Select Market under the symbol RP. The following table sets forth, for the periods indicated, the high and low sales price for our common stock as reported on the Nasdaq Global Select Market.

| | 2018 | |
|---------------------------------------|-------------|------------|
| | High | Low |
| Year Ended December 31, 2018: | | |
| First quarter | \$ 54.95 | \$ 43.95 |
| Second quarter (through May 18, 2018) | 61.95 | 48.00 |

| | 2017 | |
|--------------------------------------|-------------|------------|
| | High | Low |
| Year Ended December 31, 2017: | | |
| First quarter | \$ 37.40 | \$ 28.00 |
| Second quarter | 38.25 | 32.30 |
| Third quarter | 43.65 | 35.00 |
| Fourth quarter | 46.80 | 39.80 |

| | 2016 | |
|--------------------------------------|-------------|------------|
| | High | Low |
| Year Ended December 31, 2016: | | |
| First quarter | \$ 22.51 | \$ 16.06 |
| Second quarter | 23.55 | 19.54 |
| Third quarter | 26.44 | 21.62 |
| Fourth quarter | 30.85 | 23.69 |

At March 31, 2018, there were approximately 256 holders of record of our common stock. Restricted shares granted under our stock-based compensation plans which have not yet vested are considered to be held by one holder. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, the number of record holders of our shares is not indicative of the total number of stockholders.

Table of Contents

DIVIDEND POLICY

We have neither declared nor paid any cash dividends on our common stock in recent fiscal years. We do not expect to pay cash dividends on our common stock for the foreseeable future. Instead, we anticipate that all of our earnings will be used for the operation and growth of the business. Any future determination to declare cash dividends would be subject to the discretion of our board of directors and would depend upon various factors, including our results of operations; financial condition and liquidity requirements; restrictions that may be imposed by applicable law and our contracts; and other factors deemed relevant by our board of directors. Additionally, our secured credit facility contains customary covenants, subject in each case to customary exceptions and qualifications. Included in these covenants is a restriction which prevents us from paying dividends and making other distributions on our capital stock.

S-9

Table of Contents

DESCRIPTION OF CAPITAL STOCK

The following is a summary of our capital stock and provisions of our certificate of incorporation and bylaws, as each is in effect as of the date of this prospectus supplement. This summary does not purport to be complete and is qualified in its entirety by the provisions of our certificate of incorporation and bylaws, copies of which are incorporated by reference as exhibits to the accompanying registration statement. References in this section to the company, we, us and our refer to RealPage, Inc. and not to any of its subsidiaries.

Our authorized capital stock consists of 135,000,000 shares, with a par value of \$0.001 per share, of which:

125,000,000 shares are designated as common stock; and

10,000,000 shares are designated as preferred stock.

Common Stock

Voting Rights

The holders of our common stock are entitled to one vote per share on all matters to be voted on by the stockholders.

Dividends

Subject to preferences that may be applicable to any outstanding shares of preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by our board of directors out of funds legally available therefor.

Liquidation

In the event we liquidate, dissolve or wind up, holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any outstanding shares of preferred stock.

Rights and Preferences

Holders of common stock have no preemptive, conversion or subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are, and all shares of common stock to be outstanding upon completion of this offering will be, fully paid and nonassessable.

Preferred Stock

No shares of our preferred stock are currently outstanding. Under our amended and restated certificate of incorporation, our board of directors has the authority, without further action by the stockholders, to issue from time to time the preferred stock in one or more series, to fix the number of shares of any such series and the designation thereof and to fix the rights, preferences, privileges and restrictions granted to or imposed upon such preferred stock, including dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption, redemption prices, liquidation preference and sinking fund terms, any or all of which may be greater than or senior to the rights of the common stock. The issuance of preferred stock could adversely affect the voting power of holders of common

stock and reduce the likelihood that such holders will receive dividend payments and payments upon liquidation. Such issuance could have the effect of decreasing the market price of our common stock. The issuance of preferred stock or even the ability to issue preferred stock could have the effect of delaying, deterring or preventing a change in control. We have no present plans to issue any shares of preferred stock.

S-10

Table of Contents

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation and our amended and restated bylaws contain certain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are designed, in part, to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us.

Undesignated preferred stock

As discussed above, our board of directors has the ability to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Limits on ability of stockholders to act by written consent or call a special meeting

Our amended and restated certificate of incorporation provides that our stockholders may not act by written consent. This limit on the ability of our stockholders to act by written consent may lengthen the amount of time required to take stockholder actions. As a result, a holder controlling a majority of our capital stock would not be able to amend our bylaws or remove directors without holding a meeting of our stockholders called in accordance with our amended and restated bylaws.

