

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended November 30, 2020
or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____
Commission File Number: **0-19417**

PROGRESS SOFTWARE CORPORATION

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

04-2746201

(I.R.S. Employer Identification No.)

14 Oak Park

Bedford, Massachusetts 01730

(Address of principal executive offices) (Zip code)

(781) 280-4000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	PRGS	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of May 31, 2020 (the last business day of the registrant's most recently completed second fiscal quarter), the aggregate market value of voting stock held by non-affiliates of the registrant was approximately \$1,786,000,000.

As of January 20, 2021, there were 44,216,251 common shares outstanding.

Documents Incorporated By Reference

Certain information required in Items 10, 11, 12, 13 and 14 of Part III of this Annual Report on Form 10-K is incorporated by reference to our definitive Proxy Statement for our 2021 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A (our "definitive Proxy Statement").

PROGRESS SOFTWARE CORPORATION
FORM 10-K
FOR THE FISCAL YEAR ENDED NOVEMBER 30, 2020
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CAUTIONARY STATEMENTS

This Form 10-K, and other information provided by us or statements made by our directors, officers or employees from time to time, may contain statements that constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and other securities laws. Whenever we use words such as “believe,” “may,” “could,” “would,” “might,” “should,” “expect,” “intend,” “plan,” “estimate,” “target,” “anticipate” and negatives and derivatives of these or similar expressions, or when we make statements concerning future financial results, product offerings or other events that have not yet occurred, we are making forward-looking statements. These forward-looking statements are based upon our present intent, beliefs or expectations, but forward-looking statements are not guaranteed to occur and may not occur. Actual future results may differ materially from those contained in or implied by our forward-looking statements as a result of various factors. Such factors are more fully described in Item 1A of this Form 10-K under the heading “Risk Factors.” Although we have sought to identify the most significant risks to our business, we cannot predict whether, or to what extent, any of such risks may be realized. We also cannot assure you that we have identified all possible issues which we might face. We undertake no obligation to update any forward-looking statements that we make.

PART I

Item 1. Business

Overview

Progress Software Corporation ("Progress," the "Company," "we," "us," or "our") provides the best products to develop, deploy and manage high-impact business applications. Our comprehensive product solutions are designed to make technology teams more productive and we have a deep commitment to the developer community, both open source and commercial alike. With Progress, organizations can accelerate the creation and delivery of strategic business applications, automate the process by which apps are configured, deployed and scaled, and make critical data and content more accessible and secure—leading to competitive differentiation and business success. Over 1,700 independent software vendors ("ISVs"), 100,000 enterprise customers, and three million developers rely on Progress to power their applications.

Our products are generally sold as perpetual licenses, but certain products also use term licensing models and our cloud-based offerings use a subscription-based model. More than half of our worldwide license revenue is realized through relationships with indirect channel partners, principally ISVs, original equipment manufacturers ("OEMs"), distributors and value-added resellers.

We operate in North America and Latin America (the "Americas"); Europe, the Middle East and Africa ("EMEA"); and the Asia Pacific region, through local subsidiaries as well as independent distributors.

Strategic Plan and Operating Model

The key tenets of our strategic plan and operating model are as follows:

Trusted Provider of the Best Products to Develop, Deploy and Manage High Impact Business Applications. A key element of our strategy is centered on providing the platform and tools enterprises need to build modern, strategic business applications. We offer these products and tools to both new customers and partners as well as our existing partner and customer ecosystems. This strategy builds on our inherent DNA and our vast experience in application development that we've acquired over the past 40 years.

Focus on Customer and Partner Retention to Drive Recurring Revenue and Profitability. Our organizational philosophy and operating principles focus primarily on customer and partner retention and success, and a streamlined operating approach in order to more efficiently drive, predictable and stable recurring revenue.

Total Growth Strategy Driven by Accretive M&A. We are pursuing a total growth strategy driven by accretive acquisitions of businesses within the software infrastructure space, with products that appeal to both IT organizations and individual developers. These acquisitions must meet strict financial and other criteria, which should enable us to drive significant stockholder returns by providing scale and increased cash flows. As described below, in October 2020, we acquired Chef Software Inc. ("Chef") in a transaction that we expect will meet these strict financial criteria.

Chef is a global leader in providing complete infrastructure automation to build, deploy, manage and secure applications in modern multi-cloud and hybrid environments, as well as on-premises. The purchase price for Chef was \$220 million and we

funded the purchase price with a combination of existing cash balances and drawings under our revolving credit facility. Chef is the developer of Chef Enterprise Automation Stack, automating infrastructure, compliance and application delivery for many of the Fortune 500.

We expect to continue to pursue acquisitions meeting our financial criteria and designed to expand our business and drive significant stockholder returns.

Holistic Capital Allocation Approach. We have adopted a shareholder friendly capital allocation policy that utilizes dividends and share repurchases to return capital to shareholders. Pursuant to our capital allocation strategy that we initially announced in September 2017, we have targeted to return approximately 25% of our annual cash flows from operations to stockholders in the form of dividends. We also intend to repurchase our shares in sufficient quantities to offset dilution from our equity plans.

In fiscal year 2020, we repurchased and retired 1.4 million shares of our common stock for \$60.0 million. As of November 30, 2020, there was \$190.0 million remaining under share repurchase authorization. The timing and amount of any shares repurchased will be determined by management based on its evaluation of market conditions and other factors, and the Board of Directors may choose to suspend, expand or discontinue the repurchase program at any time.

We began paying quarterly cash dividends of \$0.125 per share of common stock to Progress stockholders in December 2016 and increased the quarterly cash dividend annually in fiscal years 2017, 2018 and 2019. On September 22, 2020, our Board of Directors approved an additional increase of 6% to our quarterly cash dividend from \$0.165 to \$0.175 and declared a quarterly dividend of \$0.175 per share of common stock. We expect to continue paying quarterly cash dividends in subsequent quarters consistent with our capital allocation strategy.

Our Business Segments

OpenEdge Business Segment

The OpenEdge business segment drives growth within OpenEdge's large, diverse partner base by providing the technology enhancements and marketing support these partners need to sell more of their existing solutions to their customers. The OpenEdge business segment is also focused on providing partners and direct end users with a clear path to develop and integrate cloud-based applications. Our professional services organization helps partners and customers leverage their core assets and develop strategies that protect current investments, while addressing changing business requirements.

The solutions within the OpenEdge business segment include:

Progress OpenEdge

Progress OpenEdge is development software for building dynamic multi-language applications for secure deployment across any platform, any device, and any cloud. OpenEdge provides a unified environment comprising development tools, application servers, application management tools, an embedded relational database management system, and the capability to connect and integrate with other applications and data sources independently or with other Progress products.

Progress Corticon

Progress Corticon is a market-leading Business Rules Management System that provides applications with decision automation, decision change process and decision-related insight capabilities. Corticon helps both business and IT users to quickly create or reuse business rules as well as create, improve, collaborate on, and maintain decision logic.

MOVEit

MOVEit provides secure collaboration and automated file transfers of critical business information between users, locations and partners in compliance with data security regulations such as the Health Insurance Portability and Accountability Act (HIPAA), the Payment Card Industry Data Security Standard and the European Union's General Data Protection Regulation, and advanced workflow automation capabilities without the need for scripting.

WhatsUp Gold

WhatsUp Gold is an award-winning network monitoring solution, which enables small and medium-sized businesses and enterprises to continuously monitor and manage their IT infrastructure and applications, assuring high levels of performance and availability.

Progress Kinvey

Progress Kinvey is a modern platform for rapidly building complex enterprise applications and scalable consumer applications experiences. from mission-critical consumer and business experiences for global insurance, manufacturing and media companies, to HIPAA-compliant and life-critical apps for healthcare, health implant manufacturers and pharma.

Data Connectivity and Integration Business Segment

The Data Connectivity and Integration ("DCI") business segment is focused on the growth of our data assets, including the data integration components of our cloud offerings. Data is at the core of every application, and with the exponential growth in the number and volume of data sources, this business segment addresses the increasingly complex challenges that organizations have in accessing and integrating that data.

The solutions within the DCI business segment include:

Progress DataDirect Connect

Progress DataDirect Connect provides data connectivity using industry-standard interfaces to connect applications running on various platforms to any major database, for both corporate IT organizations and software vendors. With software components embedded in the products of over 350 software companies and in the applications of thousands of large enterprises, DataDirect Connect is a global leader in the data connectivity market. The primary products, in addition to other drivers we have developed, are ODBC drivers, JDBC drivers and ADO.NET providers. They provide the capability to connect and integrate with other applications and data sources independently or with our cloud-based offerings.

Progress DataDirect Hybrid Data Pipeline

Progress DataDirect Hybrid Data Pipeline is a data access service that provides simple, secure access to organizations' cloud and on-premises data sources for hybrid cloud applications, such as customer resource management, data management platforms or hosted analytics. It enables developers to integrate applications and data quickly, no matter whether that data lives-on-site, in the cloud or both.

Application Development and Deployment Business Segment

The Application Development and Deployment ("AD&D") business segment is focused on serving the evolving needs of our substantial developer community in creating modern and engaging applications and digital experiences. This business segment is agile and digitally-driven in its go-to-market, able to react quickly to changes in this rapidly-evolving market. Products in this segment focus on user interface development and content-driven digital experiences.

The solutions within the AD&D business segment include:

Developer Tools

Our Developer Tools (DevTools) business offers a leading set of components for user interface (UI) development for Web, Mobile, Desktop, Chat and AR/VR apps, plus automated application testing and reporting tools. These products make development of modern, engaging application UIs fast and easy for .NET and JavaScript developers. Product lines include Telerik, Kendo UI, Fiddler, and Test Studio.

Sitefinity

Sitefinity is a next-generation web content management and customer analytics platform for managing and optimizing digital experiences. Sitefinity combines superior end user experience with a high level of customization capabilities for developers.

Chef

Chef is a complete infrastructure automation platform to build, deploy, manage and secure applications in modern multi-cloud and hybrid environments, as well as on-premises. Chef Enterprise Automation Stack is the full suite of enterprise infrastructure, application and DevSecOps automation technologies delivering change quickly, repeatedly and securely. For more than ten years, Chef has led the industry in DevOps innovation, uniting teams at organizations of all sizes and optimizing processes and outcomes to accelerate its customers' business growth.

The Chef offerings incorporate software components licensed to the general public under open source licenses. We obtain many components from software developed and released by contributors to independent open source components of our offerings. Under the open source licensing model, a software developer distributes the software under an open source license that provides relatively broad rights for recipients of the software to use, copy, modify and redistribute the software. These rights afford significant latitude for recipients to inspect, suggest changes to, customize or enhance the software.

The primary solutions within the Chef Enterprise Automation Stack are Chef Infra, Chef InSpec, Chef Habitat, Chef Compliance, Chef Automate and Chef Desktop. Chef Infra automates infrastructure configuration, ensuring every system is configured correctly and consistently. Chef InSpec provides a language for describing security and compliance rules that can be shared between software engineers, operations and security engineers. Chef Habitat provides automation capabilities for defining, packaging and delivering applications to almost any environment, regardless of operating system or deployment platform. Chef Automate is an enterprise dashboard and analytics tool enabling cross-team collaboration with actionable insights for configuration and compliance and an auditable history of changes to environments. Chef Compliance helps enterprises maintain compliance and prevent security incidents across heterogeneous estates. Chef Desktop allows IT teams to automate the deployment, management and ongoing compliance of IT resources.

Product Development

Most of our products have been developed by our internal product development staff or the internal staffs of acquired companies. We believe that the features and performance of our products are competitive with those of other available development and deployment tools and that none of the current versions of our products are approaching obsolescence. However, we have invested, and expect to continue to invest in new product development and enhancements of our current products to maintain our competitive position.

Our primary development offices are located in Bedford, Massachusetts; Morrisville, North Carolina; Alpharetta, Georgia; Madison, Wisconsin; Seattle, Washington; Sofia, Bulgaria; and Bangalore and Hyderabad, India.

Customers

We market our products globally through several channels: directly to end users and indirectly to independent software vendors, OEMs, and system integrators. Sales of our solutions and products through our direct sales force have historically been to business managers or IT managers in corporations and governmental agencies. We also target developers who create business applications, from individuals to teams, within enterprises of all sizes.

We also market our products through indirect channels, primarily ISVs, OEMs, and value-added resellers, who embed or add features to our products as part of an integrated solution. We use distributors, both internationally and domestically, in certain locations where we do not have a direct presence or where it is more economically feasible for us to do so. More than half of our license revenues are derived from these indirect channels.

Independent Software Vendors

Our ISVs cover a broad range of markets, offer an extensive library of business applications and are a source of recurring revenue. We have kept entry costs, consisting primarily of the initial purchase of development licenses, low to encourage a wide variety of ISVs to build applications. If an ISV succeeds in marketing its applications, we obtain recurring revenue as the ISV licenses our deployment products to allow its application to be installed and used by customers. In recent years, a significantly increasing amount of our revenue from ISVs has been generated from ISVs who have chosen to enable their business applications under a software-as-a-service ("SaaS") platform.

Original Equipment Manufacturers

We enter into arrangements with OEMs in which the OEM embeds our products into its solutions, typically either software or technology devices. OEMs typically license the right to embed our products into their solutions and distribute those solutions for initial terms ranging from one to three years. Historically, most of our OEMs have renewed their agreements upon the expiration of the initial term. However, there is no assurance that they will continue to renew in the future. If any of our largest OEM customers were not to renew their agreements in the future, this could materially impact our DCI segment.

Value Added Resellers

We enter into arrangements with value-added resellers (VARs) in which the VAR adds features or services to our products, then resell those products as an integrated product or complete "turn-key" solution.

No single customer or partner has accounted for more than 10% of our total revenue in any of our last three fiscal years.

Sales and Marketing

We sell our products and solutions through our direct sales force and indirect channel partners. We have sold our products and solutions to enterprises in over 180 countries. Our sales and field marketing groups are organized primarily by region. We operate by region in the Americas, EMEA and Asia Pacific. We believe this structure allows us to maintain direct contact with our customers and support their diverse market requirements. Our international operations provide focused local sales, support and marketing efforts and are able to respond directly to changes in local conditions.

In addition to our direct sales efforts, we distribute our products through ISVs, systems integrators, resellers, distributors, and OEM partners in the United States and internationally. Systems integrators typically have expertise in vertical or functional markets. In some cases, they resell our products, bundling them with their broader service offerings. In other cases, they refer sales opportunities for our products to our direct sales force. Distributors sublicense our products and provide service and support within their territories. OEMs embed portions of our technology in their product offerings.

Sales personnel are responsible for developing new direct end user accounts, recruiting new indirect channel partners and new independent distributors, managing existing channel partner relationships and servicing existing customers. We actively seek to avoid conflict between the sales efforts of our ISVs and our own direct sales efforts. We use our inside sales teams to enhance our direct sales efforts and to generate new business and follow-on business from existing customers.

Our marketing personnel conduct a variety of marketing engagement programs designed to create demand for our products, enhance the market readiness of our products, raise the general awareness of our company and our products and solutions, generate leads for the sales organization and promote our various products. These programs include press relations, analyst relations, investor relations, digital/web marketing, marketing communications, participation in trade shows and industry conferences, and production of sales and marketing literature. We also hold and participate in global events, as well as regional user events in various locations throughout the world.

Our sales and marketing efforts with respect to certain of our products differ from our traditional sales and marketing efforts because the target markets are different. For these products, we have designed our marketing and sales model to be efficient for high volumes of lower-price transactions. Our marketing efforts focus on driving traffic to our websites and on generating high quality sales leads, in many cases, consisting of developer end users who download a free evaluation of our software. Our sales efforts then focus on converting these leads into paying customers through a high volume, short duration, sales process. Of particular importance to our target market, we enable our customers to buy our products in a manner convenient to them, whether by purchase order, online with a credit card or through our channel partners.

Customer Support

Our customer support staff provides telephone and Web-based support to end users, application developers and OEMs. Customers purchase maintenance services entitling them to software updates, technical support and technical bulletins. Maintenance is generally not required with our products and is purchased at the customer's option. We provide support to customers primarily through our main regional customer support centers in Bedford, Massachusetts; Morrisville, North Carolina; Alpharetta, Georgia; Madison, Wisconsin; Seattle, Washington; Galway, Ireland; Rotterdam, The Netherlands; Hyderabad, India; Melbourne, Australia; and Sofia, Bulgaria. Local technical support for specific products is provided in certain other countries as well.

Professional Services

Our global professional services organization delivers business solutions for customers through a combination of products, consulting and education. Our consulting organization offers project management, implementation services, custom development, programming and other services. Our consulting organization also provides services to Web-enable existing applications or to take advantage of the capabilities of new product releases. Our education organization offers numerous training options, from traditional instructor-led courses to advanced learning modules available via the web or on digital media.

Our services offerings include: application modernization; infrastructure automation; development operations; data management, managed database services; performance enhancements and tuning; and analytics/business intelligence.

Competition

The computer software industry is intensely competitive. We experience significant competition from a variety of sources with respect to all of our products. We believe that certain competitive factors affect the market for our software products and services, which may include: (i) vendor and product reputation; (ii) product quality, performance and price; (iii) the availability of software products on multiple platforms; (iv) product scalability; (v) product integration with other enterprise applications; (vi) software functionality and features; (vii) software ease of use; (viii) the quality of professional services, customer support services and training; and (ix) the ability to address specific customer business problems. We believe the relative importance of each of these factors depends upon the concerns and needs of each specific customer.

We compete with multiple companies, some that have single or narrow solutions, and some that have a range of enterprise infrastructure solutions such as Salesforce.com, Inc., Amazon.com, Inc. and Microsoft Corporation. Many of these vendors offer platform-as-a-service, application development, data integration and other tools in conjunction with their CRM, web services, operating systems, and relational database management systems. We compete with software vendors that offer their products under a typical proprietary software license model, and various other vendors that offer their solutions in an open source licensing or freely available distribution model.

We do not believe that there is a dominant vendor in the infrastructure software markets in which we compete. However, some of our competitors have greater financial, marketing or technical resources than we have and/or may have experience in, or be able to adapt more quickly to new or emerging technologies and changes in customer requirements or to devote greater resources to the development, promotion and sale of their products than we can. Increased competition could make it more difficult for us to maintain our revenue and market presence.

Intellectual Property

We rely on a combination of contractual provisions and copyright, patent, trademark and trade secret laws to protect our proprietary rights in our products. Except as described below with respect to our Chef products, we generally distribute our products under software license agreements that grant customers a perpetual nonexclusive license to use our products and contain terms and conditions prohibiting the unauthorized reproduction or transfer of our products. We also distribute our products through various channel partners, including ISVs, OEMs and system integrators. We also license our products under term or subscription arrangements. In addition, we attempt to protect our trade secrets and other proprietary information through agreements with employees, consultants and channel partners. Although we intend to protect our rights vigorously, there is no assurance that these measures will be successful.

We seek to protect the source code of our products as trade secrets and as unpublished copyrighted works. We hold numerous patents covering portions of our products. We also have several patent applications for some of our other product technologies. Where possible, we seek to obtain protection of our product names and service offerings through trademark registration and other similar procedures throughout the world.

Our Chef offerings incorporate software components licensed to the general public under open source licenses. We obtain many components from software developed and released by contributors to independent open source components of our offerings. Open source licenses grant licensees broad permissions to use, copy, modify and redistribute our platform. As a result, open source development and licensing practices can limit the value of our software copyright assets.

We believe that due to the rapid pace of innovation within our industry, factors such as the technological and creative skills of our personnel are as important in establishing and maintaining a leadership position within the industry as are the various legal protections of our technology. In addition, we believe that the nature of our customers, the importance of our products to them

and their need for continuing product support may reduce the risk of unauthorized reproduction, although no assurances can be made in this regard.

Business Segment and Geographical Information

We operate and report as three distinct business segments: OpenEdge, Data Connectivity and Integration, and Application Development and Deployment. For additional information on our business segments as well as our geographical financial information, see Note 18 to our Consolidated Financial Statements in Item 8 of this Form 10-K.

Human Capital

As of November 30, 2020, we had 1,796 employees worldwide, including 600 in sales and marketing, 292 in customer support and services, 711 in product development and 193 in administration.

None of our U.S. employees are subject to a collective bargaining agreement. Employees in certain foreign jurisdictions are represented by local workers' councils and/or collective bargaining agreements as may be customary or required in those jurisdictions. We have experienced no work stoppages and believe our relations with employees are good.

We believe that our future success largely depends upon our continued ability to attract and retain highly skilled employees. We provide our employees with competitive compensation and benefits, opportunities for equity ownership, and development programs that enable continued learning and growth.

Employee Engagement, Development and Training

We invest significant resources to develop our in-house talent and deepen our employees' skill sets, both to strengthen our company and help further our employees' personal career goals. We empower our employees to drive their career aspirations and set personal development objectives in partnership with their managers. To strengthen these conversations, we train managers across the globe to partner with employees through career conversations, as well provide career development training for all employees so that they can successfully leverage the many tools in place to support them.

To match the location and learning specifics of our people, we combine various channels for personal and technical development: on-demand videos, webinars, classroom trainings, text-based resources, coaching, and more. We also believe strongly in fostering our employees' personal growth and offer programs like tuition reimbursement.

Our efforts to recruit and retain a diverse and passionate workforce include providing competitive compensation and benefit packages worldwide and ensuring we listen to our employees. To that end, we regularly survey our employees to obtain their views and assess employee satisfaction. We use the views expressed in the surveys to influence our people strategy and policies. We also use employee survey information to gain insights into how and where we work.

COVID-19 Response

In response to the COVID-19 pandemic, we implemented significant changes that we determined were in the best interest of our employees as well as the communities in which we operate. This includes having the vast majority of our employees work from home, while implementing additional safety measures for employees continuing critical on-site work. We also provide flexible work hours. We have also provided a work-from-home reimbursement policy to assist employees in that transition and added several company-wide paid days off and caregiving support to help employees balance their work and life responsibilities.

Inclusion and Diversity

As a multicultural company serving a global community, we encourage a wide range of views and celebrate our diverse backgrounds. We are committed to creating a culture of innovation and inspiration, where employees feel a strong sense of community and pride in the company and the successes they have helped to achieve.

We have launched an inclusion and diversity (I&D) undertaking focused on fostering an inclusive environment and diverse workforce by strengthening the following core areas of our organization: culture and belonging; talent acquisition; leveraging talent; management and leadership; and career development. To ensure success of our I&D efforts, we formed an Inclusion and Diversity Advisory Committee, made up of a diverse group of Progress employees from around the globe with varying backgrounds, skill sets and viewpoints. This committee has been tasked with supporting the formation and implementation of enterprise-wide I&D initiatives and ensuring a clear I&D vision is established and articulated in a way that is authentic for

everyone at Progress. Among its many accomplishments, the committee helped to establish a governance framework for Progress Employee Resource Groups (ERGs), supported the formation of our first four ERGs, Progress for Her, Blacks at Progress, Plus (LGTBQ+) and veterans@progress, and contributed to the strengthening of our career and hiring processes.

Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on our website at www.progress.com as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the SEC at www.sec.gov. The information posted on our website is not incorporated into this Annual Report.

Our Code of Conduct and Business Ethics is also available on our website. Additional information about this code and amendments and waivers thereto can be found below in Part III, Item 10 of this Form 10-K.

Item 1A. Risk Factors

We operate in a rapidly changing environment that involves certain risks and uncertainties, some of which are beyond our control. The risks described below are not the only risks we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially adversely affect our business, financial condition and/or operating results.

Risks Related to Our Ability to Grow Our Business

The ongoing COVID-19 pandemic could materially and adversely affect our business, results of operations and financial condition. In March 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic, which has spread throughout the United States and the world and has resulted in authorities implementing and re-implementing numerous measures to contain the virus, including travel bans and restrictions, quarantines, shelter-in-place orders, and business limitations and shutdowns. These measures are in place to varying degrees. We are unable to accurately predict the full impact that the COVID-19 pandemic will have on our results of operations, financial condition, liquidity and cash flows due to numerous uncertainties, including the duration and severity of the pandemic and containment measures. Our compliance with these measures has impacted our day-to-day operations and could disrupt our business and operations, as well as that of our customers, partners, suppliers and others with whom we work, for an indefinite period of time. To support the health and well-being of our employees, customers, partners and communities, the vast majority of our employees are working remotely and are expected to continue to work remotely until the pandemic subsides. In addition, many of our customers and partners are working remotely, which may delay the timing of their purchases of our products and services.

Given the economic uncertainty created by the COVID-19 pandemic, we have and may continue to see delays in our sales cycle, failures of customers to renew at all or to renew at the anticipated scope their subscriptions with us, requests from customers for payment term deferrals as well as pricing or bundling concessions, which, if significant, could materially and adversely affect our business, results of operations and financial condition. In addition, our third-party service providers may experience financial difficulties or business disruptions that could negatively affect their operations and their ability to supply us with services needed for our products and operations. Although such events did not have a material adverse impact on our financial results for the fiscal year ended November 30, 2020, there can be no assurance that these events will not have a material adverse impact on our financial results for the full fiscal year or future periods.

The full extent of the COVID-19 pandemic's impact on our operations and financial performance depends on future developments that are uncertain and unpredictable, including the duration and spread of the pandemic, its impact on capital and financial markets, the timing of economic recovery, the spread of the virus to other regions, and the actions taken to contain it, among others. Any of these impacts could have a material adverse impact on our business, results of operations and financial condition and ability to execute and capitalize on our strategies. Due to the ongoing uncertainty regarding the severity and duration of the COVID-19 pandemic, we cannot predict whether our response to date or the actions we may take in the future will be effective in mitigating the effects of the COVID-19 pandemic on our business, results of operations or financial condition. Accordingly, we are unable at this time to predict the future impact of the COVID-19 pandemic on our operations, liquidity, and financial results, and, depending on the magnitude and duration of the COVID-19 pandemic, such impact may be material.

Technology and customer requirements evolve rapidly in our industry, and if we do not continue to develop new products and enhance our existing products in response to these changes, our business could be harmed. Ongoing enhancements to our product sets will be required to enable us to maintain our competitive position and the competitive position of our ISVs, distributors/resellers, and OEMs. We may not be successful in developing and marketing enhancements to our products on a timely basis, and any enhancements we develop may not adequately address the changing needs of the marketplace.

Overlaying the risks associated with our existing products and enhancements are ongoing technological developments and rapid changes in customer and partner requirements. Our future success will depend upon our ability to develop and introduce new products in a timely manner that take advantage of technological advances and respond to new customer and partner requirements. We may not be successful in developing new products incorporating new technology on a timely basis, and any new products we develop may not adequately address the changing needs of the marketplace or may not be accepted by the market. Failure to develop new products and product enhancements that meet market needs in a timely manner could have a material adverse effect on our business, financial condition and operating results.

We are substantially dependent on our Progress OpenEdge products. We derive a significant portion of our revenue from software license and maintenance revenue attributable to our Progress OpenEdge product set. Accordingly, our future results depend on continued market acceptance of OpenEdge. If consumer demand declines, or new technologies emerge that are superior to, or are more responsive to customer requirements than, OpenEdge such that we are unable to maintain OpenEdge's

competitive position within its marketplace, our business, financial condition and operating results may be materially adversely affected.

The segments of the software industry in which we participate are intensely competitive, and our inability to compete effectively could harm our business. We experience significant competition from a variety of sources with respect to the marketing and distribution of our products. Many of our competitors have greater financial, marketing or technical resources than we do and may be able to adapt more quickly to new or emerging technologies and changes in customer requirements or to devote greater resources to the promotion and sale of their products than we can. Increased competition could make it more difficult for us to maintain our market presence or lead to downward pricing pressure.

In addition, the marketplace for new products is intensely competitive and characterized by low barriers to entry. For example, an increase in market acceptance of open source software may cause downward pricing pressures. One of the characteristics of open source software is that the governing license terms generally allow liberal modifications of the code and distribution thereof to a wide group of companies and/or individuals. As a result, others could easily develop new software products or services based upon those open source programs that compete with existing open source software that we support and incorporate into our Chef products. As a result, new competitors possessing technological, marketing or other competitive advantages may emerge and develop their own open source software or hybrid proprietary and open source software offerings, potentially reducing the demand for, and putting price pressure on, our products enabling them to rapidly acquire market share. In addition, current and potential competitors may make strategic acquisitions or establish cooperative relationships among themselves or with third parties, thereby increasing their ability to deliver products that better address the needs of our prospective customers. Current and potential competitors may also be more successful than we are in having their products or technologies widely accepted. We may be unable to compete successfully against current and future competitors, and our failure to do so could have a material adverse effect on our business, prospects, financial condition and operating results.

We intend to make additional acquisitions of businesses, products or technologies that involve additional risks, which could disrupt our business or harm our financial condition, results of operations or cash flows. A key element of our strategy includes the acquisition of businesses that offer complementary products, services and technologies, augment our revenues and cash flows, and meet our strict financial and other criteria, such as our recent acquisitions of Ipswich and Chef. We may not be able to identify suitable acquisition opportunities, or to consummate any such transactions. Any acquisitions that we do complete and their integration involve a number of risks, the occurrence of which could have a material adverse effect on our business, financial condition, operating results or cash flows, including:

- unexpected delays, challenges and related expenses, and the disruption of our business;
- difficulties of assimilating the operations and personnel of acquired companies;
- our potential inability to realize the value of the acquired assets relative to the price paid;
- distraction of management from our ongoing businesses;
- potential product disruptions associated with the sale of the acquired business's products;
- the potential that an acquisition may not further our business strategy as we expected, may not result in revenue and cash flow growth to the degree we expected or at all, or may not achieve expected synergies;
- the possibility of incurring significant restructuring charges and amortization expense;
- risks related to the assumption of the acquired business's liabilities or any ongoing lawsuits;
- potential impairment to assets that we recorded as a part of an acquisition, including intangible assets and goodwill; and
- to the extent that we issue stock to pay for an acquisition, dilution to existing stockholders and decreased earnings per share.

Difficulties associated with any acquisitions we may pursue, and their integration may be complicated by factors such as:

- the size of the business or entity acquired;
- geographic and cultural differences;
- lack of experience operating in the industry or geographic markets of the acquired business;
- potential loss of key employees and customers;
- the potential for deficiencies in internal controls at the acquired or combined business;
- performance problems with the acquired business's technology;
- exposure to unanticipated liabilities of the acquired business;
- insufficient revenue to offset increased expenses associated with the acquisition; and
- adverse tax consequences.

If we fail to complete an announced acquisition, our stock price could fall to the extent the price reflects an assumption that such acquisition will be completed, and we may incur significant unrecoverable costs. Further, the failure to consummate an acquisition may result in negative publicity and adversely impact our relationships with our customers, vendors and employees. We may become subject to legal proceedings relating to the acquisition and the integration of acquired businesses may not be successful. Failure to manage and successfully integrate acquired businesses, achieve anticipated levels of profitability of the acquired business, improve margins of the acquired businesses and products, or realize other anticipated benefits of an acquisition could materially harm our business, operating results and margins.

If our goodwill or amortizable intangible assets become impaired, we may be required to record a significant charge to earnings. We acquire other companies and intangible assets and may not realize all the economic benefit from those acquisitions, which could cause an impairment of goodwill or intangibles. We review our amortizable intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. We test goodwill for impairment at least annually. Factors that may cause a change in circumstances, indicating that the carrying value of our goodwill or amortizable intangible assets may not be recoverable, include a decline in our stock price and market capitalization, reduced future cash flow estimates, and slower growth rates in industry segments in which we participate. We may be required to record a significant charge in our consolidated financial statements during the period in which any impairment of our goodwill or amortizable intangible assets is determined, negatively affecting our results of operations.

We face various risks in connection with our acquisition of Chef. On October 5, 2020, we completed our acquisition of Chef. We face various risks in connection with this acquisition, including the effects of disruption from the transaction making it more difficult to maintain relationships with employees, customers, other business partners or governmental entities, other business effects, including the effects of industry, economic or political conditions outside of our control, transaction costs, actual or contingent liabilities, diversion of management, uncertainties as to whether anticipated synergies will be realized and uncertainties as to whether Chef's business will be successfully integrated with our business. Any one or more of these factors could have a material adverse effect on the combined business, our results of operations and our financial condition.

We may incur significant debt or issue a material amount of debt or equity securities to finance an acquisition, which could adversely affect our operating flexibility and financial statements. If we were to incur a significant amount of debt, whether by borrowing funds or issuing new debt securities, to finance an acquisition, our interest expense, debt service requirements and leverage would increase significantly. The increases in these expenses and in our leverage could adversely impact our ability to operate the company as we might otherwise and to borrow additional amounts. If we were to issue a significant amount of equity securities in connection with an acquisition, existing stockholders would be diluted and earnings per share could decrease.

Risk Related to the Operation of Our Business

We recognize a substantial portion of our revenue from sales made through third parties, including our ISVs, distributors/resellers, and OEMs, and adverse developments in the businesses of these third parties or in our relationships with them could harm our revenues and results of operations. Our future results depend in large part upon our continued successful distribution of our products through our ISV, distributor/reseller, and OEM channels. The activities of these third parties are not within our direct control. Our failure to manage our relationships with these third parties effectively could impair the success of our sales, marketing and support activities. A reduction in the sales efforts, technical capabilities or financial viability of these parties, a misalignment of interest between us and them, or a termination of our relationship with a major ISV, distributor/reseller, or OEM could have a negative effect on our sales and financial results. Any adverse effect on any of our ISV's, distributors'/resellers', or OEMs' businesses related to competition, pricing and other factors could also have a material adverse effect on our business, financial condition and operating results.

A failure of our information technology systems could have a material adverse effect on our business. We rely on our technology infrastructure, and the technology infrastructure of third parties, for many functions, including selling our products, supporting our ISVs and other third-party channels, fulfilling orders and billing, and collecting and making payments. This technology infrastructure may be vulnerable to damage or interruption from natural disasters, power loss, telecommunication failures, terrorist attacks, computer intrusions, vulnerabilities and viruses, software errors, computer denial-of-service attacks and other events. A significant number of the systems making up this infrastructure are not redundant, and our disaster recovery planning may not be sufficient for every eventuality. This technology infrastructure may fail or be vulnerable to damage or interruption because of actions by third parties or employee error or malfeasance. We may not carry business interruption insurance sufficient to protect us from all losses that may result from interruptions in our services as a result of technology infrastructure failures or to cover all contingencies. Any interruption in the availability of our websites and on-line interactions with customers or partners may cause a reduction in customer or partner satisfaction levels, which in turn could cause additional claims, reduced revenue or loss of customers or partners. Despite any precautions we may take, these problems could result in,

among other consequences, a loss of data, loss of confidence in the stability and reliability of our offerings, damage to our reputation, and legal liability, all of which may adversely affect our business, financial condition, operating results and cash flows.

Our international operations expose us to additional risks, and changes in global economic and political conditions could adversely affect our international operations, our revenue and our net income. Approximately 41% of our total revenue is generated from sales outside North America. Political and/or financial instability, oil price shocks and armed conflict in various regions of the world can lead to economic uncertainty and may adversely impact our business. For example, political instability, such as the Referendum of the United Kingdom's (the "U.K.") Membership of the European Union ("E.U.") (referred to as "Brexit"), led to significant, continuing volatility in global stock markets and currency exchange rate fluctuations. If customers' buying patterns, decision-making processes, timing of expected deliveries and timing of new projects unfavorably change due to economic or political conditions, there would be a material adverse effect on our business, financial condition and operating results.

Other potential risks inherent in our international business include:

- longer payment cycles;
- credit risk and higher levels of payment fraud;
- greater difficulties in accounts receivable collection;
- varying regulatory and legal requirements;
- compliance with international and local trade, labor and export control laws;
- restrictions on the transfer of funds;
- difficulties in developing, staffing, and simultaneously managing a large number of varying foreign operations as a result of distance, legal impediments and language and cultural differences;
- reduced or minimal protection of intellectual property rights in some countries;
- laws and business practices that favor local competitors or prohibit foreign ownership of certain businesses;
- changes in U.S. or foreign trade policies or practices that increase costs or restrict the distribution of products;
- seasonal reductions in business activity during the summer months in Europe and certain other parts of the world;
- economic instability in emerging markets; and
- potentially adverse tax consequences.

Any one or more of these factors could have a material adverse effect on our international operations, and, consequently, on our business, financial condition and operating results.

In addition, our business has been, and could in the future be, adversely affected by regional or global health crises, including an outbreak of contagious disease such as COVID-19. A significant outbreak of contagious diseases and other adverse public health developments, or the fear of such events that results in a widespread health crisis could adversely affect global supply chains and the economies and financial markets of many countries. Any prolonged economic disruption could affect demand for our products and services and adversely impact our results of operations and financial condition. The full impact of the coronavirus outbreak is unknown at this time. We continue to monitor developments and the potential effect on our business.

Fluctuations in foreign currency exchange rates could have an adverse impact on our financial condition and results of operations. Changes in the value of foreign currencies relative to the U.S. dollar could adversely affect our results of operations and financial position. For example, during periods in which the value of the U.S. dollar strengthens in comparison to certain foreign currencies, particularly in Europe, Brazil and Australia, our reported international revenue is reduced because foreign currencies translate into fewer U.S. dollars. As approximately one-third of our revenue is denominated in foreign currencies, our revenue results have been impacted, and we expect will continue to be impacted, by fluctuations in foreign currency exchange rates.

We seek to reduce our exposure to fluctuations in exchange rates by entering into foreign exchange forward contracts to hedge certain actual and forecasted transactions of selected currencies (mainly in Europe, Brazil, India and Australia). Our currency hedging transactions may not be effective in reducing any adverse impact of fluctuations in foreign currency exchange rates. Further, the imposition of exchange or price controls or other restrictions on the conversion of foreign currencies could have a material adverse effect on our business.

Our customers and partners may delay payment or fail to pay us in accordance with the terms of their agreements, necessitating action by us to compel payment. If customers and partners delay the payment or fail to pay us under the terms of our agreements, we may be adversely affected both from the inability to collect amounts due and the cost of enforcing the terms of our contracts, including litigation. Furthermore, some of our customers and partners may seek bankruptcy protection or other

similar relief and fail to pay amounts due to us, or pay those amounts more slowly, either of which could adversely affect our operating results, financial position and cash flow. The ongoing global COVID-19 pandemic has also increased the likelihood of these risks.

We rely on the experience and expertise of our skilled employees, and must continue to attract and retain qualified technical, marketing and managerial personnel in order to succeed. Our future success will depend in large part upon our ability to attract and retain highly skilled technical, managerial, sales and marketing personnel. There is significant competition for such personnel in the software industry. We may not continue to be successful in attracting and retaining the personnel we require to develop new and enhanced products and to continue to grow and operate profitably.

Our periodic workforce restructurings can be disruptive. We have in the past restructured or made other adjustments to our workforce in response to management changes, product changes, performance issues, changes in strategy, acquisitions and other internal and external considerations. In the past, these restructurings have resulted in increased restructuring costs and have temporarily reduced productivity. These effects could recur in connection with any future restructurings or we may not achieve or sustain the expected growth or cost savings benefits of any such restructurings, or do so within the expected timeframe. As a result, our revenues and other results of operations could be negatively affected.

If our products contain software defects or security flaws, it could harm our revenues and expose us to litigation. Our products, despite extensive testing and quality control, may contain defects or security flaws, especially when we first introduce them or when new versions are released. We may need to issue corrective releases of our software products to fix any defects or errors. The detection and correction of any security flaws can be time consuming and costly. Errors in our software products could affect the ability of our products to work with other hardware or software products, delay the development or release of new products or new versions of products, adversely affect market acceptance of our products and expose us to potential litigation. If we experience errors or delays in releasing new products or new versions of products, such errors or delays could have a material adverse effect on our revenue.

If our security measures are breached, our products and services may be perceived as not being secure, customers may curtail or stop using our products and services, and we may incur significant legal and financial exposure. Our products and services involve the storage and transmission of our customers' proprietary information and may be vulnerable to unauthorized access, computer viruses, cyber-attacks, distributed denial of service attacks and other disruptive problems. Due to the actions of outside parties, employee error, malfeasance, or otherwise, an unauthorized party may obtain access to our data or our customers' data, which could result in its theft, destruction or misappropriation. Security risks in recent years have increased significantly given the increased sophistication and activities of hackers, organized crime, including state-sponsored organizations and nation-states, and other outside parties. Cyber threats are continuously evolving, increasing the difficulty of defending against them. While we have implemented security procedures and controls to address these threats, our security measures could be compromised or could fail. Any security breach or unauthorized access could result in significant legal and financial exposure, increased costs to defend litigation, indemnity and other contractual obligations, government fines and penalties, damage to our reputation and our brand, and a loss of confidence in the security of our products and services that could potentially have an adverse effect on our business and results of operations. Breaches of our network could disrupt our internal systems and business applications, including services provided to our customers. Additionally, data breaches could compromise technical and proprietary information, harming our competitive position. We may need to spend significant capital or allocate significant resources to ensure effective ongoing protection against the threat of security breaches or to address security related concerns. If an actual or perceived breach of our security occurs, the market perception of the effectiveness of our security measures could be harmed and we could lose customers. In addition, our insurance coverage may not be adequate to cover all costs related to cybersecurity incidents and the disruptions resulting from such events.

Catastrophic events may disrupt our business. We rely on our network infrastructure and enterprise applications, internal technology systems and website for our development, marketing, operations, support and sales activities. In addition, we rely on third-party hosted services, and we do not control the operation of third-party data center facilities, which increases our vulnerability. A disruption, infiltration or failure of these systems or third-party hosted services in the event of a major earthquake, fire, flood, tsunami or other weather event, power loss, telecommunications failure, software or hardware malfunctions, pandemics (including the COVID-19 pandemic), cyber-attack, war, terrorist attack or other catastrophic event that our disaster recovery plans do not adequately address, could cause system interruptions, reputational harm, loss of intellectual property, delays in our product development, lengthy interruptions in our services, breaches of data security and loss of critical data. A catastrophic event that results in the destruction or disruption of any of our data centers or our critical business or information technology systems could severely affect our ability to conduct normal business operations and, as a result, our future operating results could be adversely affected, and the adverse effects of any such catastrophic event would be exacerbated if experienced at the same time as another unexpected and adverse event, such as the COVID-19 pandemic.

Risk Related to Laws and Regulations

We are subject to risks associated with compliance with laws and regulations globally, which may harm our business. We are a global company subject to varied and complex laws, regulations and customs, both domestically and internationally. These laws and regulations relate to a number of aspects of our business, including trade protection, import and export control, data and transaction processing security, payment card industry data security standards, records management, user-generated content hosted on websites we operate, privacy practices, data residency, corporate governance, anti-trust and competition, employee and third-party complaints, anti-corruption, gift policies, conflicts of interest, securities regulations and other regulatory requirements affecting trade and investment. The application of these laws and regulations to our business is often unclear and may at times conflict. For example, in many foreign countries, particularly in those with developing economies, it is common to engage in business practices that are prohibited by U.S. regulations applicable to us, including the Foreign Corrupt Practices Act. We cannot provide assurance that our employees, contractors, agents and business partners will not take actions in violation of our internal policies or U.S. laws. Compliance with these laws and regulations may involve significant costs or require changes in our business practices that result in reduced revenue and profitability. Non-compliance could also result in fines, damages, criminal sanctions against us, our officers or our employees, prohibitions on the conduct of our business, and damage to our reputation. In response to the COVID-19 pandemic, federal, state, local and foreign governmental authorities have imposed, and may continue to impose, protocols and restrictions intended to contain the spread of the virus, including limitations on the size of gatherings, closures of work facilities, schools, public buildings and businesses, quarantines, lockdowns and travel restrictions. Such restrictions have disrupted and may continue to disrupt our business operations and limit our ability to perform critical functions.

Our business practices with respect to the collection, use and management of personal information could give rise to operational interruption, liabilities or reputational harm as a result of governmental regulation, legal requirements or industry standards relating to consumer privacy and data protection. As regulatory focus on privacy issues continues to increase and worldwide laws and regulations concerning the handling of personal information expand and become more complex, potential risks related to data collection and use within our business will intensify. For example, on July 16, 2020, the Court of Justice of the European Union ("CJEU") invalidated the E.U.-U.S. Privacy Shield framework – a system for complying with EU data protection requirements when transferring personal data from the European Economic Area ("EEA") to the U.S. – with immediate effect. Other data transfer mechanisms remain intact although still subject to considerable scrutiny by certain member states and their Data Protection Authorities. While legislators are said to be considering a replacement for the Privacy Shield, no action seems imminent. As a result, we may experience reluctance or refusal by current or prospective European customers to use our products, and we may find it necessary or desirable to make further changes to our handling of personal data of EEA residents. The regulatory environment applicable to the handling of EEA residents' personal data, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs, and could result in our business, operating results and financial condition being harmed. Additionally, we and our customers may face a risk of enforcement actions by data protection authorities in the EEA relating to personal data transfers to us and by us from the EEA. Any such enforcement actions could result in substantial costs and diversion of resources, distract management and technical personnel and negatively affect our business, operating results and financial condition.

In addition, U.S. and foreign governments have enacted or are considering enacting legislation or regulations, or may in the near future interpret existing legislation or regulations, in a manner that could significantly impact our ability and the ability of our customers and data partners to collect, augment, analyze, use, transfer and share personal and other information that is integral to certain services we provide. For example, in the U.S., the California Consumer Privacy Act ("CCPA") became effective in January 2020, and the U.S. Congress is considering several privacy bills at the federal level, and other state legislatures are considering privacy laws. Internationally, Brazil has recently enacted its national data privacy law (Lei Geral de Proteção de Dados Pessoais, or LGPD), which is similar to GDPR.

Regulators globally are also imposing greater monetary fines for privacy violations. For example, in 2016, the E.U. adopted a law governing data practices and privacy called the General Data Protection Regulation ("GDPR"), which became effective in May 2018. The law establishes new requirements regarding the handling of personal data. Non-compliance with the GDPR may result in monetary penalties of up to 4% of worldwide revenue. The GDPR and other changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as healthcare data or other personal information, could greatly increase our cost of providing our products and services or even prevent us from offering certain services in jurisdictions that we operate.