In addition, our amended and restated bylaws provide that special meetings of the stockholders may be called only by the chairperson of our board of directors, our Chief Executive Officer, our president (in the absence of our Chief Executive Officer) or our board of directors. Our amended and restated bylaws prohibit a stockholder from calling a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority of our capital stock to take any action, including the removal of directors.

Requirements for advance notification of stockholder nominations and proposals

Our amended and restated bylaws include advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of our board of directors. However, our amended and restated bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Board Classification

Our board of directors is divided into three classes, one class of which is elected each year by our stockholders. The directors in each class will serve for a three-year term. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board.

Board vacancies filled only by majority of directors then in office

Vacancies and newly created seats on our board of directors may be filled only by our board of directors. Only our board of directors may determine the number of directors on our board of directors. The inability of stockholders to determine the number of directors or to fill vacancies or newly created seats on our board of directors makes it more difficult to change the composition of our board of directors, but these provisions promote a continuity of existing management.

S-11

Table of Contents

Directors removed only for cause

Our certificate of incorporation provides that directors may be removed by stockholders only for cause.

Delaware anti-takeover statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date on which the person became an interested stockholder unless:

Prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

Upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

At or subsequent to the date of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, beneficially owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock.

The provisions of Delaware law and our amended and restated certificate of incorporation and amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent's address is 462 South 4th Street, Suite 1600, Louisville, Kentucky 40202 and its telephone number is (800) 962-4284.

The Nasdaq Global Select Market Listing

Our common stock is listed on The Nasdaq Global Select Market under the symbol RP.

S-12

Table of Contents

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF COMMON STOCK

The following summary describes the material U.S. federal income tax consequences of the acquisition, ownership and disposition of our common stock acquired in this offering by Non-U.S. Holders (as defined below). This discussion is not a complete analysis of all potential U.S. federal income tax consequences relating thereto, and does not deal with foreign, state and local consequences that may be relevant to Non-U.S. Holders in light of their particular circumstances, nor does it address U.S. federal tax consequences (such as gift and estate taxes) other than income taxes. Special rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Internal Revenue Code of 1986, as amended (or the Code), such as financial institutions, insurance companies, tax-exempt organizations, broker-dealers and traders in securities, U.S. expatriates, controlled foreign corporations, passive foreign investment companies, corporations that accumulate earnings to avoid U.S. federal income tax, corporations organized outside of the United States, any state thereof or the District of Columbia that are nonetheless treated as United States income taxpayers for United States federal tax purposes, persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or integrated investment or other risk reduction strategy, persons who acquire our common stock through the exercise of an option or otherwise as compensation, persons subject to the alternative minimum tax or federal Medicare contribution tax on net investment income, partnerships and other pass-through entities or arrangements, and investors in such pass-through entities or arrangements. Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them. Furthermore, the discussion below is based upon the provisions of the Code, and Treasury regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked or modified, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the U.S. Internal Revenue Service, or IRS, with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions. This discussion assumes that the Non-U.S. Holder holds our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment).

Persons considering the purchase of our common stock pursuant to this offering should consult their own tax advisors concerning the U.S. federal income, estate and other tax consequences of acquiring, owning and disposing of our common stock in light of their particular situations as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign tax consequences.

For the purposes of this discussion, a Non-U.S. Holder is, for U.S. federal income tax purposes, a beneficial owner of common stock that is neither a U.S. Holder, nor a partnership (or other entity treated as a partnership for U.S. federal income tax purposes regardless of its place of organization or formation). A U.S. Holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes any of the following:

an individual who is a citizen or resident of the United States;

a corporation or other entity treated as a corporation for U.S. federal income tax purposes created or organized in or under the laws of the U.S., any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. federal income taxation regardless of its source; or

a trust if it (1) is subject to the primary supervision of a court within the U.S. and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

Distributions

Distributions, if any, made on our common stock to a Non-U.S. Holder to the extent made out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) generally will

S-13

Table of Contents

constitute dividends for U.S. tax purposes and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty, subject to the discussion below under Foreign Accounts. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide us with a properly executed IRS Form W-8BEN (in the case of individuals) or IRS Form W-8BEN-E (in the case of entities), or other appropriate form, including a U.S. taxpayer identification number or, in certain circumstances, a foreign tax identifying number, and certifying the Non-U.S. Holder's entitlement to benefits under that treaty. This certification must be provided to us or our paying agent prior to the payment of dividends and must be updated periodically. In the case of a Non-U.S. Holder that is an entity, Treasury regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends will be treated as paid to the entity or to those holding an interest in that entity. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. If you are eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty and you do not timely file the required certification, you may be able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment that such holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us (or, if stock is held through a financial institution or other agent, to such agent). In general, such effectively connected dividends will be subject to U.S. federal income tax, on a net income basis at the regular graduated rates applicable to U.S. residents. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional branch profits tax, which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder's effectively connected earnings and profits, subject to certain adjustments. Non-U.S. Holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

To the extent distributions on our common stock, if any, exceed our current and accumulated earnings and profits, they will first reduce the Non-U.S. Holder's adjusted basis in our common stock, but not below zero, and then will be treated as gain to the extent of any excess, and taxed in the same manner as gain realized from a sale or other disposition of common stock as described in the next section.

Gain on Disposition of Our Common Stock

Subject to the discussions below under Information Reporting Requirements and Backup Withholding and Foreign Accounts, a Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other disposition of our common stock unless (a) the gain is effectively connected with a trade or business of such holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment that such holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien individual and is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met or (c) we are or have been a United States real property holding corporation within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or such holder's holding period.

In general, we would be a U.S. real property holding corporation if interests in U.S. real estate comprise (by fair market value) at least half of our business assets. We believe that we have not been and that we are not, and we do not anticipate becoming, a U.S. real property holding corporation. Even if we are treated as a U.S. real property holding

corporation, gain realized by a Non-U.S. Holder on a disposition of our common stock will not be subject to U.S. federal income tax so long as (1) the Non-U.S. Holder owned, directly, indirectly and constructively, no more than 5% of our common stock at all times within the shorter of (i) the five-year period

S-14

Table of Contents

preceding the disposition or (ii) the holder's holding period and (2) our common stock is regularly traded on an established securities market. There can be no assurance that our common stock will continue to qualify as regularly traded on an established securities market. If any gain on your disposition is taxable because we are or we become a United States real property holding corporation and your ownership of our common stock exceeds 5%, you will be taxed on such disposition generally in the manner applicable to U.S. persons.

If you are a Non-U.S. Holder described in (a) above, you will be required to pay tax on the net gain derived from the sale at regular graduated U.S. federal income tax rates, and corporate Non-U.S. Holders described in (a) above may be subject to the additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. Gain described in (b) above will be subject to U.S. federal income tax at a flat 30% rate or such lower rate as may be specified by an applicable income tax treaty, which gain may be offset by certain U.S.-source capital losses (even though you are not considered a resident of the U.S.), provided that the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

Information Reporting Requirements and Backup Withholding

Generally, we must report information to the IRS with respect to any dividends we pay on our common stock (even if the payments are exempt from withholding), including the amount of any such dividends, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. backup withholding unless the Non-U.S. Holder provides a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E, or IRS Form W-ECI, or otherwise establishes an exemption. Notwithstanding the foregoing, backup withholding may apply if the payor has actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

U.S. information reporting and backup withholding requirements generally will apply to the proceeds of a disposition of our common stock effected by or through a U.S. office of any broker, U.S. or foreign, unless the holder provides a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E or otherwise meets documentary evidence requirements for establishing non-U.S. person status or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the U.S. through a non-U.S. office of a non-U.S. broker. Information reporting and backup withholding requirements may, however, apply to a payment of disposition proceeds if the broker has actual knowledge, or reason to know, that the holder is, in fact, a U.S. person. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be credited against the tax liability of persons subject to backup withholding, provided that the required information is timely furnished to the IRS.

Foreign Accounts

Sections 1471 through 1474 of the Code (commonly referred to as FATCA) impose a U.S. federal withholding tax of 30% on certain payments, including dividends paid on and the gross proceeds of a disposition of our common stock, to a foreign financial institution (as specifically defined by applicable rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax

authorities substantial information regarding U.S. account holders of such institution (which includes certain equity holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). FATCA also generally imposes a federal withholding tax of 30% on certain

S-15

Table of Contents

payments, including dividends paid on and the gross proceeds of a disposition of our common stock, to a non-financial foreign entity unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding substantial direct and indirect U.S. owners of the entity. An intergovernmental agreement between the United States and an applicable foreign country may modify those requirements. The withholding tax described above will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules. Holders are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

The withholding provisions described above currently apply to payments of dividends, and will apply to payments of gross proceeds from a sale or other disposition of common stock on or after January 1, 2019.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF ACQUIRING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY RECENT CHANGE IN APPLICABLE LAW.