Additionally, public perception and standards related to the privacy of personal information can shift rapidly, in ways that may affect our reputation or influence regulators to enact regulations and laws that may limit our ability to provide certain products. Any failure, or perceived failure, by us to comply with U.S. federal, state, or foreign laws and regulations, including laws and regulations regulating privacy, data security, or consumer protection, or other policies, public perception, standards, self-

regulatory requirements or legal obligations, could result in lost or restricted business, proceedings, actions or fines brought against us or levied by governmental entities or others, or could adversely affect our business and harm our reputation.

We could incur substantial cost in protecting our proprietary software technology or if we fail to protect our technology, which would harm our business. We rely principally on a combination of contract provisions and copyright, trademark, patent and trade secret laws to protect our proprietary technology. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or to obtain and use information that we regard as proprietary. Policing unauthorized use of our products is difficult. Litigation may be necessary in the future to enforce our intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. This litigation could result in substantial costs and diversion of resources, whether or not we ultimately prevail on the merits. The steps we take to protect our proprietary rights may be inadequate to prevent misappropriation of our technology; moreover, others could independently develop similar technology.

The value of our Chef software assets may be limited by open source development and licensing practices. Our Chef offerings incorporate software components licensed to the general public under open source licenses. We obtain many components from software developed and released by contributors to independent open source components of our offerings. Open source licenses grant licensees broad permissions to use, copy, modify and redistribute our platform. As a result, open source development and licensing practices can limit the value of our software copyright assets.

We could be subject to claims that we infringe intellectual property rights of others, which could harm our business, financial condition, results of operations or cash flows. Third parties could assert infringement claims in the future with respect to our products and technology, and such claims might be successful. Litigation relating to any such claims could result in substantial costs and diversion of resources, whether or not we ultimately prevail on the merits. Any such litigation could also result in our being prohibited from selling one or more of our products, unanticipated royalty payments, reluctance by potential customers to purchase our products, or liability to our customers and could have a material adverse effect on our business, financial condition, operating results and cash flows.

Changes in accounting principles and guidance, or their interpretation or implementation, may materially adversely affect our reported results of operations or financial position. We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America (“GAAP”) These principles are subject to interpretation by the SEC and various bodies formed to create and interpret appropriate accounting principles and guidance. A change in these principles or guidance, or in their interpretations, may have a significant effect on our reported results, as well as our processes and related controls.

We may have exposure to additional tax liabilities. As a multinational corporation, we are subject to income taxes in the U.S. and various foreign jurisdictions. Significant judgment is required in determining our global provision for income taxes and other tax liabilities. In the ordinary course of a global business, there are many intercompany transactions and calculations where the ultimate tax determination is uncertain. Our income tax returns are routinely subject to audits by tax authorities. Although we regularly assess the likelihood of adverse outcomes resulting from these examinations to determine our tax estimates, a final determination of tax audits that is inconsistent with such assessments or tax disputes could have an adverse effect on our financial condition, results of operations and cash flows.

We are also subject to non-income taxes, such as payroll, sales, use, value-added, net worth, property and goods and services taxes in the U.S. and various foreign jurisdictions. We are regularly under audit by tax authorities with respect to these non-income taxes and may have exposure to additional non-income tax liabilities, which could have an adverse effect on our results of operations, financial condition and cash flows.

In addition, our future effective tax rates could be favorably or unfavorably affected by changes in tax rates, changes in the valuation of our deferred tax assets or liabilities, or changes in tax laws or their interpretation. Such changes could have a material adverse impact on our financial results.

Contracting with government entities exposes us to additional risks inherent in the government procurement process. We provide products and services, directly and indirectly, to a variety of government entities, both domestically and internationally. Risks associated with licensing and selling products and services to government entities include more extended sales and collection cycles, varying governmental budgeting processes and adherence to complex procurement regulations and other government-specific contractual requirements. We may be subject to audits and investigations relating to our government contracts and any violations could result in various civil and criminal penalties and administrative sanctions, including

termination of contracts, payment of fines, and suspension or debarment from future government business, as well as harm to our reputation and financial results.

Risks Related to Financial Performance or General Economic Conditions

Weakness in the U.S. and international economies may result in fewer sales of our products and may otherwise harm our business. We are subject to risks arising from adverse changes in global economic conditions, especially those in the U.S., Europe and Latin America. If global economic conditions weaken, credit markets tighten and/or financial markets become unstable, customers may delay, reduce or forego technology purchases, both directly and through our ISVs, resellers/distributors and OEMs. This could result in reductions in sales of our products, longer sales cycles, slower adoption of new technologies and increased price competition. Further, deteriorating economic conditions could adversely affect our customers and their ability to pay amounts owed to us. Any of these events would likely harm our business, results of operations, financial condition or cash flows.

Revenue forecasting is uncertain, and the failure to meet our forecasts could result in a decline in our stock price. Our revenues, particularly new software license revenues, are difficult to forecast. We use a pipeline system to forecast revenues and trends in our business. Our pipeline estimates may prove to be unreliable either in a particular quarter or over a longer period of time, in part because the conversion rate of the pipeline into contracts can be difficult to estimate and requires management judgment. A variation in the conversion rate could cause us to plan or budget incorrectly and result in a material adverse impact on our business or our planned results of operations. Furthermore, most of our expenses are relatively fixed, including costs of personnel and facilities. Thus, an unexpected reduction in our revenue, or failure to achieve the anticipated rate of growth, would have a material adverse effect on our profitability. If our operating results do not meet our publicly stated guidance or the expectations of investors, our stock price may decline.

We are required to comply with certain financial and operating covenants under our credit facility and to make scheduled debt payments as they become due; any failure to comply with those covenants or to make scheduled payments could cause amounts borrowed under the facility to become immediately due and payable or prevent us from borrowing under the facility. In April 2019, we entered into an amended and restated credit agreement, which consists of a \$301.0 million term loan and a \$100.0 million revolving loan (which may be increased by an additional \$125.0 million if the existing or additional lenders are willing to make such increased commitments). This facility matures in April 2024, at which time any amounts outstanding will be due and payable in full. We may wish to borrow additional amounts under the facility in the future to support our operations, including for strategic acquisitions and share repurchases.

We are required to comply with specified financial and operating covenants and to make scheduled repayments of our term loan, which may limit our ability to operate our business as we otherwise might operate it. Our failure to comply with any of these covenants or to meet any payment obligations under the facility could result in an event of default which, if not cured or waived, would result in any amounts outstanding, including any accrued interest and unpaid fees, becoming immediately due and payable. We might not have sufficient working capital or liquidity to satisfy any repayment obligations in the event of an acceleration of those obligations. In addition, if we are not in compliance with the financial and operating covenants at the time we wish to borrow funds, we will be unable to borrow funds.

Our revenue and quarterly results may fluctuate, which could adversely affect our stock price. We have experienced, and may in the future experience, significant fluctuations in our quarterly operating results that may be caused by many factors. These factors include:

- changes in demand for our products;
- introduction, enhancement or announcement of products by us or our competitors;
- market acceptance of our new products;
- the growth rates of certain market segments in which we compete;
- size and timing of significant orders;
- a high percentage of our revenue is generated in the third month of each fiscal quarter and any failure to receive, complete or process orders at the end of any quarter could cause us to fall short of our revenue targets;
- budgeting cycles of customers;
- mix of distribution channels;
- mix of products and services sold;
- mix of international and North American revenues;
- fluctuations in currency exchange rates;
- changes in the level of operating expenses;
- changes in management;

- restructuring programs;
- changes in our sales force;
- completion or announcement of acquisitions by us or our competitors;
- integration of acquired businesses;
- customer order deferrals in anticipation of new products announced by us or our competitors;
- general economic conditions in regions in which we conduct business; and
- other factors such as political or social unrest, terrorist attacks, other hostilities, natural disasters, and potential public health crises, such as COVID-19.

Our common stock price may continue to be volatile, which could result in losses for investors. The market price of our common stock, like that of other technology companies, is volatile and is subject to wide fluctuations in response to quarterly variations in operating results, announcements of technological innovations or new products by us or our competitors, changes in financial estimates by securities analysts or other events or factors. Our stock price may also be affected by broader market trends unrelated to our performance. As a result, purchasers of our common stock may be unable at any given time to sell their shares at or above the price they paid for them.

Item 1B. Unresolved Staff Comments

As of the date of this report, we do not have any open comments from the Securities and Exchange Commission (SEC) related to our financial statements or periodic filings with the SEC.

Item 2. Properties

We own our headquarters facility, which includes administrative, sales, support, marketing, product development and distribution functions, in one building totaling approximately 165,000 square feet in Bedford, Massachusetts.

We also maintain offices for administrative, sales, support, marketing, product development and/or distribution purposes in leased facilities in various other locations in North America, including Burlington, Massachusetts, Morrisville, North Carolina, and Seattle, Washington and outside North America, including Sofia, Bulgaria, Bangalore and Hyderabad, India, and Rotterdam, the Netherlands. The terms of our leases generally range from one to fifteen years.

Beginning in March 2020, our employees across all geographic regions have shifted to working from home due to the COVID-19 pandemic. Our focus remains on promoting employee health and safety as we carefully evaluate reopening plans and timelines. As of November 30, 2020, we have not terminated any significant lease arrangements. We believe our facilities are adequate for the conduct of our business should we decide to reopen our facilities in the next twelve months.

Item 3. Legal Proceedings

We are subject to various legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, management does not believe that the outcome of any of these legal matters will have a material effect on our consolidated financial position, results of operations or cash flows.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market and Stockholders

Our common stock trades on the NASDAQ Global Select Market under the symbol "PRGS".

As of December 31, 2020, our common stock was held by approximately 145 stockholders of record. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Stock Repurchases and Dividends

Repurchases of our common stock by month in the fourth quarter of fiscal year 2020 were as follows:

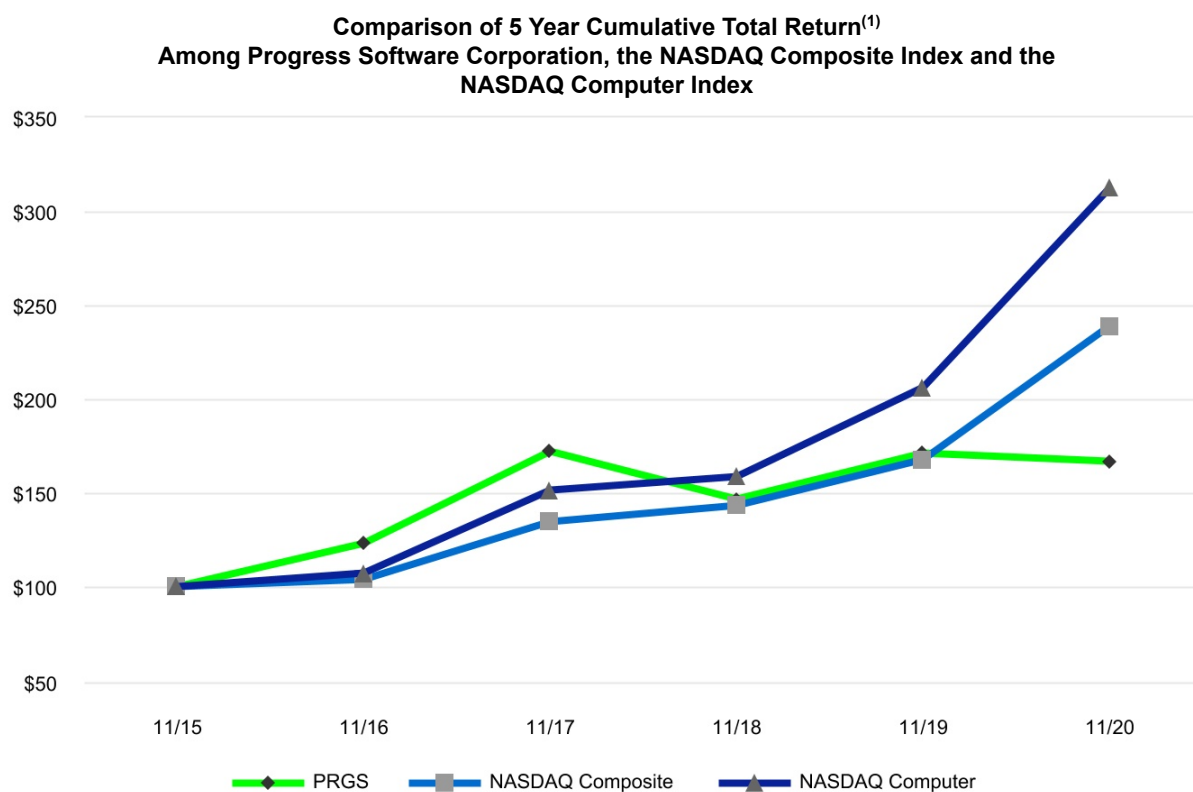
Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plans or Programs
September 1, 2020 - September 30, 2020	—	\$ —	—	\$ 230,000,000
October 1, 2020 - October 31, 2020	513,116	38.96	513,116	210,000,000
November 1, 2020 - November 30, 2020	506,881	39.44	506,881	190,000,000
Total	1,019,997	\$ 39.20	1,019,997	\$ 190,000,000

The timing and amount of any shares repurchased will be determined by management based on its evaluation of market conditions and other factors, and the Board of Directors may choose to suspend, expand or discontinue the repurchase program at any time. In January 2020, our Board of Directors increased the total share repurchase authorization to \$250.0 million. As of November 30, 2020, there was \$190.0 million remaining under the share repurchase authorization.

We have declared aggregate per share quarterly cash dividends totaling \$0.670, \$0.630 and \$0.575 for the years ended November 30, 2020, November 30, 2019 and November 30, 2018, respectively. We paid aggregate cash dividends totaling \$29.9 million, \$27.8 million and \$25.8 million for the years ended November 30, 2020, November 30, 2019 and November 30, 2018, respectively. We expect to continue paying quarterly cash dividends in subsequent quarters consistent with our capital allocation strategy.

Stock Performance Graph and Cumulative Total Return

The graph below compares the cumulative total stockholder return on our common stock with the cumulative total return on the NASDAQ Composite Index and the NASDAQ Computer Index for each of the last five fiscal years ended November 30, 2020, assuming an investment of \$100 at the beginning of such period and the reinvestment of any dividends.



⁽¹⁾ \$100 invested on November 30, 2015 in stock or index, including reinvestment of dividends.

November 30,	2015	2016	2017	2018	2019	2020
Progress Software Corporation	\$ 100.00	\$ 123.26	\$ 172.32	\$ 146.56	\$ 171.45	\$ 167.15
NASDAQ Composite	100.00	104.21	134.55	143.49	167.71	238.79
NASDAQ Computer	100.00	107.25	151.69	158.83	206.22	312.34

Item 6. Selected Financial Data

The following table sets forth selected financial data for the last five fiscal years (in thousands, except per share data):

Year Ended November 30,	2020	2019	2018	2017	2016
			As Adjusted ⁽¹⁾	As Adjusted ⁽¹⁾	As Reported ⁽¹⁾
Revenue	\$ 442,150	\$ 413,298	\$ 378,981	\$ 389,154	\$ 405,341
Income (loss) from operations	107,728	40,084	67,814	57,490	(29,709)
Net income (loss)	79,722	26,400	49,670	29,021	(55,726)
Basic earnings (loss) per share	1.78	0.59	1.09	0.60	(1.13)
Diluted earnings (loss) per share	1.76	0.58	1.08	0.60	(1.13)
Cash dividends declared per common share	0.670	0.630	0.575	0.515	0.125
Cash, cash equivalents and short-term investments	105,995	173,685	139,513	183,609	249,754
Total assets	1,041,782	881,271	644,150	718,718	754,827
Long-term debt, net, including current portion	382,502	294,719	116,089	121,909	135,000
Shareholders' equity	346,013	330,282	324,002	404,381	406,629

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. As a result, we have adjusted balances for 2018 and 2017. We have not adjusted 2016 for ASC 606. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

Fiscal year 2016 amounts were impacted by a \$92.0 million impairment charge related to the goodwill of the Application Development and Deployment reporting unit.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

Certain statements below about anticipated results and our products and markets are forward-looking statements that are based on our current plans and assumptions. Important information about the bases for these plans and assumptions and factors that may cause our actual results to differ materially from these statements is contained below and in Item 1A. "Risk Factors" of this Annual Report on Form 10-K.

Use of Constant Currency

Revenue from our international operations has historically represented a substantial portion of our total revenue. As a result, our revenue results have been impacted, and we expect will continue to be impacted, by fluctuations in foreign currency exchange rates. For example, if the local currencies of our foreign subsidiaries strengthen, our consolidated results stated in U.S. dollars are positively impacted.

As exchange rates are an important factor in understanding period to period comparisons, we believe the presentation of revenue growth rates on a constant currency basis enhances the understanding of our revenue results and evaluation of our performance in comparison to prior periods. The constant currency information presented is calculated by translating current period results using prior period weighted average foreign currency exchange rates. These results should be considered in addition to, not as a substitute for, results reported in accordance with GAAP.

Impact of COVID-19

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic, which continues to impact the U.S. and the world. COVID-19 has disrupted the business of our customers and partners, and negatively impacted our business and consolidated results of operations, and could impact our financial condition in the future. We are unable to accurately predict the full impact that COVID-19 will have due to numerous uncertainties, including the duration of the outbreak, actions that may be taken by governmental authorities, the impact to the business of our customers and partners and other factors identified in Part I, Item 1A "Risk Factors" in this Form 10-K. We will continue to evaluate the nature and extent of the impact to our business, consolidated results of operations, and financial condition.

Overview

Progress Software Corporation ("Progress," the "Company," "we," "us," or "our") provides the best products to develop, deploy and manage high-impact business applications. Our comprehensive product solutions are designed to make technology teams more productive and we have a deep commitment to the developer community, both open source and commercial alike. We operate as three distinct segments: OpenEdge, Data Connectivity and Integration, and Application Development and Deployment.

The key tenets of our strategic plan and operating model are as follows:

Trusted Provider of the Best Products to Develop, Deploy and Manage High Impact Business Applications. A key element of our strategy is centered on providing the platform and tools enterprises need to build modern, strategic business applications. We offer these products and tools to both new customers and partners as well as our existing partner and customer ecosystems. This strategy builds on our inherent DNA and our vast experience in application development that we've acquired over the past 40 years.

Focus on Customer and Partner Retention to Drive Recurring Revenue and Profitability. Our organizational philosophy and operating principles focus primarily on customer and partner retention and success and a streamlined operating approach in order to more efficiently drive, predictable and stable recurring revenue.

Total Growth Strategy Driven by Accretive M&A. We are pursuing a total growth strategy driven by accretive acquisitions of businesses within the software infrastructure space, with products that appeal to both IT organizations and individual developers. These acquisitions must meet strict financial and other criteria, which should enable us to drive significant stockholder returns by providing scale and increased cash flows. In April 2019, we acquired Ipswitch, Inc. and, as described below, in October 2020, we acquired Chef Software. Both acquisitions are expected to meet these strict financial criteria.

Chef is a global leader in providing complete infrastructure automation to build, deploy, manage and secure applications in modern multi-cloud and hybrid environments, as well as on-premises. The purchase price for Chef was \$220 million and we funded the purchase price with a combination of existing cash balances and drawings under our revolving credit facility. Chef is the developer of Chef Enterprise Automation Stack, automating infrastructure, compliance and application delivery for many of the Fortune 500.

Holistic Capital Allocation Approach. We have adopted a shareholder friendly capital allocation policy that utilizes dividends and share repurchases to return capital to shareholders. Pursuant to our capital allocation strategy that we initially announced in September 2017, we have targeted to return approximately 25% of our annual cash flows from operations to stockholders in the form of dividends. We also intend to repurchase our shares in sufficient quantities to offset dilution from our equity plans.

In fiscal year 2020, we repurchased and retired 1.4 million shares of our common stock for \$60.0 million. As of November 30, 2020, there was \$190.0 million remaining under share repurchase authorization. The timing and amount of any shares repurchased will be determined by management based on its evaluation of market conditions and other factors, and the Board of Directors may choose to suspend, expand or discontinue the repurchase program at any time.

We began paying quarterly cash dividends of \$0.125 per share of common stock to Progress stockholders in December 2016 and increased the quarterly cash dividend annually in fiscal years 2017, 2018 and 2019. On September 22, 2020, our Board of Directors approved an additional increase of 6% to our quarterly cash dividend from \$0.165 to \$0.175 and declared a quarterly dividend of \$0.175 per share of common stock. We expect to continue paying quarterly cash dividends in subsequent quarters consistent with our capital allocation strategy.

We expect to continue to pursue acquisitions meeting our financial criteria and designed to expand our business and drive significant stockholder returns. As a result, our expected uses of cash could change, our cash position could be reduced, and we may incur additional debt obligations to the extent we complete additional acquisitions. However, we believe that existing cash balances, together with funds generated from operations and amounts available under our credit facility, will be sufficient to finance our operations and meet our foreseeable cash requirements, including quarterly cash dividends and stock repurchases to Progress stockholders, as applicable, through at least the next twelve months.

We also believe that our financial resources have allowed, and will continue to allow us to manage the impact of COVID-19 on our business operations for the foreseeable future. The challenges posed by COVID-19 on our business continue to evolve. Consequently, we will continue to evaluate our financial position in light of future developments, particularly those relating to COVID-19.

We derive a significant portion of our revenue from international operations, which are primarily conducted in foreign currencies. As a result, changes in the value of these foreign currencies relative to the U.S. dollar have significantly impacted our results of operations and may impact our future results of operations. Since approximately one-third of our revenue is denominated in foreign currency, and given the volatility in the global economy created by COVID-19, our revenue results in fiscal year 2020 were impacted by fluctuations in foreign currency exchange rates.

Results of Operations

Fiscal Year 2020 Compared to Fiscal Year 2019

Revenue

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change	
	November 30, 2020	November 30, 2019	As Reported	Constant Currency
Revenue	\$ 442,150	\$ 413,298	7 %	7 %

Total revenue increased in fiscal year 2020 primarily due to the acquisitions of Ipswitch, during the second quarter of fiscal year 2019, and of Chef, during the fourth quarter of fiscal year 2020. These increases were offset by a decrease in license sales in our Data Connectivity and Integration segment. Ipswitch and Chef contributed \$67.5 million and \$3.8 million in revenue in fiscal year 2020, respectively. Changes in prices from fiscal year 2019 to 2020 did not have a significant impact on our revenue.

Software License Revenue

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change	
	November 30, 2020	November 30, 2019	As Reported	Constant Currency
License	\$ 115,249	\$ 122,552	(6)%	(6)%
<i>As a percentage of total revenue</i>	26 %	30 %		

Software license revenue decreased in fiscal year 2020 primarily due to a decrease in license sales in our Data Connectivity and Integration segment, partially offset by an increase in Ipswitch license sales, which are included in our OpenEdge segment. Refer to the Revenue by Segment section below for further discussion.