Table of Contents**UNDERWRITERS (CONFLICTS OF INTEREST)**

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus supplement, the underwriters listed below, for whom Morgan Stanley & Co. LLC is acting as representative, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares indicated below:

| Name | Number of Shares |
|------------------------------|------------------|
| Morgan Stanley & Co. LLC | |
| J.P. Morgan Securities LLC | |
| Wells Fargo Securities, LLC | |
| RBC Capital Markets, LLC | |
| JMP Securities LLC | |
| KeyBanc Capital Markets Inc. | |
| Fifth Third Securities, Inc. | |
| Total: | 6,500,000 |

The underwriters and the representative are collectively referred to as the underwriters and the representative, respectively. The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus supplement are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus supplement if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' option to purchase additional shares described below.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus supplement and part to certain dealers at a price that represents a concession not in excess of \$ _____ per share under the public offering price. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representative.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to 975,000 additional shares of common stock at the public offering price listed on the cover page of this prospectus supplement less underwriting discounts and commissions. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of common stock as the number listed next to the underwriter's name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table.

The following table shows the per share and total public offering price, underwriting discounts and commissions, and proceeds before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase up to an additional 975,000 shares of common stock.

Total

| | Per Share | No Exercise | Full Exercise |
|---|----------------------|------------------------|--------------------------|
| Public offering price | \$ | \$ | \$ |
| Underwriting discounts and commissions to be paid by us | \$ | \$ | \$ |
| Proceeds, before expenses, to us | \$ | \$ | \$ |

S-17

Table of Contents

The estimated offering expenses payable by us, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, are approximately \$0.8 million.

Our common stock is listed on the Nasdaq Global Select Market under the trading symbol RP.

We and all of our directors and executive officers have agreed that, without the prior written consent of Morgan Stanley & Co. LLC, on behalf of the underwriters, we and they will not, during the period ending 75 days after the date of this prospectus supplement (the restricted period), offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock, whether any of these transactions are to be settled by delivery of our common stock or other securities, in cash or otherwise, or make any demand for or exercise any right with respect to the registration of our common stock.

Notwithstanding the above, the lock-up agreement applicable to us does not apply to: (a) the sale of shares of common stock in this offering; (b) the issuance by us of any shares of our common stock upon the conversion or exchange of convertible or exchangeable debt or equity securities or exercise of an option or other equity award granted under our stock-based compensation plans, in each case as described in this prospectus supplement and outstanding on the date hereof; (c) up to 5% of our outstanding shares of common stock in connection with certain strategic transactions, including acquisitions, provided that the recipient executes a lock-up agreement for the remainder of the 75-day period referred to above or the shares are restricted from sale until the end of the 75-day period; (d) the granting by us of any restricted stock awards or stock options made in accordance with the terms of our stock-based compensation plans described in this prospectus supplement; (e) subject to certain exceptions, the establishment of a trading plan (a Trading Plan) pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934 (the Exchange Act) for the transfer of shares of our common stock; or (f) the filing of any registration statement on Form S-8 relating to our stock-based compensation plans.

In addition, the underwriters have agreed that the lock-up agreements applicable to our directors and executive officers do not apply to (a) transactions relating to shares of common stock or other securities acquired in open market transactions after the completion of the offering, *provided* that no filing under Section 16(a) of the Exchange Act shall be required or shall be voluntarily made in connection with subsequent sales of common stock or other securities acquired in such open market transactions, (b) transfers of shares of common stock or any security convertible into common stock as a bona fide gift, (c) distributions of shares of common stock or any security convertible into common stock to limited partners or stockholders of the undersigned; *provided* that, in the case of any transfer or distribution pursuant to clause (b) no Form 5 shall be filed prior to the expiration of the 75-day period, and in the case of any transfer or distribution pursuant to clause (c), (i) each distributee shall sign and deliver a lock-up letter substantially in the form of the lock-up agreement entered into and (ii) no filing under Section 16(a) of the Exchange Act, reporting a reduction in beneficial ownership of shares of common stock, shall be required or shall be voluntarily made during the 75-day period, (d) sales under a Trading Plan that is in effect on the date of the lock-up agreement, provided that any Form 4 filed in accordance with Section 16 of the Exchange Act in connection with any sale described in this clause (d) will include a footnote disclosing that such sale was made pursuant to a 10b5-1 plan, (e) the establishment of a Trading Plan for the transfer of shares of common stock, *provided* that (i) such plan does not provide for the transfer of common stock during the restricted period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the undersigned or the Company regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such plan during the 75-day lock-up period and (f) any deemed sales or forfeitures of shares of common stock in connection with the satisfaction of tax obligations with respect to the

settlement or vesting of shares of restricted stock outstanding on the date hereof.