Maintenance and Services Revenue

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change	
	November 30, 2020	November 30, 2019	As Reported	Constant Currency
Maintenance	\$ 288,887	\$ 259,006	12 %	12 %
<i>As a percentage of total revenue</i>	65 %	63 %		
Professional services	\$ 38,014	\$ 31,740	20 %	20 %
<i>As a percentage of total revenue</i>	9 %	7 %		
Total maintenance and services revenue	\$ 326,901	\$ 290,746	12 %	13 %
<i>As a percentage of total revenue</i>	74 %	70 %		

Maintenance revenue increased in fiscal year 2020 primarily due to the acquisitions of Ipswitch and Chef. This increase was offset by an unfavorable impact from currency exchange rates on our OpenEdge segment maintenance revenue in fiscal year 2020. Professional services revenue increased primarily due to an increase in Application Development and Deployment professional services revenue.

Revenue by Region

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change	
	November 30, 2020	November 30, 2019	As Reported	Constant Currency
North America	\$ 260,998	\$ 233,911	12 %	12 %
<i>As a percentage of total revenue</i>	59 %	57 %		
EMEA	\$ 143,754	\$ 137,301	5 %	4 %
<i>As a percentage of total revenue</i>	33 %	33 %		
Latin America	\$ 14,574	\$ 19,665	(26)%	(14)%
<i>As a percentage of total revenue</i>	3 %	5 %		
Asia Pacific	\$ 22,824	\$ 22,421	2 %	2 %
<i>As a percentage of total revenue</i>	5 %	5 %		

Total revenue generated in North America increased \$27.1 million, and total revenue generated outside North America increased \$1.8 million, in fiscal year 2020. The increase in North America was primarily due to the acquisitions of Ipswitch and Chef, offset by decreased license sales in our Data Connectivity and Integration segment. The increase in revenue generated in EMEA was also due to the acquisitions of Ipswitch and Chef. Revenue generated in Latin America decreased due to a decrease in license sales in our OpenEdge segment. The revenue generated in Asia Pacific increased slightly primarily due to the acquisition of Ipswitch.

Total revenue generated in markets outside North America represented 41% of total revenue in fiscal year 2020 compared to 43% of total revenue in the same period last year. If exchange rates had remained constant in fiscal year 2020 as compared to the exchange rates in effect in fiscal year 2019, total revenue generated in markets outside North America would have been 41% of total revenue.

Revenue by Segment

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	Percentage Change
OpenEdge segment	\$ 326,444	\$ 296,929	10 %
Data Connectivity and Integration segment	34,187	39,903	(14)%
Application Development and Deployment segment	81,519	76,466	7 %
Total revenue	\$ 442,150	\$ 413,298	7 %

Revenue in the OpenEdge segment increased year-over-year primarily due to the acquisition of Ipswitch, partially offset by an unfavorable impact from currency exchange rates in fiscal year 2020. Data Connectivity and Integration segment revenue decreased due to the timing of term license renewals by certain of our OEM partners. Application Development and Deployment segment revenue increased primarily due to the acquisition of Chef and an increase in professional services revenue.

Cost of Software Licenses

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	Change
Cost of software licenses	\$ 4,473	\$ 4,894	\$ (421) (9)%
<i>As a percentage of software license revenue</i>	4 %	4 %	
<i>As a percentage of total revenue</i>	1 %	1 %	

Cost of software licenses consists primarily of costs of royalties, electronic software distribution, duplication, and packaging. The decrease in cost of software licenses was the result of lower payments of royalties to third parties as compared to the prior fiscal year. Cost of software licenses as a percentage of software license revenue varies from period to period depending upon the relative product mix.

Cost of Maintenance and Services

<i>(In thousands)</i>	Fiscal Year Ended			
	November 30, 2020	November 30, 2019	Change	
Cost of maintenance and services	\$ 49,744	\$ 44,463	\$ 5,281	12 %
<i>As a percentage of maintenance and services revenue</i>	15 %	15 %		
<i>As a percentage of total revenue</i>	11 %	11 %		
Components of cost of maintenance and services:				
Personnel Related Costs	\$ 35,156	\$ 31,935	\$ 3,221	10 %
Contractors and Outside Services	11,317	9,329	1,988	21 %
Hosting and Other	3,271	3,199	72	2 %
Total cost of maintenance and services	\$ 49,744	\$ 44,463	\$ 5,281	12 %

Cost of maintenance and services consists primarily of costs of providing customer support, consulting, and education. Cost of maintenance and services increased primarily due to higher personnel and contractor related costs resulting from the acquisitions of Ipswitch and Chef.

Amortization of Acquired Intangibles

<i>(In thousands)</i>	Fiscal Year Ended			Percentage Change
	November 30, 2020	November 30, 2019		
Amortization of acquired intangibles	\$ 7,897	\$ 25,884		(69)%
<i>As a percentage of total revenue</i>	2 %	6 %		

Amortization of acquired intangibles included in costs of revenue primarily represents the amortization of the value assigned to technology-related intangible assets obtained in business combinations. The year over year decrease was due to certain intangible assets being fully amortized and the impairment of intangible assets recorded in the fourth fiscal quarter of 2019 associated with the technology of our Kinvey and DataRPM acquisitions, offset by the addition of Ipswitch and Chef acquired intangibles.

Gross Profit

<i>(In thousands)</i>	Fiscal Year Ended			Percentage Change
	November 30, 2020	November 30, 2019		
Gross profit	\$ 380,036	\$ 338,057		12 %
<i>As a percentage of total revenue</i>	86 %	82 %		

Our gross profit increased primarily due to the increase in maintenance revenue and the decrease in the amortization of intangibles, offset slightly by the decrease of license revenue and increase of cost of maintenance and services, each as described above.

Sales and Marketing

<i>(In thousands)</i>	Fiscal Year Ended			
	November 30, 2020	November 30, 2019	Change	
Sales and marketing	\$ 100,113	\$ 101,701	\$ (1,588)	(2)%
<i>As a percentage of total revenue</i>	23 %	25 %		
Components of sales and marketing:				
Personnel related costs	\$ 85,167	\$ 83,957	\$ 1,210	1 %
Contractors and outside services	2,122	2,307	(185)	(8)%
Marketing programs and other	12,824	15,437	(2,613)	(17)%
Total sales and marketing	\$ 100,113	\$ 101,701	\$ (1,588)	(2)%

Sales and marketing expenses decreased in fiscal year 2020 primarily due to decreased travel and in-person events as a result of the COVID-19 pandemic, as well as cost reductions we implemented within our cognitive application product lines in the fourth quarter of fiscal year 2019. These decreases were partially offset by increased personnel costs resulting from the acquisitions of Ipswitch and Chef.

Product Development

<i>(In thousands)</i>	Fiscal Year Ended			
	November 30, 2020	November 30, 2019	Change	
Product development	\$ 88,599	\$ 88,572	\$ 27	— %
<i>As a percentage of total revenue</i>	20 %	21 %		
Components of product development costs:				
Personnel related costs	\$ 85,624	\$ 85,107	\$ 517	1 %
Contractors and outside services	2,351	2,586	(235)	(9)%
Other product development costs	624	879	(255)	(29)%
Total product developments costs	\$ 88,599	\$ 88,572	\$ 27	— %

Product development expenses remained flat year-over-year primarily due to increased personnel related expenses due to the acquisitions of Ipswitch and Chef, offset by decreased travel resulting due to the COVID-19 pandemic, and cost reductions we implemented within our cognitive application product lines in the fourth quarter of fiscal year 2019.

General and Administrative

<i>(In thousands)</i>	Fiscal Year Ended			
	November 30, 2020	November 30, 2019	Change	
General and administrative	\$ 54,004	\$ 53,360	\$ 644	1 %
<i>As a percentage of total revenue</i>	12 %	13 %		
Components of general and administrative:				
Personnel Related Costs	\$ 43,025	\$ 42,423	\$ 602	1 %
Contractors and Outside Services	8,338	7,375	963	13 %
Other general and administrative costs	2,641	3,562	(921)	(26)%
Total cost of general and administrative	\$ 54,004	\$ 53,360	\$ 644	1 %

General and administrative expenses include the costs of our finance, human resources, legal, information systems and administrative departments. General and administrative expenses increased slightly primarily due to higher personnel related costs due to the acquisitions of Ipswitch and Chef, as well as higher contractor and outside services costs, offset by decreases in other various general and administrative costs.

Amortization of Acquired Intangibles

<i>(In thousands)</i>	Fiscal Year Ended			Percentage Change
	November 30, 2020	November 30, 2019		
Amortization of acquired intangibles	\$ 20,049	\$ 22,255		(10)%
<i>As a percentage of total revenue</i>	5 %	5 %		

Amortization of acquired intangibles included in operating expenses primarily represents the amortization of value assigned to intangible assets obtained in business combinations other than assets identified as purchased technology. Amortization of acquired intangibles decreased year-over-year due to certain intangible assets being fully amortized and the impairment of certain other intangible assets, offset by the addition of Ipswitch and Chef acquired intangibles.

Impairment of Intangible and Long-Lived Assets

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2020	November 30, 2019	
Impairment of intangible and long-lived assets	\$ —	\$ 24,096	*
<i>As a percentage of total revenue</i>	— %	6 %	

*Not meaningful

In the fourth quarter of fiscal year 2019 we determined that the intangible assets associated with the technology obtained in connection with the acquisitions of DataRPM and Kinvey were fully impaired. As a result, we incurred an impairment charge of \$22.7 million in the fourth quarter of fiscal year 2019. See Note 6 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional details. In addition, during the fourth quarter of fiscal year 2019, we incurred an additional asset impairment charge of \$1.4 million related to the abandonment of certain long-lived assets associated with a sale of corporate land and buildings. See Note 5 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional details.

Restructuring Expenses

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2020	November 30, 2019	
Restructuring expenses	\$ 5,906	\$ 6,331	(7)%
<i>As a percentage of total revenue</i>	1 %	2 %	

Restructuring expenses recorded in fiscal year 2020 relate to the restructuring activities that occurred in fiscal years 2020, 2019 and 2017. See Note 15 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional details, including types of expenses incurred and the timing of future expenses and cash payments. See also the Liquidity and Capital Resources section of this Item 2, Management's Discussion and Analysis of Financial Condition and Results of Operations.

Acquisition-Related Expenses

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2020	November 30, 2019	
Acquisition-related expenses	\$ 3,637	\$ 1,658	*
<i>As a percentage of total revenue</i>	1 %	— %	

*Not meaningful

Acquisition-related costs are expensed as incurred and include those costs incurred as a result of a business combination. These costs consist of professional services fees, including third-party legal and valuation-related fees, as well as retention fees, and earn-out payments treated as compensation expense. Acquisition-related expenses in fiscal year 2020 were primarily related to the acquisition of Chef. Acquisition-related expenses in fiscal year 2019 were related to the acquisition of Ipswitch.

Income from Operations

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2020	November 30, 2019	
Income from operations	\$ 107,728	\$ 40,084	169 %
<i>As a percentage of total revenue</i>	24 %	10 %	

Income from operations increased year over year due to an increase in revenue and decreases in costs of revenue and operating expenses as shown above.

Income from Operations by Segment

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	Percentage Change
OpenEdge segment	\$ 250,092	\$ 211,720	18 %
Data Connectivity and Integration segment	25,790	31,930	(19)%
Application Development and Deployment segment	44,770	52,473	(15)%
Other unallocated expenses	(212,924)	(256,039)	17 %
Total income from operations	\$ 107,728	\$ 40,084	169 %

Note that the following expenses are not allocated to our segments as we manage and report our business in these functional areas on a consolidated basis only: certain product development and corporate sales and marketing expenses, customer support, administration, amortization of acquired intangibles, loss on assets held for sale, stock-based compensation, fees related to shareholder activist, restructuring, and acquisition-related expenses.

Other (Expense) Income

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	Percentage Change
Interest expense	\$ (10,170)	\$ (9,913)	(3)%
Interest income and other, net	1,495	1,143	31 %
Foreign currency loss, net	(2,418)	(2,819)	14 %
Total other expense, net	\$ (11,093)	\$ (11,589)	4 %
<i>As a percentage of total revenue</i>	<i>(3)%</i>	<i>(3)%</i>	

Other expense, net, decreased in fiscal year 2020 as a result of lower foreign currency loss offset by increased interest expense over the period. The increase in interest expense is due to an increase in the outstanding principle balance of our debt to fund the Ipswich and Chef acquisitions, offset by declining rates throughout fiscal year 2020.

Provision for Income Taxes

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	Percentage Change
Provision for income taxes	\$ 16,913	\$ 2,095	*
<i>As a percentage of total revenue</i>	<i>4 %</i>	<i><1%</i>	

*Not meaningful

Our effective income tax rate was 18% in fiscal year 2020 and 7% in fiscal year 2019. The primary reason for the increase in the effective rate was due to the loss incurred by our US operations in fiscal year 2019 resulting from the amortization and impairment of intangibles described above. In addition, the majority of our international profits in fiscal year 2019 were earned in a jurisdiction with a statutory tax rate of 10%.

Net Income

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	Percentage Change
Net income	\$ 79,722	\$ 26,400	202 %
<i>As a percentage of total revenue</i>	<i>18 %</i>	<i>6 %</i>	

Fiscal 2019 Compared to Fiscal 2018

Adoption of New Accounting Standard

We adopted the new accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018, using the full retrospective method, which required us to restate prior comparable periods. See *Note 1. Nature of Business and Summary of Significant Accounting Policies* for further information. *Management's Discussion and Analysis of Financial Condition and Results of Operations* has also been adjusted to reflect the full retrospective adoption of ASC 606.

Revenue

(In thousands)	Fiscal Year Ended		Percentage Change	
	November 30, 2019	November 30, 2018	As Reported	Constant Currency
Revenue	\$ 413,298	\$ 378,981	9 %	11 %

Total revenue increased in fiscal year 2019 primarily due to the acquisition of Ipswitch during the second quarter of fiscal year 2019, and an increase in license sales in our Data Connectivity and Integration segment. Ipswitch contributed \$28.2 million in revenue in fiscal year 2019. The increase in total revenue was partially offset by an unfavorable impact from currency exchange rates in fiscal year 2019. Changes in prices from fiscal year 2018 to 2019 did not have a significant impact on our revenue.

License Revenue

(In thousands)	Fiscal Year Ended		Percentage Change	
	November 30, 2019	November 30, 2018	As Reported	Constant Currency
License	\$ 122,552	\$ 99,800	23 %	25 %
<i>As a percentage of total revenue</i>	30 %	26 %		

Software license revenue increased in fiscal year 2019 primarily due to the acquisition of Ipswitch and an increase in license sales in our Data Connectivity and Integration segment. The increase in license revenue was partially offset by an unfavorable impact from currency exchange rates in fiscal year 2019.

Maintenance and Services Revenue

(In thousands)	Fiscal Year Ended		Percentage Change	
	November 30, 2019	November 30, 2018	As Reported	Constant Currency
Maintenance	\$ 259,006	\$ 249,171	4 %	6 %
<i>As a percentage of total revenue</i>	63 %	66 %		
Professional services	\$ 31,740	\$ 30,010	6 %	7 %
<i>As a percentage of total revenue</i>	8 %	8 %		
Total maintenance and services revenue	\$ 290,746	\$ 279,181	4 %	6 %
<i>As a percentage of total revenue</i>	70 %	74 %		

Maintenance revenue increased in fiscal year 2019 due to the acquisition of Ipswitch and a slight increase in maintenance revenue in our Application Development and Deployment segment. This increase was offset by an unfavorable impact from currency exchange rates on our OpenEdge segment maintenance revenue in fiscal year 2019. Professional services revenue increased in fiscal year 2019 primarily due to an increase in OpenEdge professional services revenue, partially offset by lower professional services revenue generated by our Application Development and Deployment segment.

Revenue by Region

(In thousands)	Fiscal Year Ended		Percentage Change	
	November 30, 2019	November 30, 2018	As Reported	Constant Currency
North America	\$ 233,911	\$ 204,257	15 %	15 %
As a percentage of total revenue	57 %	54 %		
EMEA	\$ 137,301	\$ 135,055	2 %	6 %
As a percentage of total revenue	33 %	35 %		
Latin America	\$ 19,665	\$ 18,046	9 %	16 %
As a percentage of total revenue	5 %	5 %		
Asia Pacific	\$ 22,421	\$ 21,623	4 %	7 %
As a percentage of total revenue	5 %	6 %		

Total revenue generated in North America increased \$29.7 million, and total revenue generated outside North America increased \$4.7 million, in fiscal year 2019. The increase in North America was primarily due to the acquisition of Ipswitch and higher license revenue generated by our Data Connectivity and Integration segment. The increase in revenue generated in EMEA in fiscal year 2019 was also due to the acquisition of Ipswitch and higher license revenue generated by our Data Connectivity and Integration segment, partially offset by the unfavorable effect of foreign exchange rates. Revenue generated in Latin America increased in fiscal year 2019 due to an increase in license sales in our OpenEdge segment. The revenue generated in Asia Pacific increased slightly in fiscal year 2019 primarily due to the acquisition of Ipswitch.

Total revenue generated in markets outside North America represented 43% of total revenue in fiscal year 2019 compared to 46% of total revenue in the prior fiscal year. If exchange rates had remained constant in fiscal year 2019 as compared to the exchange rates in effect in fiscal year 2018, total revenue generated in markets outside North America would have been 44% of total revenue.

Revenue by Segment

(In thousands)	Fiscal Year Ended		
	November 30, 2019	November 30, 2018	Percentage Change
OpenEdge segment	\$ 296,929	\$ 277,806	7 %
Data Connectivity and Integration segment	39,903	23,129	73 %
Application Development and Deployment segment	76,466	78,046	(2)%
Total revenue	\$ 413,298	\$ 378,981	9 %

Revenue in the OpenEdge segment increased in fiscal year 2019 primarily due to the acquisition of Ipswitch, partially offset by an unfavorable impact from currency exchange rates in fiscal year 2019. Data Connectivity and Integration segment revenue increased in fiscal year 2019 primarily due to the timing of certain renewals by OEMs. Application Development and Deployment segment revenue decreased in fiscal year 2019, primarily due to lower license and professional services revenue, partially offset by an increase in maintenance revenue.

Cost of Software Licenses

(In thousands)	Fiscal Year Ended		
	November 30, 2019	November 30, 2018	Change
Cost of software licenses	\$ 4,894	\$ 4,769	\$ 125 3 %
As a percentage of software license revenue	4 %	5 %	
As a percentage of total revenue	1 %	1 %	

Cost of software licenses consists primarily of costs of royalties, electronic software distribution, duplication, and packaging. Cost of software licenses as a percentage of software license revenue varies from period to period depending upon the relative product mix. During the periods presented above, cost of software licenses remained relatively flat as a percentage of revenue.

Cost of Maintenance and Services

(In thousands)	Fiscal Year Ended			
	November 30, 2019	November 30, 2018	Change	
Cost of maintenance and services	\$ 44,463	\$ 39,470	\$ 4,993	13 %
As a percentage of maintenance and services revenue	15 %	14 %		
As a percentage of total revenue	11 %	10 %		
Components of cost of maintenance and services:				
Personnel Related Costs	\$ 31,935	\$ 28,052	\$ 3,883	14 %
Contractors and Outside Services	9,329	8,639	690	8 %
Hosting and Other	3,199	2,779	420	15 %
Total cost of maintenance and services	\$ 44,463	\$ 39,470	\$ 4,993	13 %

Cost of maintenance and services consists primarily of costs of providing customer support, consulting, and education. Cost of maintenance and services increased in fiscal year 2019 primarily due to higher personnel related costs resulting from the acquisition of Ipswitch.

Amortization of Acquired Intangibles

(In thousands)	Fiscal Year Ended			Percentage Change
	November 30, 2019	November 30, 2018		
Amortization of acquired intangibles	\$ 25,884	\$ 22,734		14 %
As a percentage of total revenue	6 %	6 %		

Amortization of acquired intangibles included in costs of revenue primarily represents the amortization of the value assigned to technology-related intangible assets obtained in business combinations. Amortization of acquired intangibles increased in fiscal year 2019, primarily due to the addition of intangible assets associated with the technologies obtained in connection with the acquisition of Ipswitch.

Gross Profit

(In thousands)	Fiscal Year Ended			Percentage Change
	November 30, 2019	November 30, 2018		
Gross profit	\$ 338,057	\$ 312,008		8 %
As a percentage of total revenue	82 %	82 %		

Our gross profit increased in fiscal year 2019 primarily due to the increases of license and maintenance revenue, offset slightly by the increase of cost of maintenance and services and the amortization of acquired intangibles, each as described above.

Sales and Marketing

(In thousands)	Fiscal Year Ended			
	November 30, 2019	November 30, 2018	Change	
Sales and marketing	\$ 101,701	\$ 93,036	\$ 8,665	9 %
As a percentage of total revenue	25 %	25 %		
Components of sales and marketing:				
Personnel related costs	\$ 83,957	\$ 75,394	\$ 8,563	11 %
Contractors and outside services	2,307	2,046	261	13 %
Marketing programs and other	15,437	15,596	(159)	(1)%
Total sales and marketing	\$ 101,701	\$ 93,036	\$ 8,665	9 %

Sales and marketing expenses increased in fiscal year 2019 primarily due to increased personnel related expenses as a result of

increased headcount from the acquisition of Ipswitch.

Product Development

<i>(In thousands)</i>	Fiscal Year Ended			
	November 30, 2019	November 30, 2018	Change	
Product development	\$ 88,572	\$ 79,739	\$ 8,833	11 %
<i>As a percentage of total revenue</i>	21 %	21 %		
Components of product development costs:				
Personnel related costs	\$ 85,107	\$ 76,766	\$ 8,341	11 %
Contractors and outside services	2,586	2,263	323	14 %
Other product development costs	879	710	169	24 %
Total product developments costs	\$ 88,572	\$ 79,739	\$ 8,833	11 %

Product development expenses increased in fiscal year 2019 primarily due to increased personnel related expenses as a result of the acquisition of Ipswitch.

General and Administrative

<i>(In thousands)</i>	Fiscal Year Ended			
	November 30, 2019	November 30, 2018	Change	
General and administrative	\$ 53,360	\$ 49,050	\$ 4,310	9 %
<i>As a percentage of total revenue</i>	13 %	13 %		
Components of general and administrative:				
Personnel Related Costs	\$ 42,447	\$ 34,749	\$ 7,698	22 %
Contractors and Outside Services	7,375	9,447	(2,072)	(22)%
Other general and administrative costs	3,538	4,854	(1,316)	(27)%
Total cost of general and administrative	\$ 53,360	\$ 49,050	\$ 4,310	9 %

General and administrative expenses include the costs of our finance, human resources, legal, information systems and administrative departments. General and administrative expenses increased in fiscal year 2019 primarily due to increased stock-based compensation expense.

Amortization of Acquired Intangibles

<i>(In thousands)</i>	Fiscal Year Ended			Percentage Change
	November 30, 2019	November 30, 2018		
Amortization of acquired intangibles	\$ 22,255	\$ 13,241		68 %
<i>As a percentage of total revenue</i>	5 %	3 %		

Amortization of acquired intangibles included in operating expenses primarily represents the amortization of value assigned to intangible assets obtained in business combinations other than assets identified as purchased technology. Amortization of acquired intangibles increased in fiscal year 2019 due to the addition of intangible assets obtained in connection with the acquisition of Ipswitch.