S-18

Table of Contents

In addition, each of our directors and executive officers has agreed that, without the prior written consent of the underwriters, they will not, during the restricted period make any demand for, or exercise any right with respect to, the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for shares of our common stock. Each of our directors and our executive officers also has agreed and consented to the entry of stop transfer instructions with our transfer agent and registrar against the transfer of their shares of common stock except in compliance with the foregoing restrictions.

Morgan Stanley & Co. LLC may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriter may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the option. The underwriters can close out a covered short sale by exercising the option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the option. The underwriters may also sell shares in excess of the option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus supplement in electronic format may be made available on websites maintained by one or more underwriters or selling group members, if any, participating in the offering. The representative may agree to allocate a number of shares of common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representative to underwriters that may make Internet distributions on the same basis as other allocations.

Conflicts of Interest

The underwriters and their affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses. In particular, an affiliate of Wells Fargo Securities, LLC acts as administrative agent and lender and an affiliate of J.P. Morgan Securities LLC acts as a lender under the Company's existing credit facilities, a portion of which is expected to be prepaid with a portion of the proceeds of the offering.

Because an affiliate of Wells Fargo Securities, LLC acts as administrative agent and lender and an affiliate of J.P. Morgan Securities LLC acts as a lender under the Company's existing credit facilities and will receive 5% or more of

the net proceeds of this offering due to the repayment of the Company's indebtedness under its revolving facility, Wells Fargo Securities, LLC and J.P. Morgan Securities LLC are deemed to have a conflict of interest under Rule 5121 (Rule 5121) of the Financial Industry Regulatory Authority, Inc. (FINRA).

S-19

Table of Contents

Accordingly, this offering is being made in compliance with the requirements of Rule 5121. The appointment of a qualified independent underwriter is not required in connection with this offering as a bona fide public market, as defined in Rule 5121, exists for our common stock.

In addition, in the ordinary course of their various business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriters and their affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Selling Restrictions

Canada

The shares of our common stock may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares of our common stock must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State) an offer to the public of any shares of our common stock may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares of our common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

to any legal entity which is a qualified investor as defined in the Prospectus Directive;

to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representative for any such offer; or

in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

S-20

Table of Contents

For the purposes of this provision, the expression an offer to the public in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of our common stock to be offered so as to enable an investor to decide to purchase any shares of our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression 2010 PD Amending Directive means Directive 2010/73/EU.

United Kingdom

Each underwriter has represented and agreed that:

it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (FSMA)) received by it in connection with the issue or sale of the shares of our common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and

it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our common stock in, from or otherwise involving the United Kingdom.

S-21

Table of Contents

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus supplement will be passed upon for us by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Austin, Texas. Davis Polk & Wardwell LLP is counsel for the underwriters in connection with this offering.

EXPERTS

The consolidated financial statements of RealPage, Inc. incorporated by reference in RealPage, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2017, and the effectiveness of RealPage, Inc.'s internal control over financial reporting as of December 31, 2017 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing. The incorporation by reference in this Prospectus of the report dated September 7, 2017 prepared by Aprio, LLP, with respect to the financial statements of Multifamily Housing Operations (a carve-out of the Rainmaker Group Ventures, LLC) as of December 31, 2016 and for the year then ended, and incorporated in this Prospectus by reference to the Current Report on Form 8-K/A of RealPage, Inc. dated February 15, 2018, have been so incorporated in reliance on the report of Aprio, LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting. The consolidated financial statements of On-Site Manager, Inc. as of and for the year ended December 31, 2016, included in RealPage, Inc.'s Current Report on Form 8-K/A filed on December 12, 2017, have been audited by Moss Adams LLP, independent auditors, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements, and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge on the Investor section of our website, which is located at investor.realpage.com. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference into this prospectus supplement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus supplement. Information in this prospectus supplement supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus supplement, while information that we file later with the SEC will automatically update

Table of Contents

and supersede the information in this prospectus supplement. We incorporate by reference into this prospectus supplement and the registration statement of which this prospectus supplement is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-34846):

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed on March 1, 2018;

Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 filed on May 10, 2018;

Our Current Report on Form 8-K filed on May 21, 2018, our Current Report on Form 8-K filed on April 25, 2018, our Current Report on Form 8-K filed on April 20, 2018, our Current Report on Form 8-K filed on March 13, 2018, our Current Report on Form 8-K/A filed on February 15, 2018, and our Current Report on Form 8-K/A filed on December 12, 2017;

Our Definitive Proxy Statement on Schedule 14A for the fiscal year ended December 31, 2017 filed on April 25, 2018; and

The description of our common stock in our registration statement on Form 8-A filed with the SEC on August 9, 2010, including all amendments and reports filed for the purpose of updating such description. We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We will furnish without charge to each person, including any beneficial owner, to whom a prospectus is delivered, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. Any such request may be made by writing or telephoning us at the following address or phone number:

RealPage, Inc.

Attn: Investor Relations

2201 Lakeside Boulevard,

Richardson, TX 75082-4305

(972) 820-3000

Table of Contents

PROSPECTUS

REALPAGE, INC.

Common Stock

Preferred Stock

Debt Securities

Warrants

Purchase Contracts

Units

We may offer and sell the securities identified above from time to time in one or more offerings. This prospectus provides you with a general description of the securities.

Each time we offer and sell securities, we will provide a supplement to this prospectus that contains specific information about the offering and the amounts, prices and terms of the securities. The supplement may also add, update or change information contained in this prospectus with respect to that offering. You should carefully read this prospectus and the applicable prospectus supplement, together with any documents we incorporated by reference, before you invest in any of our securities.

We may offer and sell the securities described in this prospectus and any prospectus supplement to or through one or more underwriters, dealers and agents, or directly to purchasers, or through a combination of these methods. If any underwriters, dealers or agents are involved in the sale of any of the securities, their names and any applicable purchase price, fee, commission or discount arrangement between or among them will be set forth, or will be calculable from the information set forth, in the applicable prospectus supplement. See the sections of this prospectus entitled *About this Prospectus* and *Plan of Distribution* for more information. No securities may be sold without delivery of this prospectus and the applicable prospectus supplement describing the method and terms of the offering of such securities.

INVESTING IN OUR SECURITIES INVOLVES RISKS. SEE RISK FACTORS BEGINNING ON PAGE 3 OF THIS PROSPECTUS AND IN ANY SIMILAR SECTION CONTAINED IN OR INCORPORATED BY REFERENCE HEREIN OR IN THE APPLICABLE PROSPECTUS SUPPLEMENT CONCERNING

FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR SECURITIES.

Our common stock is listed on The Nasdaq Global Select Market (Nasdaq) under the symbol RP. On May 18, 2018, the last reported sale price of our common stock on NASDAQ was \$59.55 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 21, 2018.

Table of Contents

Table of Contents

| | Page |
|--|-------------|
| <u>ABOUT THIS PROSPECTUS</u> | 1 |
| <u>THE COMPANY</u> | 2 |
| <u>RISK FACTORS</u> | 3 |
| <u>USE OF PROCEEDS</u> | 4 |
| <u>RATIO OF EARNINGS TO FIXED CHARGES</u> | 5 |
| <u>DESCRIPTION OF SECURITIES</u> | 6 |
| <u>PLAN OF DISTRIBUTION</u> | 7 |
| <u>LEGAL MATTERS</u> | 8 |
| <u>EXPERTS</u> | 8 |
| <u>WHERE YOU CAN FIND ADDITIONAL INFORMATION; INCORPORATION BY REFERENCE</u> | 9 |

Table of Contents

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the U.S. Securities and Exchange Commission (the SEC) as a well-known seasoned issuer as defined in Rule 405 under the Securities Act of 1933, as amended, using a shelf registration process. By using a shelf registration statement, we may sell securities from time to time and in one or more offerings as described in this prospectus. Each time that we offer and sell securities, we will provide a prospectus supplement to this prospectus that contains specific information about the securities being offered and sold and the specific terms of that offering and, to the extent appropriate, any updates to the information about us contained in this prospectus. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement may also add, update or change information contained in this prospectus with respect to that offering. If there is any inconsistency between the information in this prospectus and the applicable prospectus supplement, you should rely on the prospectus supplement. Before purchasing any securities, you should carefully read both this prospectus and the applicable prospectus supplement, together with the additional information described under the heading **Where You Can Find Additional Information; Incorporation by Reference**.

We have not authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any applicable prospectus supplement or any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We will not make an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus and the applicable prospectus supplement to this prospectus is accurate as of the date on its respective cover or as otherwise specified therein and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates. This prospectus incorporates by reference, and any prospectus supplement or free writing prospectus may contain and incorporate by reference, market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus and the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading **Risk Factors** contained or incorporated by reference in this prospectus, the applicable prospectus supplement and any related free writing prospectus and under similar headings in other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

When we refer to **RealPage**, **we**, **our**, **us** and the **Company** in this prospectus, we mean RealPage, Inc. and our consolidated subsidiaries, unless the context indicates otherwise or unless otherwise specified. When we refer to **you**, we mean the holders of the applicable series of securities.