Impairment of Intangible and Long-Lived Assets

<i>(In thousands)</i>	Fiscal Year Ended			Percentage Change
	November 30, 2019	November 30, 2018		
Impairment of intangible and long-lived assets	\$ 24,096	\$ —		*
<i>As a percentage of total revenue</i>	6 %	— %		

*Not meaningful

In the fourth quarter of fiscal year 2019 we determined that the intangible assets associated with the technology obtained in connection with the acquisitions of DataRPM and Kinvey were fully impaired. As a result, we incurred an impairment charge of \$22.7 million in the fourth quarter of fiscal year 2019. See Note 6 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional details. In addition, during the fourth quarter of fiscal year 2019, we incurred an additional asset impairment charge of \$1.4 million related to the abandonment of certain long-lived assets associated with a sale of corporate land and buildings. See Note 5 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional details.

Restructuring Expenses

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2018	
Restructuring expenses	\$ 6,331	\$ 2,251	181 %
<i>As a percentage of total revenue</i>	2 %	1 %	

Restructuring expenses recorded in fiscal year 2019 related to the restructuring activities that occurred in fiscal years 2019 and 2017. See Note 15 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional details, including types of expenses incurred and the timing of future expenses and cash payments. See also the Liquidity and Capital Resources section of this Item 2, Management's Discussion and Analysis of Financial Condition and Results of Operations.

Acquisition-Related Expenses

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2018	
Acquisition-related expenses	\$ 1,658	\$ 258	*
<i>As a percentage of total revenue</i>	— %	— %	

*Not meaningful

Acquisition-related costs are expensed as incurred and include those costs incurred as a result of a business combination. These costs consist of professional services fees, including third-party legal and valuation-related fees, as well as retention fees, and earn-out payments treated as compensation expense. Acquisition-related expenses in fiscal year 2019 were related to the acquisition of Ipswitch.

Loss on Assets Held for Sale

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2017	
Loss on assets held for sale	\$ —	\$ 5,147	*
<i>As a percentage of total revenue</i>	— %	1 %	

*Not meaningful

In the fourth quarter of fiscal year 2018, we reclassified certain corporate land and building assets previously reported as property and equipment to assets held for sale on our consolidated balance sheets as we were actively marketing them and expected to sell them within one year. As a result, we recognized an impairment charge of \$5.1 million, which represented the difference between the fair value less cost to sell and the carrying value of the assets. The impairment charge was recorded to loss on assets held for sale within operating expenses on our fiscal year 2018 consolidated statement of operations. See Note 5 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional details.

Fees Related to Shareholder Activist

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2018	
Fees related to shareholder activist	\$ —	\$ 1,472	*
<i>As a percentage of total revenue</i>	—%	—%	

*Not meaningful

In September 2017, Praesidium Investment Management, then one of our largest stockholders, publicly announced its disagreement with our strategy in a Schedule 13D filed with the SEC and stated that it was seeking changes in the composition of our Board of Directors. In fiscal year 2018, we incurred professional and other fees relating to Praesidium's actions.

Income from Operations

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2018	
Income from operations	\$ 40,084	\$ 67,814	(41)%
<i>As a percentage of total revenue</i>	10%	18%	

Income from operations decreased in fiscal year 2019. As described above, the decrease was primarily driven by the impairment of intangible and long-lived assets in the fourth quarter of fiscal year 2019, as well as increases in operating expenses, amortization of acquired intangible assets, restructuring expenses and acquisition expenses recorded in fiscal year 2019 as a result of the acquisition of Ipswitch. This decrease was partially offset by increased revenue in fiscal year 2019 and the loss on assets held for sale recorded in fiscal year 2018, as described above.

Income from Operations by Segment

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2018	
OpenEdge segment	\$ 211,720	\$ 209,986	1%
Data Connectivity and Integration segment	31,930	15,495	106%
Application Development and Deployment segment	52,473	50,959	3%
Other unallocated expenses	(256,039)	(208,626)	(23)%
Total income from operations	\$ 40,084	\$ 67,814	(41)%

Note that the following expenses are not allocated to our segments as we manage and report our business in these functional areas on a consolidated basis only: certain product development and corporate sales and marketing expenses, customer support, administration, amortization of acquired intangibles, loss on assets held for sale, stock-based compensation, fees related to shareholder activist, restructuring, and acquisition-related expenses.

Other (Expense) Income

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2018	
Interest expense	\$ (9,913)	\$ (5,149)	93%
Interest income and other, net	1,143	1,220	(6)%
Foreign currency loss	(2,819)	(3,089)	(9)%
Total other expense, net	\$ (11,589)	\$ (7,018)	(65)%
<i>As a percentage of total revenue</i>	(3)%	(2)%	

Other expense, net, increased in fiscal year 2019 primarily due to an increase in interest expense. The change in interest expense is a result of an increase in the principal balance of our debt, which was used to fund the Ipswitch acquisition.

Provision for Income Taxes

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2018	
Provision for income taxes	\$ 2,095	\$ 11,126	(81)%
<i>As a percentage of total revenue</i>	<i><1%</i>	<i>3 %</i>	

Our effective income tax rate was 7% in fiscal year 2019 and 18% in fiscal year 2018. The primary reason for the decrease in the effective rate was due to the loss incurred by our US operations in fiscal year 2019 resulting from the amortization and impairment of intangibles. In addition, the majority of our international profits were earned in a jurisdiction with a statutory tax rate of 10%.

Net Income

<i>(In thousands)</i>	Fiscal Year Ended		Percentage Change
	November 30, 2019	November 30, 2018	
Net income	\$ 26,400	\$ 49,670	(47)%
<i>As a percentage of total revenue</i>	<i>6 %</i>	<i>13 %</i>	

Liquidity and Capital Resources

Cash, Cash Equivalents and Short-Term Investments

<i>(In thousands)</i>	November 30, 2020	November 30, 2019
Cash and cash equivalents	\$ 97,990	\$ 154,259
Short-term investments	8,005	19,426
Total cash, cash equivalents and short-term investments	\$ 105,995	\$ 173,685

The decrease in cash, cash equivalents and short-term investments of \$67.7 million from the end of fiscal year 2019 was primarily due to payments for acquisitions, net of cash acquired, of \$213.1 million, dividend payments of \$29.9 million, repurchases of common stock of \$60.0 million, payments of debt obligations in the amount of \$11.3 million, and purchases of property and equipment of \$6.5 million. These cash outflows were offset by cash inflows from operations of \$144.8 million, proceeds from the issuance of long term debt of \$98.5 million, \$5.8 million in cash received from the issuance of common stock, a positive effect of exchange rates on cash of \$3.1 million, and proceeds from sale of intangible assets of \$0.9 million. Except as described below, there are no limitations on our ability to access our cash, cash equivalents and short-term investments.

Cash, cash equivalents and short-term investments held by our foreign subsidiaries were \$24.7 million and \$23.1 million at November 30, 2020 and 2019, respectively. Foreign cash includes unremitted foreign earnings, which are invested indefinitely outside of the U.S. As such, they are not available to fund our domestic operations. If we were to repatriate these earnings, we may be subject to income tax withholding in certain tax jurisdictions and a portion of the repatriated earnings may be subject to U.S. income tax. However, we do not anticipate that the repatriation of earnings would have a material adverse impact on our liquidity.

Share Repurchases

In January 2020, our Board of Directors increased the total share repurchase authorization from \$75.0 million to \$250.0 million. In fiscal years 2020 and 2019, we repurchased and retired 1.4 million shares of our common stock for \$60.0 million and 0.7 million shares of our common stock for \$25.0 million, respectively, under this current authorization. In fiscal year 2018, we repurchased and retired 2.9 million shares of our common stock for \$120.0 million. As of November 30, 2020, there was \$190.0 million remaining under the current share repurchase authorization.

Dividends

We began paying quarterly cash dividends of \$0.125 per share of common stock to Progress stockholders in December 2016 and increased the quarterly cash dividend to \$0.14 per share in September 2017. In September 2018, the quarterly cash dividend was increased to \$0.155 per share of common stock. On September 24, 2019, our Board of Directors approved an additional increase to our quarterly cash dividend from \$0.155 to \$0.165 per share of common stock. On September 24, 2020, our Board of Directors approved an additional increase of 6% to our quarterly cash dividend from \$0.165 to \$0.175 per share of common stock. We have paid aggregate cash dividends totaling \$29.9 million, \$27.8 million and \$25.8 million for the years ended November 30, 2020, November 30, 2019 and November 30, 2018, respectively. We expect to continue paying quarterly cash dividends in subsequent quarters consistent with our capital allocation strategy.

Restructuring Activities

During the first quarter of fiscal year 2017, we announced certain operational restructuring initiatives intended to significantly reduce annual costs. As part of this action, management committed to a new strategic plan highlighted by a new product strategy and a streamlined operating approach. To execute these operational restructuring initiatives, we reduced our global workforce by over 20%. These workforce reductions occurred in substantially all functional units and across all geographies in which we then operated.

As part of this fiscal year 2017 restructuring, for the fiscal years ended November 30, 2020 and 2019, we incurred expenses of \$0.4 million and \$0.7 million, respectively, which are recorded as restructuring expenses on the consolidated statements of operations. We do not expect to incur additional material costs with respect to this restructuring.

During the second quarter of fiscal year 2019, we restructured our operations in connection with the acquisition of Ipswitch. This restructuring resulted in a reduction in redundant positions, primarily within administrative functions of Ipswitch. For the fiscal years ended November 30, 2020 and 2019, we incurred expenses of \$1.5 million and \$3.1 million, respectively, as part of this action related to employee costs and facility closures as we consolidated offices in various locations. These expenses are recorded as restructuring expenses in the consolidated statements of operations. We do not expect to incur additional material costs with respect to this restructuring.

During the fourth quarter of fiscal year 2019, we announced the reduction of our current and ongoing investment level within our cognitive application product lines, which consisted primarily of our DataRPM and Kinvey products. This restructuring resulted in a reduction in positions primarily within the sales and product development functions. For the fiscal years ended November 30, 2020 and 2019, we incurred expenses of \$0.1 million and \$2.5 million, respectively, in connection with the restructuring, which are recorded as restructuring expenses in the consolidated statements of operations. We do not expect to incur additional material costs with respect to this restructuring.

In connection with this restructuring action, during the fourth quarter of fiscal year 2019, we evaluated the ongoing value of the intangible assets primarily associated with the technologies and trade names obtained in the acquisitions of DataRPM and Kinvey. As a result, we wrote down these assets to fair value, which resulted in a \$22.7 million asset impairment charge.

During the fourth quarter of fiscal year 2020, we restructured our operations in connection with the acquisition of Chef. This restructuring resulted in a reduction in redundant positions, primarily within administrative functions of Chef. For the fiscal year ended November 30, 2020, we incurred expenses of \$3.9 million relating to this restructuring. The expenses are recorded as restructuring expenses in the consolidated statements of operations. We expect to incur additional expenses as part of this action related to employee costs and facility closures as we consolidate offices in various locations during fiscal year 2021, but we do not expect these costs to be material. Cash disbursements for expenses incurred to date under this restructuring are expected to be made through fiscal year 2021. Accordingly, the balance of the restructuring reserve of \$3.5 million is included in other accrued liabilities on the consolidated balance sheet at November 30, 2020.

Credit Facility

Our credit agreement provides for a \$301.0 million secured term loan and a \$100.0 million secured revolving credit facility. The revolving credit facility may be made available in U.S. Dollars and certain other currencies and may be increased by up to an additional \$125.0 million if the existing or additional lenders are willing to make such increased commitments. The revolving credit facility has sublimits for swing line loans up to \$25.0 million and for the issuance of standby letters of credit in a face amount up to \$25.0 million. We expect to use the revolving credit facility for general corporate purposes, including acquisitions of other businesses, and may also use it for working capital.

The Credit Agreement modified our prior credit facility by extending the maturity date to April 30, 2024 and extending the principal repayments of the term loan. We borrowed an additional \$185.0 million under the term loan as part of this modified credit facility. The new term loan was used to partially fund our acquisition of Ipswitch in April 2019. During October 2020, we partially funded our acquisition of Chef by drawing down \$98.5 million under the revolving line of credit (Note 7).

The credit facility matures on April 30, 2024, when all amounts outstanding will be due and payable in full. The revolving credit facility does not require amortization of principal. The outstanding balance of the term loan as of November 30, 2020 was \$286.0 million, with \$18.8 million due in the next 12 months. The term loan requires repayment of principal at the end of each fiscal quarter, beginning with the fiscal quarter ended August 31, 2019. The principal repayment amounts are in accordance with the following schedule: (i) four payments of \$1.9 million each, (ii) four payments of \$3.8 million each, (iii) four payments of \$5.6 million each, (iv) four payments of \$7.5 million each, (v) three payments of \$9.4 million each, and (vi) the last payment is of the remaining principal amount. Any amounts outstanding under the term loan thereafter would be due on the maturity date.

The term loan may be prepaid before maturity in whole or in part at our option without penalty or premium. The average interest rate of the credit facility during the fiscal year ended November 30, 2020 was 2.41% and the interest rate as of November 30, 2020 was 1.81%. In July 2019, we entered into an interest rate swap contract with an initial notional amount of \$150.0 million to manage the variability of cash flows associated with approximately one-half of our variable rate debt. The contract matures on April 30, 2024 and requires periodic interest rate settlements.

Revolving loans may be borrowed, repaid, and reborrowed until April 30, 2024, at which time all amounts outstanding must be repaid. As of November 30, 2020, there was \$98.5 million outstanding under the revolving line and \$2.1 million of letters of credit.

The credit facility contains customary affirmative and negative covenants, in each case subject to customary exceptions for a credit facility of this size and type. We are also required to maintain compliance with a consolidated fixed charge coverage ratio, a consolidated total leverage ratio and a consolidated senior secured leverage ratio. We are in compliance with these financial covenants as of November 30, 2020.

Cash Flows from Operating Activities

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018
Net income	\$ 79,722	\$ 26,400	\$ 49,670
Non-cash reconciling items included in net income	64,534	90,139	68,542
Changes in operating assets and liabilities	591	11,945	3,140
Net cash flows from operating activities	\$ 144,847	\$ 128,484	\$ 121,352

The increase in cash generated from operations in fiscal year 2020 as compared to fiscal year 2019 was primarily due to higher operating income. There were not any significant non-cash reconciling items in fiscal year 2020.

Cash flows in fiscal year 2020 increased significantly due to increased collections resulting from the acquisitions of Ipswitch and Chef, partially offset by increased personnel related expenditures. Cash flows in fiscal year 2020 also increased due to lower operating expenses primarily as a result of decreased travel and in-person events resulting from the COVID-19 pandemic, as well as cost reductions we implemented within our cognitive application product lines in the fourth quarter of fiscal year 2019.

Our gross accounts receivable as of November 30, 2020 increased by \$11.7 million from the end of fiscal year 2019, which is primarily due to the acquisition of Chef, offset by strong collections. Days sales outstanding ("DSO") in accounts receivable decreased to 54 days at the end of fiscal year 2020 compared to 56 days at the end of fiscal year 2019, with the increase due to the timing of billings. In addition, our total deferred revenue as of November 30, 2020 increased by \$16.0 million from the end of fiscal year 2019.

The significant changes in operating assets and liabilities in fiscal year 2019 as compared to fiscal year 2018 were primarily due to an increase in deferred revenue and personnel related expenditures. In fiscal year 2019 there was a \$22.7 million intangible asset impairment charge, which was the most significant non-cash reconciling item included in net income (see Note 4 to the Consolidated Financial Statements in Item 8 of this Form 10-K for further information on the impairment charge). In fiscal year

2018 there was a non-cash reconciling item included in net income for a \$5.1 million loss on assets held for sale (see Note 5 to the Consolidated Financial Statements in Item 8 of this Form 10-K for further information on the impairment charge). In addition, our gross accounts receivable as of November 30, 2019 increased by \$13.1 million from the end of fiscal year 2018, which was primarily due to the acquisition of Ipswitch. DSO in accounts receivable increased to 56 days at the end of fiscal year 2019 compared to 47 days at the end of fiscal year 2018.

Cash Flows (used in) from Investing Activities

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018
Net investment activity	\$ 11,392	\$ 14,770	\$ 14,843
Purchases of property and equipment	(6,517)	(3,998)	(7,250)
Proceeds from sale of long-lived assets, net	889	6,146	—
Payments for acquisitions, net of cash acquired	(213,057)	(225,298)	—
Net cash flows (used in) from investing activities	\$ (207,293)	\$ (208,380)	\$ 7,593

Net cash outflows and inflows of our net investment activity are generally a result of the timing of our purchases and maturities of securities, which are classified as cash equivalents or short-term securities, as well as the timing of acquisitions and divestitures. Cash used in investing activities was impacted by the acquisition of Chef for a net cash amount of \$213.1 million and Ipswitch for a net cash amount of \$225.3 million, in fiscal years 2020 and 2019, respectively. We did not complete any acquisitions during fiscal year 2018. In addition, we purchased \$6.5 million of property and equipment in fiscal year 2020, as compared to \$4.0 million in fiscal year 2019 and \$7.3 million in fiscal year 2018. We also sold \$0.9 million of intangible assets in the fourth quarter of fiscal year 2020 and \$6.1 million of certain corporate land and building assets in the second quarter of fiscal year 2019.

Cash Flows from (used in) Financing Activities

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018
Proceeds from stock-based compensation plans	\$ 11,099	\$ 9,265	\$ 9,205
Repurchases of common stock	(60,000)	(25,000)	(120,000)
Dividend payment to shareholders	(29,900)	(27,760)	(25,789)
Proceeds from the issuance of debt, net of payments of principal and debt issuance costs	87,212	178,065	(6,188)
Other financing activities	(5,331)	(4,278)	(3,999)
Net cash flows from (used in) financing activities	\$ 3,080	\$ 130,292	\$ (146,771)

During fiscal year 2020, we received \$11.1 million from the exercise of stock options and the issuance of shares under our employee stock purchase plan as compared to \$9.3 million in fiscal year 2019 and \$9.2 million in fiscal year 2018. In addition, we made dividend payments of \$29.9 million to our stockholders in fiscal year 2020, as compared to dividend payments of \$27.8 million and \$25.8 million in fiscal years 2019 and 2018, respectively. Most significantly, we received proceeds from the issuance of debt of \$98.5 million in fiscal year 2020 and \$185.0 million in fiscal year 2019 in connection with the acquisitions of Chef and Ipswitch, respectively. In addition, we repurchased \$60.0 million of our common stock under our share repurchase plan in fiscal year 2020, compared to \$25.0 million in fiscal year 2019 and \$120.0 million in fiscal year 2018. We also made principal payments on our debt of \$11.3 million during fiscal year 2020, as compared to \$5.3 million in fiscal year 2019 and \$6.2 million in fiscal year 2018.

Indemnification Obligations

We include standard intellectual property indemnification provisions in our licensing agreements in the ordinary course of business. Pursuant to our product license agreements, we will indemnify, hold harmless, and agree to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally business partners or customers, in connection with certain patent, copyright or other intellectual property infringement claims by third parties with respect to our products. Other agreements with our customers provide indemnification for claims relating to property damage or personal injury resulting from the performance of services by us or our subcontractors. Historically, our costs to defend lawsuits or settle claims relating to such indemnity agreements have been insignificant. Accordingly, the estimated fair value of these indemnification provisions is immaterial.

Liquidity Outlook

Cash from operations in fiscal year 2021 could be affected by various risks and uncertainties, including, but not limited to, the effects of the pandemic and other risks detailed in Part I, Item 1A titled "Risk Factors." While the pandemic has not negatively impacted our liquidity and capital resources to date, it has led to increased disruption and volatility in capital markets and credit markets which could adversely affect our liquidity and capital resources in the future. However, based on our current business plan, we believe that existing cash balances, together with funds generated from operations and amounts available under our credit facility, will be sufficient to finance our operations and meet our foreseeable cash requirements through at least the next twelve months. We do not contemplate a need for any foreign repatriation of the earnings which are deemed invested indefinitely outside of the U.S. Our foreseeable cash needs include our planned capital expenditures, debt repayments, quarterly cash dividends, share repurchases, acquisitions, lease commitments, restructuring obligations and other long-term obligations.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements as defined in Item 303(a)(4) of Regulation S-K.

Contractual Obligations

The following table details our contractual obligations as of November 30, 2020 (in thousands):

	Payments Due by Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Long-term debt:					
Long-term debt obligations	\$ 384,450	\$ 18,812	\$ 60,201	\$ 305,437	\$ —
Interest payments on long-term debt ⁽¹⁾	21,984	6,857	12,402	2,725	—
Operating leases	33,981	7,707	14,072	11,327	875
Purchase obligations ⁽²⁾	8,670	1,664	7,006	—	—
Unrecognized tax benefits ⁽³⁾	303	303	—	—	—
Total	<u>\$ 449,388</u>	<u>\$ 35,343</u>	<u>\$ 93,681</u>	<u>\$ 319,489</u>	<u>\$ 875</u>

(1) Interest on our long-term debt is due and payable monthly and is estimated using the effective interest rate as of November 30, 2020 as the interest rate is variable. See Note 8 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

(2) Represents the fixed or minimum amounts due under purchase obligations for support service agreements.

(3) Our other noncurrent liabilities on the consolidated balance sheet include unrecognized tax benefits and related interest and penalties. As of November 30, 2020, we had unrecognized tax benefits of \$6.2 million and an additional \$0.4 million for interest and penalties classified as noncurrent liabilities. Currently, we are only able to estimate a FY21 payment of \$0.3 million related to an audit settlement. For the remaining balance we are unable to make a reasonably reliable estimate of the timing of payments in individual years in connection with these tax liabilities; therefore, such amounts are not included in the above contractual obligation table. See Note 16 to our Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

Critical Accounting Policies

Management's discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements which have been prepared in accordance with GAAP. We make estimates and assumptions in the preparation of our consolidated financial statements that affect the reported amounts of assets and liabilities, revenue and expenses and related disclosures of contingent assets and liabilities. We base our estimates on historical experience and various other assumptions that we believe are reasonable under the circumstances. However, actual results may differ from these estimates.

We have identified the following critical accounting policies that require the use of significant judgments and estimates in the preparation of our consolidated financial statements. This listing is not a comprehensive list of all of our accounting policies. For further information regarding the application of these and other accounting policies, see Note 1 to our Consolidated Financial Statements in Item 8 of this Form 10-K.

Revenue Recognition

Our contracts with customers typically include promises to license one or more products and services to a customer. Determining whether products and services are distinct performance obligations that should be accounted for separately requires significant judgment. Significant judgment is also required to determine the stand-alone selling price ("SSP") of each distinct performance obligation. Our licenses are sold as perpetual or term licenses, and the arrangements typically contain various combinations of maintenance and services, which are generally accounted for as separate performance obligations. We use the residual approach to allocate the transaction price to our software license performance obligations because, due to the pricing of our licenses being highly variable, they do not have an observable SSP.