Table of Contents

THE COMPANY

RealPage is a leading global provider of software and data analytics to the real estate industry. Our platform of data analytics and software solutions enables the rental real estate industry to manage property operations (such as marketing, pricing, screening, leasing, and accounting), identify opportunities through market intelligence, and obtain data-driven insight for better operational and financial decision-making. Our integrated, on demand platform provides a single point of access and a massive repository of real-time lease transaction data, including prospect, renter, and property data. By leveraging data as well as integrating and streamlining a wide range of complex processes and interactions among the rental real estate ecosystem (owners, managers, prospects, renters, service providers, and investors), our platform helps our clients improve financial and operational performance and prudently place and harvest capital.

We were incorporated in the State of Delaware in December 2003 through a merger with our predecessor entity, RealPage, Inc., a Texas corporation, which was originally incorporated in November 1998. Our company was formed in 1998 to acquire Rent Roll, Inc., which marketed and sold on premise property management systems for the conventional and affordable multifamily rental housing markets. In June 2001, we released OneSite, our first on demand property management system. Since 2002, we have expanded our platform of solutions to include property management, leasing and marketing, resident services, and asset optimization capabilities. In addition to the multifamily markets, we now serve the single family, senior living, student living, military housing, commercial, hospitality, vacation rental and homeowners association, or HOA, markets. In addition, since July 2002, we have completed over 40 acquisitions of complementary technologies to supplement our internal product development and sales and marketing efforts and expand the scope of our solutions, the types of rental housing and vacation rental properties served by our solutions, and our client base. In connection with this expansion and these acquisitions, we have committed greater resources to developing and increasing sales of our platform of data analytics and on demand solutions. As part of our strategy, we plan to continue to pursue acquisitions of complementary businesses, products, and technologies.

Our executive offices are located at 2201 Lakeside Boulevard, Richardson, Texas 75082-4305, and our telephone number is (972) 820-3000. Our common stock is currently listed on Nasdaq under the symbol RP.

Table of Contents

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making a decision to invest in our securities, in addition to carefully considering the other information contained in this prospectus, in any accompanying prospectus supplement and incorporated by reference herein or therein, you should carefully consider the risks described under the caption "Risk Factors" contained in the applicable prospectus supplement, and any related free writing prospectus, and the risks discussed under the caption "Risk Factors" contained in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference, and any free writing prospectus that we may authorize for use in connection with a specific offering. See "Where You Can Find Additional Information; Incorporation by Reference."

Table of Contents

USE OF PROCEEDS

We intend to use the net proceeds from the sale of the securities as set forth in the applicable prospectus supplement.

Table of Contents**RATIO OF EARNINGS TO FIXED CHARGES**

The following table sets forth the historical ratios of earnings to fixed charges for RealPage and its consolidated subsidiaries for the periods indicated.

| | As of March 31, | | Fiscal Year Ending | | | |
|---|------------------------|-------------|---------------------------|-------------|-------------|-------------|
| | 2018 | 2017 | December 31, | | 2013 | |
| | | | 2016 | 2015 | 2014 | 2013 |
| Ratio of earnings to fixed charges ⁽¹⁾ | 2.5 | 2.0 | 9.2 | | | 15.3 |

- (1) For the purpose of calculating such ratios, earnings consist of income (loss) before income taxes plus fixed charges. Fixed charges consist of interest expense including the amortization of discounts and issuance costs related to indebtedness. Earnings before fixed charges were inadequate to cover total fixed charges by \$13.1 million and \$16.6 million for fiscal years 2015 and 2014, respectively.

Table of Contents

DESCRIPTION OF SECURITIES

We may issue from time to time, in one or more offerings, the following securities:

shares of common stock, par value \$0.001 per share, of the Company;

shares of preferred stock, par value \$0.001 per share, of the Company;

debt securities, which may be senior or subordinated, and which may be convertible into our common stock or be non-convertible;

warrants to purchase from us shares of our common stock or preferred stock or other securities;

purchase contracts; and

units representing two or more of the foregoing securities.

We will set forth in the applicable prospectus supplement and/or free writing prospectus a description of any common stock, debt securities, warrants, purchase contracts or units issued by us that may be offered or sold pursuant to this prospectus. The terms of the offering of securities, the initial offering price and the net proceeds to us will be contained in the prospectus supplement, and other offering material, relating to such offer.

Table of Contents

PLAN OF DISTRIBUTION

We may sell the offered securities from time to time:

through underwriters or dealers;

through agents;

directly to one or more purchasers; or

through a combination of any of these methods of sale.

We will identify the specific plan of distribution, including any underwriters, dealers, agents or direct purchasers and their compensation in the applicable prospectus supplement.