Maintenance revenue is recognized ratably over the contract period. The SSP of maintenance services is a percentage of the net selling price of the related software license. Professional services revenue is generally recognized as the services are delivered to the customer. We apply the practical expedient of recognizing revenue upon invoicing for time and materials-based arrangements. The SSP of services is based upon observable prices in similar transactions using the hourly rates sold in stand-alone services transactions. Services are either sold on a time and materials basis or prepaid upfront. Revenue related to software-as-a-service ("SaaS") offerings is recognized ratably over the contract period. The SSP of SaaS performance obligations is determined based upon observable prices in stand-alone SaaS transactions.

We also consider whether an arrangement has any discounts, material rights, or specified future upgrades that may represent additional performance obligations, although we do not have a history of offering these elements.

Goodwill and Intangible Asset Impairment

We had goodwill and net intangible assets of \$704.5 million at November 30, 2020. We evaluate goodwill and other intangible assets with indefinite useful lives, if any, for impairment annually or on an interim basis when events and circumstances arise that indicate impairment may have occurred. We perform our annual goodwill impairment as of October 31st of each fiscal year. We believe this date aligns the timing of the annual goodwill impairment testing with our planning and budgeting process, which is a key component of the tests, and alleviates administrative burden during our year-end reporting period.

In performing our annual assessment, we first perform a qualitative test to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value and if necessary, perform a quantitative test. To conduct the quantitative impairment test of goodwill, we compare the fair value of a reporting unit to its carrying value. If the reporting unit's carrying value exceeds its fair value, we record an impairment loss to the extent that the carrying value of goodwill exceeds its implied fair value. We estimate the fair values of our reporting units using discounted cash flow models or other valuation models, such as comparative transactions and market multiples. We must make assumptions about future cash flows, future operating plans, discount rates, comparable companies, market multiples, purchase price premiums and other factors in those models. Different assumptions and judgment determinations could yield different conclusions that would result in an impairment charge to income in the period that such change or determination was made.

When we evaluate potential impairments outside of our annual measurement date, judgment is required in determining whether an event has occurred that may impair the value of goodwill or intangible assets. Factors that could indicate that an impairment may exist include significant underperformance relative to plan or long-term projections, significant changes in business strategy, significant negative industry or economic trends or a significant decline in our stock price for a sustained period of time.

The determination of reporting units also requires management judgment. We consider whether a reporting unit exists within a reportable segment based on the availability of discrete financial information that is regularly reviewed by segment management. As of November 30, 2020, our three reporting units were OpenEdge, Data Connectivity and Integration, and Application Development and Deployment

During fiscal year 2020, we tested goodwill for impairment for each of our reporting units as of October 31, 2020. Our reporting units each had fair values which significantly exceeded their carrying values as of the annual impairment date. We did not recognize any goodwill impairment charges during fiscal years 2020, 2019 or 2018.

During fiscal year 2019, we evaluated the ongoing value of the intangible assets associated with the technology obtained in connection with the acquisitions of DataRPM and Kinvey. As a result of our decision to reduce our current and ongoing spending levels within our cognitive application product lines, which consist primarily of our DataRPM and Kinvey products, we determined that the intangible assets were fully impaired. Therefore, we incurred an impairment charge of \$22.7 million in the fourth quarter of fiscal year 2019 (Note 4). We did not recognize any intangible asset impairment charges during fiscal years 2020 and 2018.

Income Tax Accounting

We had a net deferred tax asset of \$14.5 million at November 30, 2020. We record valuation allowances to reduce deferred tax assets to the amount that is more likely than not to be realized. We consider scheduled reversals of temporary differences, projected future taxable income, tax planning strategies and other matters in assessing the need for and the amount of a valuation allowance. If we were to change our assumptions or otherwise determine that we were unable to realize all or part of our net deferred tax asset in the future, an adjustment to the deferred tax asset would be charged to income in the period that such change or determination was made.

Management judgment is also required in evaluating whether a tax position taken or expected to be taken in a tax return, based on the weight of available evidence, indicates that it is more likely than not that, on an evaluation of the technical merits, the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. Management judgment is also required in measuring the tax benefit as the largest amount that is more than 50% likely of being realized upon ultimate settlement. If management made different estimates or judgments, material differences in the amount accrued for uncertain tax positions would occur.

Stock-Based Compensation

We recognize stock-based compensation expense based on the fair value of stock-based awards, less the present value of expected dividends when applicable, measured at the date of grant. Stock-based compensation is recognized over the requisite service period, which is generally the vesting period of the award, and is adjusted each period for actual forfeitures.

We estimate the fair value of each stock-based award on the measurement date using either the current market price, the Black-Scholes option valuation model, or the Monte Carlo Simulation valuation model. The Black-Scholes and Monte Carlo Simulation valuation models incorporate assumptions as to the expected stock price volatility, the expected term of the option, a risk-free interest rate and a dividend yield. The expected volatility is based on the historical volatility of our stock price. The expected term is derived from historical data on employee exercises and post-vesting employment termination behavior. The risk-free interest rate is based on the yield of zero-coupon U.S. Treasury securities for the period that is commensurate with the expected option term at the time of grant. The expected dividend yield is based on our historical behavior and future expectations of dividend declarations.

Business Combinations

We allocate the purchase price of acquired companies to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. The estimates used to value the net assets acquired are based in part on historical experience and information obtained from the management of the acquired company. We generally value the identifiable intangible assets acquired using a discounted cash flow model. The significant estimates used in valuing certain of the intangible assets include, but are not limited to: future expected cash flows of the asset, discount rates to determine the present value of the future cash flows, attrition rates of customers, and expected technology life cycles. We also estimate the useful lives of the intangible assets based on the expected period over which we anticipate generating economic benefit from the asset.

Our estimates of fair value are based on assumptions believed to be reasonable at that time. If management made different estimates or judgments, material differences in the fair values of the net assets acquired may result.

Recent Accounting Pronouncements

Refer to Note 1 to our Consolidated Financial Statements in Item 8 of this Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to a variety of risks, including changes in interest rates affecting the return on our investments and borrowing activities and foreign currency fluctuations. We have established policies and procedures to manage our exposure to fluctuations in interest rates and foreign currency exchange rates.

Interest Rate Risk

Exposure to interest rate risk is related to changing interest rates under our Credit Agreement, which are variable and based on an index selected at our option. The rates range from 1.50% to 2.00% above the Eurocurrency rate for Eurocurrency-based borrowings or from 0.50% to 1.00% above the defined base rate for base rate borrowings. Additionally, we may borrow certain foreign currencies at rates set in the same respective range above the London interbank offered interest rates for those currencies. The outstanding balance of the term loan as of November 30, 2020 was \$286.0 million.

On July 9, 2019, we entered into an interest rate swap contract with an initial notional amount of \$150.0 million to manage the variability of cash flows associated with approximately one-half of our variable rate debt. The contract matures on April 30, 2024 and requires periodic interest rate settlements. Under this interest rate swap contract, we receive a floating rate based on the greater of 1-month LIBOR or 0.00% and pay a fixed rate of 1.855% on the outstanding notional amount. As of November 30, 2020, the notional value of the hedge was \$142.5 million. As of November 30, 2020, the fair value of the hedge was a loss of \$6.9 million and was included in other noncurrent liabilities on our consolidated balance sheets.

	November 30, 2020		November 30, 2019	
	Notional Value	Fair Value	Notional Value	Fair Value
Interest rate swap contracts designated as cash flow hedges	\$ 142,500	\$ (6,855)	\$ 148,125	\$ (2,054)

Foreign Currency Risk

Exposure to market rate risk for changes in interest rates relates to our investment portfolio. We have not used derivative financial instruments in our investment portfolio. We place our investments with high-quality issuers and have policies limiting, among other things, the amount of credit exposure to any one issuer. We seek to limit default risk by purchasing only investment-grade securities. Our investments have an average remaining maturity of less than two years or interest-rate resets of less than 60 days and are primarily fixed-rate instruments. In addition, we have classified our debt securities as available-for-sale. The available-for-sale classification reduces the consolidated statements of operations exposure to interest rate risk if such investments are held until their maturity date because changes in fair value due to market changes in interest rates are recorded on the consolidated balance sheet in accumulated other comprehensive income. Based on a hypothetical 10% adverse movement in interest rates, the potential losses in future earnings, fair value of risk-sensitive instruments and cash flows are immaterial.

We generally use forward contracts that are not designated as hedging instruments to hedge economically the impact of the variability in exchange rates on intercompany accounts receivable and loans receivable denominated in certain foreign currencies. We generally do not hedge the net assets of our international subsidiaries. All forward contracts are recorded at fair value in other current assets, other assets, other accrued liabilities, or other noncurrent liabilities on the consolidated balance sheets at the end of each reporting period and expire between 30 days and 2 years from the date the contract was entered. In fiscal year 2020, realized and unrealized gains of \$1.7 million from our forward contracts were recognized in foreign currency loss, net on the consolidated statements of operations. These losses were substantially offset by realized and unrealized gains and losses on the offsetting positions.

Foreign currency translation exposure from a 10% movement of currency exchange rates would have a material impact on our reported revenue and net income. Based on a hypothetical 10% adverse movement in all foreign currency exchange rates, our revenue would be adversely affected by approximately 3%, or \$12 million, and our net income would be adversely affected by approximately 5%, or \$4 million (excluding any offsetting positive impact from our ongoing hedging programs), although the actual effects may differ materially from the hypothetical analysis.

The table below details outstanding foreign currency forward contracts at November 30, 2020 and 2019 where the notional amount is determined using contract exchange rates (in thousands):

	November 30, 2020		November 30, 2019	
	Notional Value	Fair Value	Notional Value	Fair Value
Forward contracts to sell U.S. dollars	\$ 69,031	\$ 1,445	\$ 66,951	\$ (85)
Forward contracts to purchase U.S. dollars	440	(3)	1,457	5
Total	\$ 69,471	\$ 1,442	\$ 68,408	\$ (80)

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Progress Software Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Progress Software Corporation and subsidiaries (the "Company") as of November 30, 2020 and 2019, the related consolidated statements of operation, comprehensive income, shareholders' equity, and cash flows, for each of the three years in the period ended November 30, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of November 30, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended November 30, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of November 30, 2020, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated January 27, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue recognition - Refer to Note 1 to the financial statements

Critical Audit Matter Description

The Company derives revenue from multiple sources, including software licenses, maintenance and services. Frequently, the customer arrangements provide software licenses combined with maintenance and therefore including multiple performance obligations under ASC 606, Revenue from Contracts with Customer. The identification of performance obligations of the arrangement, particularly for more complex customer arrangements, requires a detailed analysis of the contractual terms and application of more complex accounting guidance. In addition, the allocation of the transaction price to each performance obligation within an arrangement (license, maintenance and services) and the timing of revenue recognition, requires the application of management judgment. Revenue arrangements with higher contract values frequently require more complex management judgments.

Given the accounting complexity and the management judgment necessary to identify performance obligations in the arrangement and determine the timing and allocation of revenue in arrangements with multiple performance obligations,

auditing revenue recognition for such arrangements required a high degree of auditor judgment and an increased extent of effort.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the recognition of revenue from multiple-performance-obligation arrangements included the following, among others:

- We tested the effectiveness of controls over revenue recognition, including those over the identification of performance obligations included in the transaction, the allocation of transaction price to these performance obligations, the timing of revenue recognition.
- We evaluated the Company's accounting policies in the context of the applicable accounting standards.
- We evaluated the appropriateness and consistency of the methods and assumptions used by management to determine the standalone selling price of delivered and undelivered performance obligations of the arrangement.
- We selected a sample of revenue arrangements, including those arrangements that we considered individually significant, and performed the following:
 - We obtained related contracts and evaluated whether the contracts properly documented the terms of the arrangements in accordance with the Company's policies.
 - We tested management's identification of distinct performance obligations by evaluating whether the underlying goods, services, or both were highly interdependent and interrelated.
 - We evaluated whether the Company appropriately determined all performance obligations in the arrangement and whether the methodology to allocate the transaction price to the individual performance obligation was appropriately applied based on their standalone selling prices.
 - We compared the transaction price to the consideration expected to be received based on current rights and obligations under the contracts and any modifications that were agreed upon with the customers.
 - We tested the allocation of the transaction price to each distinct performance obligation by comparing the relative standalone selling prices to the selling prices of similar goods or services.
 - We evaluated whether the value allocated to each performance obligation was appropriately recognized in the correct accounting period.
 - We obtained evidence of delivery of the performance obligations of the arrangement to the customer.

Chef Acquisition - Refer to Note 7 to the financial statements

Critical Audit Matter Description

The Company completed the acquisition of Chef Software, Inc. ("Chef") for cash consideration of approximately \$220 million on October 5, 2020. The Company accounted for the acquisition of Chef under the acquisition method of accounting for business combinations. Accordingly, the purchase price was allocated to the assets acquired and liabilities assumed based on their respective fair values. The method for determining fair value varied depending on the type of asset or liability and involved management making significant estimates related to assumptions such as the discount rates, customer attrition, and revenue growth projections.

We identified the valuation of the intangible assets of Chef as a critical audit matter because of the significant estimates management makes to determine their fair value. This requires a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists, when performing audit procedures to evaluate the reasonableness of management's assumptions related to the discount rates, customer attrition, and revenue growth projections.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the fair value of assets acquired and liabilities assumed for Chef included the following, among others:

- We tested the effectiveness of controls over the valuation of intangible assets, including management's controls over forecasts of revenue growth projections, customer attrition rate, and selection of the discount rate.
- We assessed the reasonableness of management's revenue growth projections and customer attrition rate by comparing these assumptions to historical results and certain peer companies.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the (1) valuation methodology and (2) valuation assumptions by:
 - Testing the source information underlying the determination of the valuation assumptions and testing the mathematical accuracy of the calculation.

- Developing a range of independent estimates and comparing those to the assumptions selected by management.
 - Evaluating whether the fair value models being used is appropriate considering the Company’s circumstances and valuation premise identified.
- We evaluated whether the estimated future cash flows were consistent with evidence obtained in other areas of the audit.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
January 27, 2021

We have served as the Company's auditor since 1990.

PROGRESS SOFTWARE CORPORATION
Consolidated Balance Sheets

(In thousands, except share data)

	November 30, 2020	November 30, 2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 97,990	\$ 154,259
Short-term investments	8,005	19,426
Total cash, cash equivalents and short-term investments	105,995	173,685
Accounts receivable (less allowances of \$1,315 in 2020 and \$825 in 2019)	84,040	72,820
Unbilled receivables and contract assets	24,917	10,880
Other current assets	23,983	27,280
Total current assets	238,935	284,665
Long-term unbilled receivables and contract assets	17,133	12,492
Property and equipment, net	29,817	29,765
Intangible assets, net	212,747	99,392
Goodwill	491,726	432,824
Right-of-use lease assets	30,635	—
Deferred tax assets	14,490	18,601
Other assets	6,299	3,532
Total assets	\$ 1,041,782	\$ 881,271
Liabilities and shareholders' equity		
Current liabilities:		
Current portion of long-term debt, net	\$ 18,242	\$ 10,717
Accounts payable	9,978	10,603
Accrued compensation and related taxes	36,816	34,444
Dividends payable to shareholders	7,904	7,498
Short-term operating lease liabilities	7,015	—
Income taxes payable	1,899	1,444
Other accrued liabilities	14,302	18,685
Short-term deferred revenue	166,387	157,494
Total current liabilities	262,543	240,885
Long-term debt, net	364,260	284,002
Long-term operating lease liabilities	26,966	—
Long-term deferred revenue	26,908	19,752
Other noncurrent liabilities	15,092	6,350
Commitments and contingencies (Note 10)		
Shareholders' equity:		
Preferred stock, \$0.01 par value; authorized, 10,000,000 shares; issued, none	—	—
Common stock, \$0.01 par value, and additional paid-in capital; authorized, 200,000,000 shares; issued and outstanding, 44,240,635 shares in 2020 and 45,036,441 shares in 2019	442	450
Additional paid-in capital	305,802	295,503
Retained earnings	72,547	64,303
Accumulated other comprehensive loss	(32,778)	(29,974)
Total shareholders' equity	346,013	330,282
Total liabilities and shareholders' equity	\$ 1,041,782	\$ 881,271

See notes to consolidated financial statements.

PROGRESS SOFTWARE CORPORATION
Consolidated Statements of Operations

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
<i>(In thousands, except per share data)</i>			
Revenue:			
Software licenses	\$ 115,249	\$ 122,552	\$ 99,800
Maintenance and services	326,901	290,746	279,181
Total revenue	<u>442,150</u>	<u>413,298</u>	<u>378,981</u>
Costs of revenue:			
Cost of software licenses	4,473	4,894	4,769
Cost of maintenance and services	49,744	44,463	39,470
Amortization of acquired intangibles	7,897	25,884	22,734
Total costs of revenue	<u>62,114</u>	<u>75,241</u>	<u>66,973</u>
Gross profit	<u>380,036</u>	<u>338,057</u>	<u>312,008</u>
Operating expenses:			
Sales and marketing	100,113	101,701	93,036
Product development	88,599	88,572	79,739
General and administrative	54,004	53,360	49,050
Amortization of acquired intangibles	20,049	22,255	13,241
Impairment of intangible and long-lived assets	—	24,096	—
Restructuring expenses	5,906	6,331	2,251
Acquisition-related expenses	3,637	1,658	258
Loss on assets held for sale	—	—	5,147
Fees related to shareholder activist	—	—	1,472
Total operating expenses	<u>272,308</u>	<u>297,973</u>	<u>244,194</u>
Income from operations	<u>107,728</u>	<u>40,084</u>	<u>67,814</u>
Other (expense) income:			
Interest expense	(10,170)	(9,913)	(5,149)
Interest income and other, net	1,495	1,143	1,220
Foreign currency loss, net	(2,418)	(2,819)	(3,089)
Total other expense, net	<u>(11,093)</u>	<u>(11,589)</u>	<u>(7,018)</u>
Income before income taxes	<u>96,635</u>	<u>28,495</u>	<u>60,796</u>
Provision for income taxes	16,913	2,095	11,126
Net income	<u>\$ 79,722</u>	<u>\$ 26,400</u>	<u>\$ 49,670</u>
Earnings per share:			
Basic	\$ 1.78	\$ 0.59	\$ 1.09
Diluted	\$ 1.76	\$ 0.58	\$ 1.08
Weighted average shares outstanding:			
Basic	44,886	44,791	45,561
Diluted	45,321	45,340	46,135
Cash dividends declared per common share	\$ 0.670	\$ 0.630	\$ 0.575

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

See notes to consolidated financial statements.

PROGRESS SOFTWARE CORPORATION
Consolidated Statements of Comprehensive Income

<i>(In thousands)</i>	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
Net income	\$ 79,722	\$ 26,400	\$ 49,670
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	777	(420)	(9,796)
Unrealized loss on hedging activity, net of tax benefit of \$1,176 in 2020 and \$503 in 2019, respectively	(3,625)	(1,551)	—
Unrealized gain on investments, net of tax provision of \$32, \$60 and \$57 in 2020, 2019 and 2018, respectively	44	173	26
Total other comprehensive (loss), net of tax	(2,804)	(1,798)	(9,770)
Comprehensive income	\$ 76,918	\$ 24,602	\$ 39,900

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

See notes to consolidated financial statements.

PROGRESS SOFTWARE CORPORATION
Consolidated Statements of Shareholders' Equity

<i>(in thousands)</i>	Common Stock		Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
	Number of Shares	Amount				
Balance, December 1, 2017, as adjusted ⁽¹⁾	47,281	\$ 473	\$ 249,363	\$ 172,951	\$ (18,406)	\$ 404,381
Issuance of stock under employee stock purchase plan	225	2	5,456	—	—	5,458
Exercise of stock options	189	2	3,856	—	—	3,858
Vesting of restricted stock units and release of deferred stock units	407	4	—	—	—	4
Withholding tax payments related to net issuance of restricted stock units	(108)	(1)	(3,998)	—	—	(3,999)
Stock-based compensation	—	—	20,569	—	—	20,569
Adjustment due to adoption of ASU 2016-09 (Note 1)	—	—	641	(641)	—	—
Dividends declared	—	—	—	(26,169)	—	(26,169)
Treasury stock repurchases and retirements	(2,879)	(29)	(9,285)	(110,686)	—	(120,000)
Net income	—	—	—	49,670	—	49,670
Other comprehensive income	—	—	—	—	(9,770)	(9,770)
Balance, November 30, 2018, as adjusted ⁽¹⁾	45,115	\$ 451	\$ 266,602	\$ 85,125	\$ (28,176)	\$ 324,002
Issuance of stock under employee stock purchase plan	189	2	5,505	—	—	5,507
Exercise of stock options	119	1	3,620	—	—	3,621
Vesting of restricted stock units and release of deferred stock units	364	4	(1)	—	—	3
Withholding tax payments related to net issuance of restricted stock units	(106)	(1)	(4,277)	—	—	(4,278)
Stock-based compensation	—	—	23,311	—	—	23,311
Issuance of shares related to non-compete agreement (Note 7)	44	—	2,000	—	—	2,000
Adjustment due to adoption of ASU 2016-16 (Note 1)	—	—	—	4,781	—	4,781
Dividends declared	—	—	—	(28,267)	—	(28,267)
Treasury stock repurchases and retirements	(688)	(7)	(1,257)	(23,736)	—	(25,000)
Net income	—	—	—	26,400	—	26,400
Other comprehensive loss	—	—	—	—	(1,798)	(1,798)
Balance, November 30, 2019	45,037	\$ 450	\$ 295,503	\$ 64,303	\$ (29,974)	\$ 330,282

Issuance of stock under employee stock purchase plan	237	2	6,604	—	—	6,606
Exercise of stock options	137	1	4,360	—	—	4,361
Vesting of restricted stock units and release of deferred stock units	416	4	(4)	—	—	—
Withholding tax payments related to net issuance of restricted stock units	(140)	(1)	(5,330)	—	—	(5,331)
Stock-based compensation	—	—	23,482	—	—	23,482
Dividends declared	—	—	—	(30,305)	—	(30,305)
Treasury stock repurchases and retirements	(1,446)	(14)	(18,813)	(41,173)	—	(60,000)
Net income	—	—	—	79,722	—	79,722
Other comprehensive loss	—	—	—	—	(2,804)	(2,804)
Balance, November 30, 2020	44,241	\$ 442	\$ 305,802	\$ 72,547	\$ (32,778)	\$ 346,013

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

See notes to consolidated financial statements.