Table of Contents

LEGAL MATTERS

Wilson Sonsini Goodrich & Rosati, Professional Corporation, Austin, Texas, will pass upon certain legal matters relating to the issuance and sale of the securities offered hereby on behalf of RealPage, Inc. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of RealPage, Inc. incorporated by reference in RealPage, Inc.'s Annual Report (Form 10-K) for the year ended December 31, 2017, and the effectiveness of RealPage, Inc.'s internal control over financial reporting as of December 31, 2017 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing. The incorporation by reference in this Prospectus of the report dated September 7, 2017 prepared by Aprio, LLP, with respect to the financial statements of Multifamily Housing Operations (a carve-out of the Rainmaker Group Ventures, LLC) as of December 31, 2016 and for the year then ended, and incorporated in this Prospectus by reference to the Current Report on Form 8-K/A of RealPage, Inc. dated February 15, 2018, have been so incorporated in reliance on the report of Aprio, LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting. The consolidated financial statements of On-Site Manager, Inc. as of and for the year ended December 31, 2016, included in RealPage, Inc.'s Current Report on Form 8-K/A filed on December 12, 2017, have been audited by Moss Adams LLP, independent auditors, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Table of Contents

WHERE YOU CAN FIND ADDITIONAL INFORMATION; INCORPORATION BY REFERENCE

Available Information

We file periodic and current reports, proxy statements and other information with the SEC. Information filed with the SEC by us can be inspected and copied at the Public Reference Room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of this information by mail from the Public Reference Room of the SEC at prescribed rates. Further information on the operation of the SEC's Public Reference Room in Washington, D.C. can be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information about issuers, such as us, who file electronically with the SEC. The address of that website is <http://www.sec.gov>.

Our web site address is www.RealPage.com. The information on our web site, or that can be accessed through our web site, however, is not, and should not be deemed to be, a part of this prospectus.

This prospectus and any prospectus supplement are part of a registration statement that we filed with the SEC and do not contain all of the information in the registration statement. The full registration statement may be obtained from the SEC or us, as provided below. Forms of the indenture and other documents establishing the terms of the offered securities are or may be filed as exhibits to the registration statement. Statements in this prospectus or any prospectus supplement about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. You may inspect a copy of the registration statement at the SEC's Public Reference Room in Washington, D.C. or through the SEC's website, as provided above.

Incorporation by Reference

The SEC's rules allow us to incorporate by reference information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this prospectus, and subsequent information that we file with the SEC will automatically update and supersede that information. Any statement contained in a previously filed document incorporated by reference will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or replaces that statement.

We incorporate by reference our documents listed below and any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, which we refer to as the Exchange Act in this prospectus, between the date of this prospectus and the termination of the offering of the securities described in this prospectus. We are not, however, incorporating by reference any documents or portions thereof, whether specifically listed below or filed in the future, that are not deemed filed with the SEC, including any information furnished pursuant to Items 2.02 or 7.01 of Form 8-K or related exhibits furnished pursuant to Item 9.01 of Form 8-K.

This prospectus and any accompanying prospectus supplement incorporate by reference the documents set forth below that have previously been filed with the SEC:

Information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 from our Definitive Proxy Statement on Schedule 14A filed on April 25, 2018.

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed on March 1, 2018.

Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 filed on May 10, 2018.

Table of Contents

Our Current Report on Form 8-K filed on May 21, 2018, our Current Report on Form 8-K filed on April 25, 2018, our Current Report on Form 8-K filed on April 20, 2018, our Current Report on Form 8-K filed on March 13, 2018, our Current Report on Form 8-K/A filed on February 15, 2018, our Current Report on Form 8-K/A filed on December 12, 2017.

The description of our common stock, par value \$0.001 per share, contained in our registration statement on Form 8-A, filed with the SEC on August 9, 2010, including any subsequent filed amendments and reports updating such description.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

You may request a free copy of any of the documents incorporated by reference in this prospectus (other than exhibits, unless they are specifically incorporated by reference in the documents) by writing or telephoning us at the following address:

RealPage, Inc.

2201 Lakeside Boulevard

Richardson, Texas 75082-4305

(972) 820-3000

Exhibits to the filings will not be sent, however, unless those exhibits have specifically been incorporated by reference in this prospectus and any accompanying prospectus supplement.

The information accessible through any website referred to in this prospectus or any document incorporated herein is not, and should not be deemed to be, a part of this prospectus.

Table of Contents

6,500,000 Shares

COMMON STOCK

PROSPECTUS SUPPLEMENT

MORGAN STANLEY

J.P. MORGAN

WELLS FARGO SECURITIES

RBC CAPITAL MARKETS

JMP SECURITIES

KEYBANC CAPITAL MARKETS

FIFTH THIRD SECURITIES

, 2018