PROGRESS SOFTWARE CORPORATION
Consolidated Statements of Cash Flows

(In thousands)	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
Cash flows from operating activities:			
Net income	\$ 79,722	\$ 26,400	\$ 49,670
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of property and equipment	6,144	7,552	6,941
Amortization of acquired intangibles and other	28,621	49,127	37,561
Stock-based compensation	23,482	23,311	20,569
Non-cash lease expense	8,609	—	—
Loss on disposal of property and equipment	1,025	376	390
Loss on assets held for sale	—	—	5,147
Impairment of intangible and long-lived assets	—	24,096	—
Deferred income taxes	(2,622)	(14,869)	(2,328)
Allowances for bad debt and sales credits	164	546	262
Gain on sale of intangible assets	(889)	—	—
Changes in operating assets and liabilities:			
Accounts receivable and unbilled receivables	10,682	(24,655)	18,708
Other assets	1,561	(1,902)	(10,332)
Accounts payable and accrued liabilities	(4,974)	9,116	(11,842)
Lease liabilities	(8,101)	—	—
Income taxes payable	3	(454)	(2,890)
Deferred revenue	1,420	29,840	9,496
Net cash flows from operating activities	<u>144,847</u>	<u>128,484</u>	<u>121,352</u>
Cash flows (used in) from investing activities:			
Purchases of investments	(5,009)	(10,550)	(8,258)
Sales and maturities of investments	16,401	25,320	23,101
Purchases of property and equipment	(6,517)	(3,998)	(7,250)
Payments for acquisitions, net of cash acquired	(213,057)	(225,298)	—
Proceeds from sale of long-lived assets, net	889	6,146	—
Net cash flows (used in) from investing activities	<u>(207,293)</u>	<u>(208,380)</u>	<u>7,593</u>
Cash flows from (used in) financing activities:			
Proceeds from stock-based compensation plans	11,099	9,265	9,205
Payments for taxes related to net share settlements of equity awards	(5,331)	(4,278)	(3,999)
Repurchases of common stock	(60,000)	(25,000)	(120,000)
Dividend payments to shareholders	(29,900)	(27,760)	(25,789)
Proceeds from the issuance of debt	98,500	184,985	—
Payment of principal on long-term debt	(11,288)	(5,309)	(6,188)
Payment of issuance costs for long-term debt	—	(1,611)	—
Net cash flows from (used in) financing activities	<u>3,080</u>	<u>130,292</u>	<u>(146,771)</u>
Effect of exchange rate changes on cash	3,097	(1,263)	(10,512)
Net (decrease) increase in cash and cash equivalents	<u>(56,269)</u>	<u>49,133</u>	<u>(28,338)</u>
Cash and cash equivalents, beginning of year	154,259	105,126	133,464
Cash and cash equivalents, end of year	<u>\$ 97,990</u>	<u>\$ 154,259</u>	<u>\$ 105,126</u>

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

Supplemental disclosure:

Cash paid for income taxes, net of refunds of \$724 in 2020, \$1,385 in 2019 and \$909 in 2018	\$	16,107	\$	16,340	\$	25,451
Cash paid for interest	\$	9,175	\$	8,666	\$	4,220
Non-cash investing and financing activities:						
Total fair value of restricted stock awards, restricted stock units and deferred stock units on date vested	\$	17,046	\$	16,573	\$	16,431
Dividends declared	\$	7,904	\$	7,498	\$	6,998

See notes to consolidated financial statements.

PROGRESS SOFTWARE CORPORATION
Notes to Consolidated Financial Statements

Note 1: Nature of Business and Summary of Significant Accounting Policies

The Company

Progress Software Corporation ("Progress," the "Company," "we," "us," or "our") provides the best products to develop, deploy and manage high-impact business applications. Our comprehensive product stack is designed to make technology teams more productive and we have a deep commitment to the developer community, both open source and commercial alike. With Progress, organizations can accelerate the creation and delivery of strategic business applications, automate the process by which apps are configured, deployed and scaled, and make critical data and content more accessible and secure—leading to competitive differentiation and business success. Over 1,700 independent software vendors ("ISVs"), 100,000 enterprise customers, and three million developers rely on Progress to power their applications.

Our products are generally sold as perpetual licenses, but certain products also use term licensing models and our cloud-based offerings use a subscription-based model. More than half of our worldwide license revenue is realized through relationships with indirect channel partners, principally ISVs, original equipment manufacturers ("OEMs"), distributors and value-added resellers. ISVs develop and market applications using our technology and resell our products in conjunction with sales of their own products that incorporate our technology. OEMs are companies that embed our products into their own software products or devices. Value-added resellers are companies that add features or services to our product, then resell it as an integrated product or complete "turn-key" solution.

We operate in North America and Latin America (the "Americas"); Europe, the Middle East and Africa ("EMEA"); and the Asia Pacific region, through local subsidiaries as well as independent distributors.

Accounting Principles

We prepare our consolidated financial statements and accompanying notes in conformity with accounting principles generally accepted in the United States of America ("GAAP").

Basis of Consolidation

The consolidated financial statements include our accounts and those of our subsidiaries (all of which are wholly owned). We eliminate all intercompany balances and transactions.

Use of Estimates

The preparation of consolidated financial statements requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an on-going basis, management evaluates its estimates and records changes in estimates in the period in which they become known. These estimates are based on historical data and experience, as well as various other assumptions that management believes to be reasonable under the circumstances. The most significant estimates relate to: the timing and amount of revenue recognition, including the determination of the nature and timing of the satisfaction of performance obligations, the standalone selling price of performance obligations, and the transaction price allocated to performance obligations; the realization of tax assets and estimates of tax liabilities; fair values of investments in marketable securities; intangible assets and goodwill valuations; the recognition and disclosure of contingent liabilities; the collectability of accounts receivable; and assumptions used to determine the fair value of stock-based compensation. Actual results could differ from those estimates.

Foreign Currency Translation

The functional currency of most of our foreign subsidiaries is the local currency in which the subsidiary operates. For foreign operations where the local currency is considered to be the functional currency, we translate assets and liabilities into U.S. dollars at the exchange rate on the balance sheet date. We translate income and expense items at average rates of exchange prevailing during each period. We accumulate translation adjustments in accumulated other comprehensive loss, a component of shareholders' equity.

For foreign operations where the U.S. dollar is considered to be the functional currency, we remeasure monetary assets and liabilities into U.S. dollars at the exchange rate on the balance sheet date and non-monetary assets and liabilities are remeasured

into U.S. dollars at historical exchange rates. We translate income and expense items at average rates of exchange prevailing during each period. We recognize remeasurement adjustments currently as a component of foreign currency loss, net in the statements of operations.

Transaction gains or losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency are included in foreign currency loss, net in the statements of operations as incurred.

Cash Equivalents and Investments

Cash equivalents include short-term, highly liquid investments purchased with remaining maturities of three months or less. As of November 30, 2020, all of our cash equivalents were invested in money market funds.

We classify investments, state and municipal bond obligations, U.S. treasury and government agency bonds, and corporate bonds and notes, as investments available-for-sale, which are stated at fair value. We include aggregate unrealized holding gains and losses, net of taxes, on available-for-sale securities as a component of accumulated other comprehensive loss in shareholders' equity. We include realized gains and losses in interest income and other, net on the consolidated statements of operations.

We monitor our investment portfolio for impairment on a periodic basis. In the event that the carrying value of an investment exceeds its fair value and the decline in value is determined to be other than temporary, an impairment charge is recorded and a new cost basis for the investment is established. In determining whether an other-than-temporary impairment exists, we consider the nature of the investment, the length of time and the extent to which the fair value has been less than cost, and our intent and ability to continue holding the security for a period sufficient for an expected recovery in fair value.

Allowances for Doubtful Accounts and Sales Credit Memos

We maintain an allowance for doubtful accounts for estimated losses resulting from the inability of customers to make required payments. We establish this allowance using estimates that we make based on factors such as the composition of the accounts receivable aging, historical bad debts, changes in payment patterns, changes to customer creditworthiness and current economic trends.

We also record an allowance for estimates of potential sales credit memos. This allowance is determined based on an analysis of historical credit memos issued and current economic trends, and is recorded as a reduction of revenue.

A summary of activity in the allowance for doubtful accounts is as follows (in thousands):

	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
Beginning balance	\$ 667	\$ 574	\$ 498
ASC 606 adjustment	—	—	88
Charge to costs and expenses	429	606	216
Write-offs and other	(169)	(457)	(232)
Translation adjustments	(41)	(56)	4
Ending balance	\$ 886	\$ 667	\$ 574

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

A summary of activity in the allowance for sales credit memos is as follows (in thousands):

	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
Beginning balance	\$ 158	\$ 266	\$ 178
ASC 606 adjustment	—	—	41
Charge (credit) to revenue	265	(60)	46
Write-offs and other	—	(46)	—
Translation adjustments	6	(2)	1
Ending balance	<u>\$ 429</u>	<u>\$ 158</u>	<u>\$ 266</u>

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

Concentrations of Credit Risk

Our financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash and cash equivalents, investments, derivative instruments and trade receivables. We have cash investment policies which, among other things, limit investments to investment-grade securities. We hold our cash and cash equivalents, investments and derivative instrument contracts with high quality financial institutions and we monitor the credit ratings of those institutions. We perform ongoing credit evaluations of our customers, and the risk with respect to trade receivables is further mitigated by the diversity, both by geography and by industry, of the customer base. No single customer represented more than 10% of consolidated accounts receivable or revenue in fiscal years 2020, 2019 or 2018.

Fair Value of Financial Instruments

The carrying amount of our cash and cash equivalents, accounts receivable, accounts payable and long-term debt approximates fair value due to the short-term nature or market interest rates of these items. We base the fair value of short-term investments on quoted market prices or other relevant information generated by market transactions involving identical or comparable assets. We measure and record derivative financial instruments at fair value. See Note 4 for further discussion of financial instruments that are carried at fair value on a recurring and nonrecurring basis.

Derivative Instruments

We record all derivatives on the consolidated balance sheets at fair value. We use derivative instruments to manage exposures to fluctuations in the value of foreign currencies, which exist as part of our ongoing business operations.

Cash Flow Hedge

We entered into an interest rate swap contract in July 2019 to manage the variability of cash flows associated with approximately one-half of our variable rate debt. We have designated the interest rate swap as a cash flow hedge and we assessed the hedge's effectiveness both at the onset of the hedge and at regular intervals throughout the life of the derivative. To the extent that the interest rate swap is highly effective in offsetting the variability of the hedged cash flows, changes in the fair value of the derivative are included as a component of other comprehensive loss on our consolidated balance sheets. Although we determined at the onset of the hedge that the interest rate swap will be a highly effective hedge throughout the term of the contract, any portion of the fair value swap subsequently determined to be ineffective will be recognized in earnings.

Forward Contracts

Certain assets and forecasted transactions are exposed to foreign currency risk. Our objective for holding derivatives is to eliminate or reduce the impact of these exposures. We periodically monitor our foreign currency exposures to enhance the overall economic effectiveness of our foreign currency hedge positions. Principal currencies hedged include the euro, British pound, Brazilian real, Indian rupee, and Australian dollar. We do not enter into derivative instruments for speculative purposes, nor do we hold or issue any derivative instruments for trading purposes.

We enter into certain derivative instruments that do not qualify for hedge accounting and are not designated as hedges. Although these derivatives do not qualify for hedge accounting, we believe that such instruments are closely correlated with the

underlying exposure, thus managing the associated risk. The gains or losses from changes in the fair value of such derivative instruments that are not accounted for as hedges are recognized in earnings in foreign currency loss, net in the consolidated statements of operations.

Property and Equipment

We record property and equipment at cost. We record property and equipment purchased in business combinations at fair value, which is then treated as the cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the related assets. Leasehold improvements are amortized on a straight-line basis over the shorter of the lease term or the useful lives of the assets. Useful lives by major asset class are as follows: computer equipment and software, 3 to 7 years; buildings and improvements, 5 to 39 years; and furniture and fixtures, 5 to 7 years. Repairs and maintenance costs are expensed as incurred.

Product Development and Internal Use Software

Expenditures for product development, other than internal use software costs, are expensed as incurred. Product development expenses primarily consist of personnel and related expenses for our product development staff, the cost of various third-party contractor fees, and allocated overhead expenses.

Software development costs associated with internal use software are incurred in three stages of development: the preliminary project stage, the application development stage, and the post-implementation stage. Costs incurred during the preliminary project and post-implementation stages are expensed as incurred. Certain internal and external qualifying costs incurred during the application development stage are capitalized as property and equipment. Internal use software is amortized on a straight-line basis over its estimated useful life of three years, beginning when the software is ready for its intended use.

During the fiscal years ended November 30, 2020, 2019, and 2018, there were no internal use software development costs capitalized. We did not incur any amortization expense related to internal use software development costs during the fiscal years ended November 30, 2020 and 2019 as these costs were fully amortized as of November 30, 2018. Amortization expense related to internal use software totaled \$0.2 million during the fiscal year ended November 30, 2018.

Goodwill, Intangible Assets and Long-Lived Assets

Goodwill is the amount by which the cost of acquired net assets in a business combination exceeded the fair value of net identifiable assets on the date of purchase. We evaluate goodwill and other intangible assets with indefinite useful lives, if any, for impairment annually or on an interim basis when events and circumstances arise that indicate impairment may have occurred.

In performing our annual assessment, we first perform a qualitative test and if necessary, perform a quantitative test. To conduct the quantitative impairment test of goodwill, we compare the fair value of a reporting unit to its carrying value. If the reporting unit's carrying value exceeds its fair value, we record an impairment loss to the extent that the carrying value of goodwill exceeds its implied fair value. We estimate the fair values of our reporting units using discounted cash flow models or other valuation models, such as comparative transactions and market multiples. We did not recognize any goodwill impairment charges during fiscal years 2020, 2019, or 2018.

Intangible assets are comprised of purchased technology, customer-related assets, and trademarks and trade names acquired through business combinations (Note 7). All of our intangible assets are amortized using the straight-line method over their estimated useful life.

We periodically review long-lived assets (primarily property and equipment) and intangible assets with finite lives for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of those assets are no longer appropriate. We base each impairment test on a comparison of the undiscounted cash flows to the carrying value of the asset or asset group. If impairment is indicated, we write down the asset to its estimated fair value based on a discounted cash flow analysis. During fiscal year 2019, we recorded a \$22.7 million asset impairment charge, which was primarily applicable to the intangible assets obtained in connection with our acquisitions of DataRPM and Kinvey during the second and third quarters of fiscal year 2017, respectively (Note 4).

We classify long-lived assets to be sold as held for sale in the period in which: (i) we have approved and committed to a plan to sell the asset, (ii) the asset is available for immediate sale in its present condition, (iii) an active program to locate a buyer and other actions required to sell the asset have been initiated, (iv) the sale of the asset is probable, (v) the asset is being actively marketed for sale at a price that is reasonable in relation to its current fair value, and (vi) it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

Assets held for sale are initially measured at the lower of the carrying value or the fair value less cost to sell. Losses resulting from this measurement are recognized in the period in which the held for sale criteria are met while gains are not recognized until the date of sale. Once designated as held for sale, we stop recording depreciation expense on the asset. We assess the fair value less cost to sell of long-lived assets held for sale at each reporting period until it no longer meets this classification.

In the fourth quarter of fiscal year 2018, we reclassified certain corporate land and building assets previously reported as property and equipment to assets held for sale on our consolidated balance sheet. As the fair value less cost to sell was less than the carrying value of these assets, we recognized an impairment charge of \$5.1 million. We sold these long-lived assets during fiscal year 2019 and recognized a net gain on the sale of approximately \$0.1 million.

During the fourth quarter of fiscal year 2019, we incurred an additional asset impairment charge of \$1.4 million related to the abandonment of certain long-lived assets associated with this sale of corporate land and buildings. The fair value of the assets held for sale was measured using third-party valuation models, which included a discounted cash flow analysis.

Comprehensive (Loss) Income

The components of comprehensive loss include, in addition to net income, foreign currency translation adjustments and unrealized gains and losses on investments and hedging activity.

Accumulated other comprehensive loss by components, net of tax (in thousands):

	Foreign Currency Translation Adjustment	Unrealized (Losses) Gains on Investments	Unrealized Losses on Hedging Activity	Total
Balance, December 1, 2018	\$ (27,973)	\$ (203)	\$ —	\$ (28,176)
Other comprehensive (loss) income	(420)	173	(1,551)	(1,798)
Balance, December 1, 2019	\$ (28,393)	\$ (30)	\$ (1,551)	\$ (29,974)
Other comprehensive (loss) income	777	44	(3,625)	(2,804)
Balance, November 30, 2020	\$ (27,616)	\$ 14	\$ (5,176)	\$ (32,778)

The tax effect on accumulated unrealized losses on hedging activity and unrealized (losses) gains on investments was \$1.6 million, \$0.4 million and minimal as of November 30, 2020, November 30, 2019, and November 30, 2018, respectively.

Revenue Recognition

Revenue Policy

We derive our revenue primarily from software licenses and maintenance and services. Our license arrangements generally contain multiple performance obligations, including software maintenance services. Revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration that we expect to receive in exchange for those goods or services. When an arrangement contains multiple performance obligations, we account for individual performance obligations separately if they are distinct. We recognize revenue through the application of the following steps: (i) identification of the contract(s) with a customer; (ii) identification of the performance obligations in the contract; (iii) determination of the transaction price; (iv) allocation of the transaction price to performance obligations in the contract; and (v) recognition of revenue when or as we satisfy the performance obligations. Sales taxes collected from customers and remitted to government authorities are excluded from revenue and we do not license our software with a right of return.

Software Licenses

Software licenses are on-premise and fully functional when made available to the customer. As the customer can use and benefit from the license on its own, on-premise software licenses represent distinct performance obligations. Revenue is recognized upfront at the point in time when control is transferred, which is defined as the point in time when the client can use and benefit from the license. Our licenses are sold as perpetual or term licenses, and the arrangements typically contain various combinations of maintenance and services, which are generally accounted for as separate performance obligations. We use the residual approach to allocate the transaction price to our software license performance obligations because, due to the pricing of our licenses being highly variable, they do not have an observable stand-alone selling price ("SSP"). As required, we evaluate the residual approach estimate compared to all available observable data in order to conclude the estimate is representative of its SSP.

Perpetual licenses are generally invoiced upon execution of the contract and payable within 30 days. Term licenses are generally invoiced in advance on an annual basis over the term of the arrangement, which is typically one to three years. Any difference between the revenue recognized and the amount invoiced to the customer is recognized on our consolidated balance sheets as unbilled receivables until the customer is invoiced, at which point the amount is reclassified to accounts receivable.

Maintenance

Maintenance revenue is made up of technical support, bug fixes, and when-and-if available unspecified software upgrades. As these maintenance services are considered to be a series of distinct services that are substantially the same and have the same duration and measure of progress, we have concluded that they represent one combined performance obligation. Revenue is recognized ratably over the contract period. The SSP of maintenance services is a percentage of the net selling price of the related software license, which has remained within a tight range and is consistent with the stand-alone pricing of subsequent maintenance renewals.

Maintenance services are generally invoiced in advance on an annual basis over the term of the arrangement, which is typically one to three years.

Services

Services revenue primarily includes consulting and customer education services. In general, services are distinct performance obligations. Services revenue is generally recognized as the services are delivered to the customer. We apply the practical expedient of recognizing revenue upon invoicing for time and materials-based arrangements as the invoiced amount corresponds to the value of the services provided. The SSP of services is based upon observable prices in similar transactions using the hourly rates sold in stand-alone services transactions. Services are either sold on a time and materials basis or prepaid upfront.

We also offer products via a software-as-a-service ("SaaS") model, which is a subscription-based model. Our customers can use hosted software over the contract period without taking possession of it and the cloud services are available to them throughout the entire term, even if they do not use the service. Revenue related to SaaS offerings is recognized ratably over the contract period. The SSP of SaaS performance obligations is determined based upon observable prices in stand-alone SaaS transactions. SaaS arrangements are generally invoiced in advance on a monthly, quarterly, or annual basis over the term of the arrangement, which is typically one to three years.

Arrangements with Multiple Performance Obligations

When an arrangement contains multiple performance obligations, we account for individual performance obligations separately if they are distinct. We allocate the transaction price to each performance obligation in a contract based on its relative SSP. Although we do not have a history of offering these elements, prior to allocating the transaction price to each performance obligation, we consider whether the arrangement has any discounts, material rights, or specified future upgrades that may represent additional performance obligations. Determining whether products and services are distinct performance obligations and the determination of the SSP may require significant judgment.

Advertising Costs

Advertising costs are expensed as incurred and were \$0.5 million, \$0.8 million, and \$1.4 million in fiscal years 2020, 2019, and 2018, respectively.

Warranty Costs

We make periodic provisions for expected warranty costs. Historically, warranty costs have been insignificant.

Stock-Based Compensation

Stock-based compensation expense reflects the fair value of stock-based awards, less the present value of expected dividends when applicable, measured at the grant date and recognized over the relevant service period. We estimate the fair value of each stock-based award on the measurement date using either the current market price of the stock, the Black-Scholes option valuation model, or the Monte Carlo Simulation valuation model. The Black-Scholes and Monte Carlo Simulation valuation models incorporate assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. We recognize stock-based compensation expense related to options and restricted stock units on a straight-line basis over the service period of the award, which is generally 4 or 5 years for options and 3 years for restricted stock units. We recognize stock-based compensation expense related to performance stock units and our employee stock purchase plan using an accelerated attribution method.

Fees Related to Shareholder Activist

In September 2017, Praesidium Investment Management, then one of our largest stockholders, publicly announced its disagreement with our strategy in a Schedule 13D filed with the Securities and Exchange Commission (the "SEC") and stated that it was seeking changes in the composition of our Board of Directors. In fiscal year 2018, we incurred professional and other fees relating to Praesidium's actions. We did not incur any fees related to Praesidium's actions during fiscal year 2020 or 2019.

Acquisition-Related Costs

Acquisition-related costs are expensed as incurred and include those costs incurred as a result of a business combination. These costs consist of professional services fees, including third-party legal and valuation-related fees, as well as retention fees and earn-out payments treated as compensation expense. We incurred \$3.6 million, \$1.7 million, and \$0.3 million of acquisition-related costs, which are included in acquisition-related expenses in our consolidated statement of operations, for the fiscal years ended November 30, 2020, November 30, 2019, and November 30, 2018, respectively.

Restructuring Charges

Our restructuring charges are comprised primarily of costs related to property abandonment, including future lease commitments, net of any sublease income, and associated leasehold improvements; and employee termination costs related to headcount reductions. We recognize and measure restructuring liabilities initially at fair value when the liability is incurred. We incurred \$5.9 million, \$6.3 million, and \$2.3 million of restructuring related costs, which are included in restructuring expenses in our consolidated statement of operations, for the fiscal years ended November 30, 2020, November 30, 2019, and November 30, 2018, respectively.

Income Taxes

We provide for deferred income taxes resulting from temporary differences between financial and taxable income. We record valuation allowances to reduce deferred tax assets to the amount that is more likely than not to be realized.

We recognize and measure uncertain tax positions taken or expected to be taken in a tax return utilizing a two-step approach. We first determine if the weight of available evidence indicates that it is more likely than not that the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. The second step is that we measure the tax benefit as the largest amount that is more likely than not to be realized upon ultimate settlement. We recognize interest and penalties related to uncertain tax positions in our provision for income taxes on our consolidated statements of operations.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In August 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2017-12, *Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities* ("ASU 2017-12"). ASU 2017-12 intends to better align an entity's risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The amendments expand and refine hedge accounting for both nonfinancial and financial risk components and align the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. We adopted this standard at the beginning of the first quarter of fiscal year 2020. However, because our existing accounting aligned with the guidance of ASU 2017-12 there was no impact to our financial statements from adoption.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* ("ASC 842"). ASC 842 supersedes the requirements in Topic 840, *Leases*, and requires lessees to recognize right-of-use ("ROU") assets and liabilities for leases with lease terms of more than twelve months. ASC 842 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2018. We adopted ASC 842 effective December 1, 2019 using the modified retrospective transition method of applying the new standard at the adoption date. Results for reporting periods beginning on or after December 1, 2019 are presented under the new guidance, while prior period amounts have not been adjusted and continue to be reported in accordance with previous guidance. Disclosures required under the new standard will not be provided for dates and periods before December 1, 2019.

The new standard provided a number of optional practical expedients in transition. We elected the transition package of practical expedients available in the standard, which allowed the carry forward of historical assessments of whether a contract contains a lease, lease classification and initial direct costs. We also elected the practical expedient provided in ASC 842 to not separate lease components from non-lease components for each material underlying asset class: office leases, vehicle leases and equipment leases.

For each lease, the non-lease components and related lease components are accounted for as a single lease component. Items or activities that do not transfer goods or services to the lessee, such as administrative tasks to set up the contract and reimbursement or payment of lessor costs, are not components of the contract and therefore no contract consideration is allocated to such items or activities. We did not elect the hindsight practical expedient to determine the lease term for existing leases. The adoption of the new standard also resulted in significant additional disclosures regarding our leasing activities. Refer to Note 9 for further details.

In October 2016, the FASB issued Accounting Standards Update No. 2016-16, *Income Taxes (Topic 740), Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"), which requires entities to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. Under prior accounting standards, the recognition of current and deferred income taxes for an intra-entity transfer was prohibited until the asset has been sold to an outside party. We adopted this standard at the beginning of the first quarter of fiscal year 2019.

Upon adoption, we reclassified approximately \$3.4 million from non-current prepaid taxes, which is included in other assets on our consolidated balance sheet, to retained earnings as of December 1, 2018. During the preparation of our consolidated financial statements for the three months ended August 31, 2019, we identified that a deferred tax asset of \$8.2 million should also have been recorded upon adoption of this standard at the beginning of the first quarter of fiscal year 2019, with the offset recorded to retained earnings. We determined that the error is not material to the first and second quarters of fiscal year 2019. We also concluded that recording an out-of-period correction in the third quarter of fiscal year 2019 would not be material and therefore corrected this error by recording the \$8.2 million deferred tax asset during the third quarter of fiscal year 2019. Therefore, the impact of the adoption of ASU 2016-16 on our consolidated balance sheet was a reclassification of approximately \$4.8 million to retained earnings.

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* ("ASC 606"). Under this standard, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. The standard also requires new disclosures regarding the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers and provides guidance on the recognition of costs related to obtaining customer contracts. We adopted this ASU effective December 1, 2018 in accordance with the full retrospective approach, which required us to retrospectively adjust certain previously reported results in the comparative prior periods presented. Upon adoption, we recorded a cumulative \$31 million increase to our 2017 beginning retained earnings balance, a \$15 million decrease to deferred revenue, a \$28 million increase to unbilled receivables, and a \$12 million increase to deferred tax liabilities.

The revenue recognition related to accounting for the following transactions was most impacted by our adoption of this standard:

- **Revenue from term licenses with extended payment terms over the term of the agreement within our Data Connectivity and Integration segment** - Under the applicable revenue recognition guidance for fiscal years 2018 and prior, these transactions were recognized when the amounts were billed to the customer. In accordance with ASC 606, revenue from term license performance obligations is recognized upon delivery and revenue from maintenance performance obligations is expected to be recognized over the contract term. To the extent that we have entered into these transactions after adoption of ASC 606, revenue from term licenses with extended payment terms is being recognized prior to the customer being billed and we recognize an unbilled receivable on the balance sheet. Accordingly, the recognition of license revenue is accelerated under ASC 606 as we historically did not recognize revenue until the amounts had been billed to the customer.
- **Revenue from transactions with multiple elements within our Application Development and Deployment segment (i.e., sales of perpetual licenses with maintenance and/or support)** - Under the applicable revenue recognition guidance for fiscal years 2018 and prior, these transactions were recognized ratably over the associated maintenance period as the Company did not have vendor specific objective evidence ("VSOE") for maintenance or support. Under ASC 606, the requirement to have VSOE for undelivered elements that existed under prior guidance is eliminated. Accordingly, the Company is recognizing a portion of the sales price as revenue upon delivery of the license instead of recognizing the entire sales price ratably over the maintenance period.

The impact of the adoption of this standard on our previously reported consolidated balance sheet and consolidated statements of operations was as follows:

Consolidated Balance Sheet

(in thousands)	November 30, 2018		
	As Reported	Adjustments	As Adjusted
Assets			
Accounts receivable, net	\$ 58,450	\$ 1,265	\$ 59,715
Short-term unbilled receivables	—	1,421	1,421
Long-term unbilled receivables	—	1,811	1,811
Deferred tax assets	1,922	(956)	966
Other assets ⁽¹⁾	580,237	—	580,237
Total assets	\$ 640,609	\$ 3,541	\$ 644,150
Liabilities and shareholders' equity			
Short-term deferred revenue	133,194	(9,984)	123,210
Long-term deferred revenue	15,127	(2,397)	12,730
Deferred tax liabilities	3,797	2,002	5,799
Other liabilities ⁽²⁾	178,409	—	178,409
Retained earnings	71,242	13,883	85,125
Accumulated other comprehensive loss	(28,213)	37	(28,176)
Other equity ⁽³⁾	267,053	—	267,053
Total liabilities and shareholders' equity	\$ 640,609	\$ 3,541	\$ 644,150

⁽¹⁾Includes cash and cash equivalents, short-term investments, other current assets, assets held for sale, property and equipment, net, intangible assets, net, goodwill, and other assets.

⁽²⁾Includes current portion of long-term debt, net, accounts payable, accrued compensation and related taxes, dividends payable, income taxes payable, other accrued liabilities, long-term debt, net, and other noncurrent liabilities.

⁽³⁾Includes common stock and additional paid-in capital.

Consolidated Statements of Income

(In thousands, except per share data)	Fiscal Year Ended		
	November 30, 2018		
	As Reported	Adjustments	As Adjusted
Revenue:			
Software licenses	\$ 122,137	\$ (22,337)	\$ 99,800
Maintenance and services	275,028	4,153	279,181
Total revenue	397,165	(18,184)	378,981
Costs of revenue	66,973	—	66,973
Gross Profit	330,192	(18,184)	312,008
Operating expenses	244,194	—	244,194
Income from operations	85,998	(18,184)	67,814
Other expense, net	(7,018)	—	(7,018)
Income before income taxes	78,980	(18,184)	60,796
Provision for income taxes	15,489	(4,363)	11,126
Net income	\$ 63,491	\$ (13,821)	\$ 49,670
Earnings (loss) per share:			
Basic	\$ 1.39	\$ (0.30)	\$ 1.09
Diluted	\$ 1.38	\$ (0.30)	\$ 1.08
Weighted average shares outstanding:			
Basic	45,561	—	45,561
Diluted	46,135	—	46,135

The adoption of ASC 606 had no impact on total cash from or used in operating, financing, or investing activities on our consolidated cash flow statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, *Intangibles - Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). ASU 2017-04 amends Topic 350 to simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. This update requires the performance of an annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge should be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value. However, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The guidance in ASU 2017-04 is required for annual reporting periods beginning after December 15, 2019, with early adoption permitted. Upon adoption, we do not expect this update to have a material effect on our consolidated financial position and results of operations.

In June 2016, the FASB issued Accounting Standards Update No. 2016-13, *Financial Instruments - Credit Losses (Topic 326)* ("ASU 2016-13"). ASU 2016-13 changes the impairment model for most financial assets and certain other instruments. Entities will be required to use a model that will result in the earlier recognition of allowances for losses for trade and other receivables, contract assets, held-to-maturity debt securities, loans, and other instruments. ASU 2016-13 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2019. Early adoption is permitted. We are currently evaluating the impact of ASU 2016-13 on our consolidated financial statements.

Note 2: Cash, Cash Equivalents and Investments

A summary of our cash, cash equivalents and available-for-sale investments at November 30, 2020 is as follows (in thousands):

	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash	\$ 79,026	\$ —	\$ —	\$ 79,026
Money market funds	18,964	—	—	18,964
U.S. treasury bonds	4,993	58	—	5,051
Corporate bonds	2,913	41	—	2,954
Total	\$ 105,896	\$ 99	\$ —	\$ 105,995

A summary of our cash, cash equivalents and available-for-sale investments at November 30, 2019 is as follows (in thousands):

	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash	\$ 144,346	\$ —	\$ —	\$ 144,346
Money market funds	9,913	—	—	9,913
State and municipal bond obligations	7,036	1	—	7,037
U.S. treasury bonds	7,221	10	—	7,231
Corporate bonds	5,146	12	—	5,158
Total	\$ 173,662	\$ 23	\$ —	\$ 173,685

Such amounts are classified on our consolidated balance sheets as follows (in thousands):

	November 30, 2020		November 30, 2019	
	Cash and Equivalents	Short-Term Investments	Cash and Equivalents	Short-Term Investments
Cash	\$ 79,026	\$ —	\$ 144,346	\$ —
Money market funds	18,964	—	9,913	—
State and municipal bond obligations	—	—	—	7,037
U.S. treasury bonds	—	5,051	—	7,231
Corporate bonds	—	2,954	—	5,158
Total	<u>\$ 97,990</u>	<u>\$ 8,005</u>	<u>\$ 154,259</u>	<u>\$ 19,426</u>

The fair value of debt securities by contractual maturity is as follows (in thousands):

	November 30, 2020	November 30, 2019
Due in one year or less	\$ 5,998	\$ 14,004
Due after one year ⁽¹⁾	2,007	5,422
Total	<u>\$ 8,005</u>	<u>\$ 19,426</u>

(1) Includes U.S. treasury bonds and corporate bonds, which are securities representing investments available for current operations and are classified as current on the consolidated balance sheets.

We did not hold any investments with continuous unrealized losses as of November 30, 2020 or November 30, 2019.

Note 3: Derivative Instruments

Cash Flow Hedge

On July 9, 2019, we entered into an interest rate swap contract with an initial notional amount of \$150.0 million to manage the variability of cash flows associated with approximately one-half of our variable rate debt. The contract matures on April 30, 2024 and requires periodic interest rate settlements. Under this interest rate swap contract, we receive a floating rate based on the greater of 1-month LIBOR or 0.00% and pay a fixed rate of 1.855% on the outstanding notional amount.

We have designated the interest rate swap as a cash flow hedge and assessed the hedge effectiveness both at the onset of the hedge and at regular intervals throughout the life of the derivative. To the extent that the interest rate swap is highly effective in offsetting the variability of the hedged cash flows, changes in the fair value of the derivative are included as a component of other comprehensive loss on our consolidated balance sheets. Although we determined at the onset of the hedge that the interest rate swap will be a highly effective hedge throughout the term of the contract, any portion of the fair value swap subsequently determined to be ineffective will be recognized in earnings. As of November 30, 2020 and November 30, 2019, the fair value of the hedge was a loss of \$6.9 million and \$2.1 million, respectively, and was included in other noncurrent liabilities on our consolidated balance sheets.

The following table presents our interest rate swap contract where the notional amount reflects the quarterly amortization of the interest rate swap, which is equal to approximately one-half of the corresponding reduction in the balance of our term loan as we make our scheduled principal payments. The fair value of the derivative represents the discounted value of the expected future discounted cash flows for the interest rate swap, based on the amortization schedule and the current forward curve for the remaining term of the contract, as of the date of each reporting period (in thousands):

	November 30, 2020		November 30, 2019	
	Notional Value	Fair Value	Notional Value	Fair Value
Interest rate swap contracts designated as cash flow hedges	\$ 142,500	\$ (6,855)	\$ 148,125	\$ (2,054)

Forward Contracts

We generally use forward contracts that are not designated as hedging instruments to hedge economically the impact of the variability in exchange rates on intercompany accounts receivable and loans receivable denominated in certain foreign currencies. We generally do not hedge the net assets of our international subsidiaries.

All forward contracts are recorded at fair value on the consolidated balance sheets at the end of each reporting period and expire between 30 days and two years from the date the contract was entered. At November 30, 2020, \$1.4 million was recorded in other assets on the consolidated balance sheets. At November 30, 2019, \$0.1 million was recorded in other noncurrent liabilities on the consolidated balance sheets.

In fiscal year 2020, realized and unrealized gains of \$1.7 million from our forward contracts were recognized in foreign currency loss, net on the consolidated statement of operations. In fiscal years 2019 and 2018, realized and unrealized losses of \$1.1 million and \$6.9 million, respectively, from our forward contracts were recognized in foreign currency loss, net on the consolidated statements of operations. These gains and losses were substantially offset by realized and unrealized losses and gains on the offsetting positions.

The table below details outstanding foreign currency forward contracts where the notional amount is determined using contract exchange rates (in thousands):

	November 30, 2020		November 30, 2019	
	Notional Value	Fair Value	Notional Value	Fair Value
Forward contracts to sell U.S. dollars	\$ 69,031	\$ 1,445	\$ 66,951	\$ (85)
Forward contracts to purchase U.S. dollars	440	(3)	1,457	5
Total	<u>\$ 69,471</u>	<u>\$ 1,442</u>	<u>\$ 68,408</u>	<u>\$ (80)</u>

Note 4: Fair Value Measurements

Recurring Fair Value Measurements

The following table details the fair value measurements within the fair value hierarchy of our financial assets and liabilities at November 30, 2020 (in thousands):

	Total Fair Value	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
<i>Assets</i>				
Money market funds	\$ 18,964	\$ 18,964	\$ —	\$ —
U.S. treasury bonds	5,051	—	5,051	—
Corporate bonds	2,954	—	2,954	—
Foreign exchange derivatives	1,442	—	1,442	—
<i>Liabilities</i>				
Interest rate swap	\$ (6,855)	\$ —	\$ (6,855)	\$ —

The following table details the fair value measurements within the fair value hierarchy of our financial assets and liabilities at November 30, 2019 (in thousands):

	Total Fair Value	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
<i>Assets</i>				
Money market funds	\$ 9,913	\$ 9,913	\$ —	\$ —
State and municipal bond obligations	7,037	—	7,037	—
U.S. treasury bonds	7,231	—	7,231	—
Corporate bonds	5,158	—	5,158	—
<i>Liabilities</i>				
Foreign exchange derivatives	(80)	—	(80)	—
Interest rate swap	\$ (2,054)	\$ —	\$ (2,054)	\$ —

When developing fair value estimates, we maximize the use of observable inputs and minimize the use of unobservable inputs. When available, we use quoted market prices to measure fair value. The valuation technique used to measure fair value for our Level 1 and Level 2 assets is a market approach, using prices and other relevant information generated by market transactions involving identical or comparable assets. If market prices are not available, the fair value measurement is based on models that use primarily market-based parameters including yield curves, volatilities, credit ratings and currency rates. In certain cases where market rate assumptions are not available, we are required to make judgments about assumptions market participants would use to estimate the fair value of a financial instrument.

Nonrecurring Fair Value Measurements

During fiscal year 2019, certain assets were measured at fair value on a nonrecurring basis using significant unobservable inputs (Level 3).

During the fourth quarter of fiscal year 2019, based on the fair value measurement, we recorded a \$22.7 million asset impairment charge, which was attributable to the intangible assets primarily associated with the technologies and trade names obtained in the acquisitions of DataRPM and Kinvey during the second and third quarters of fiscal year 2017, respectively (Note 6).

The following table presents nonrecurring fair value measurements as of November 30, 2019 (in thousands):

	Total Fair Value	Total Losses
Intangible assets	\$ —	\$ 22,688

The fair value measurements of intangible assets and long-lived assets were determined using an income-based valuation methodology, which incorporates unobservable inputs, including discounted expected cash flows over the remaining estimated useful life of the technology, thereby classifying the fair value as a Level 3 measurement within the fair value hierarchy. The expected cash flows include maintenance fees to be collected from existing customers using the products, offset by compensation related costs and hosting fees to be incurred over the remaining estimated useful lives.

Note 5: Property and Equipment

Property and equipment consists of the following (in thousands):

	November 30, 2020	November 30, 2019
Computer equipment and software	\$ 50,103	\$ 47,699
Land, buildings and leasehold improvements	31,610	34,083
Furniture and fixtures	5,107	7,090
Capitalized software development costs	276	276
Property and equipment, gross	87,096	89,148
Less accumulated depreciation and amortization	(57,279)	(59,383)
Property and equipment, net	\$ 29,817	\$ 29,765

Depreciation and amortization expense related to property and equipment was \$6.1 million, \$7.6 million, and \$6.9 million for the years ended November 30, 2020, 2019, and 2018, respectively.

Note 6: Intangible Assets and Goodwill

Intangible Assets

Intangible assets are comprised of the following significant classes (in thousands):

	November 30, 2020			November 30, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Purchased technology	\$ 173,486	\$ (113,863)	\$ 59,623	\$ 135,186	\$ (105,967)	\$ 29,219
Customer-related	231,342	(91,326)	140,016	134,042	(74,175)	59,867
Trademarks and trade names	30,440	(18,275)	12,165	24,740	(16,043)	8,697
Non-compete agreement	2,000	(1,057)	943	2,000	(391)	1,609
Total	\$ 437,268	\$ (224,521)	\$ 212,747	\$ 295,968	\$ (196,576)	\$ 99,392

We amortize intangible assets assuming no expected residual value. Amortization expense related to these intangible assets was \$27.9 million, \$48.1 million and \$36.0 million in fiscal years 2020, 2019 and 2018, respectively.

The additions to intangible assets during fiscal years 2020 and 2019 are related to the acquisition of Chef in October 2020 and Ipswitch in April 2019, respectively (Note 7).

During the fourth quarter of fiscal year 2019, we evaluated the ongoing value of the intangible assets associated with the technology obtained in connection with the acquisitions of DataRPM and Kinvey. As a result of our decision to reduce our current and ongoing spending levels within our cognitive application product lines, which consist primarily of our DataRPM and Kinvey products, we determined that the intangible assets were fully impaired and incurred an impairment charge of \$22.7 million (Note 4).

Future amortization expense for intangible assets as of November 30, 2020 is as follows (in thousands):

2021	\$	44,890
2022		44,836
2023		44,560
2024		31,744
2025		21,233
Thereafter		25,484
Total	\$	212,747

Goodwill

Changes in the carrying amount of goodwill for fiscal years 2020 and 2019 are as follows (in thousands):

	November 30, 2020	November 30, 2019
Balance, beginning of year	\$ 432,824	\$ 314,992
Measurement Period Adjustments ⁽¹⁾	(838)	—
Additions ⁽²⁾	59,858	117,871
Translation Adjustments	(118)	(39)
Balance, end of year	\$ 491,726	\$ 432,824

⁽¹⁾ Represents final measurement period adjustments related to our Ipswitch acquisition (Note 7).

⁽²⁾ The additions to goodwill during fiscal years 2020 and 2019 are related to the acquisition of Chef in October 2020 and Ipswitch in April 2019, respectively (Note 7).

Changes in the carrying amount of goodwill by reportable segment for fiscal year 2020 are as follows (in thousands):

	November 30, 2019	Measurement Period Adjustments	Additions	Translation Adjustments	November 30, 2020
OpenEdge	\$ 366,819	\$ (838)	\$ —	\$ (118)	\$ 365,863
Data Connectivity and Integration	19,040	—	—	—	19,040
Application Development and Deployment	46,965	—	59,858	—	106,823
Total goodwill	\$ 432,824	\$ (838)	\$ 59,858	\$ (118)	\$ 491,726

We assess the impairment of goodwill on an annual basis and whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable.

During fiscal year 2020, we tested goodwill for impairment for each of our reporting units as of October 31, 2020. Our reporting units each had fair values which significantly exceeded their carrying values as of the annual impairment date. We did not recognize any goodwill impairment charges during fiscal years 2020, 2019 or 2018.

Note 7: Business Combinations

Chef Acquisition

On October 5, 2020, we completed the acquisition of Chef Software Inc. (“Chef”) pursuant to the Agreement and Plan of Merger (the “Merger Agreement”), dated as of September 4, 2020. The acquisition was completed for a base purchase price of \$220.0 million, subject to certain customary adjustments as further described in the Merger Agreement (the “Aggregate Consideration”), which was paid in cash. Pursuant to the Merger Agreement, \$12.0 million of the Aggregate Consideration was deposited into an escrow account to secure certain indemnification and other potential obligations of the former Chef equity holders.

Chef is a global leader in DevOps and DevSecOps, providing complete infrastructure automation to build, deploy, manage and secure applications in modern multi-cloud and hybrid environments, as well as on-premises. Chef has enhanced our position as a trusted provider of the best products to develop, deploy and manage high-impact business applications by providing industry-

leading compliance and application automation products for multi-cloud and on-prem infrastructure. The acquisition bolstered our core offerings, enabling customers to respond faster to business demands and improve efficiency. We funded the acquisition through a combination of existing cash resources and by drawing down \$98.5 million from our existing revolving credit facility (Note 8).

The Aggregate Consideration has been allocated to Chef's tangible assets, identifiable intangible assets, and assumed liabilities based on their estimated fair values. The preliminary fair value estimates of the net assets acquired are based upon preliminary calculations and valuations, and those estimates and assumptions are subject to change as we obtain additional information for those estimates during the measurement period (up to one year from the acquisition date). The excess of the total consideration over the tangible assets, identifiable intangible assets, and assumed liabilities was recorded as goodwill.

The allocation of the purchase price is as follows (in thousands):

	Initial Purchase Price Allocation	Life
Net working capital	\$ 52,330	
Property, plant and equipment	498	
Purchased technology	38,300	5 years
Trade name	5,700	5 years
Customer relationships	97,300	7 years
Other assets	122	
Other noncurrent liabilities	(841)	
Lease liabilities, net	(1,810)	
Deferred taxes	(7,817)	
Deferred revenue	(12,525)	
Goodwill	59,858	
Net assets acquired	<u>\$ 231,115</u>	

The fair value of the intangible assets was estimated using the income approach in which the after-tax cash flows are discounted to present value. The cash flows are based on estimates used to value the acquisition, and the discount rates applied were benchmarked with reference to the implied rate of return from the transaction model as well as the weighted average cost of capital. The valuation assumptions take into consideration our estimates of customer attrition, technology obsolescence, and revenue growth projections. Based on the preliminary valuation, the acquired intangible assets are comprised of customer relationships of approximately \$97.3 million, existing technology of approximately \$38.3 million, and trade names of approximately \$5.7 million.

Tangible assets acquired and assumed liabilities were recorded at fair value. The valuation of the assumed deferred revenue was based on our contractual commitment to provide post-contract customer support to Chef customers and future contractual performance obligations under existing hosting arrangements. The fair value of this assumed liability was based on the estimated cost plus a reasonable margin to fulfill these service obligations. A significant portion of the deferred revenue is expected to be recognized in the 12 months following the acquisition.

We recorded the excess of the purchase price over the identified tangible and intangible assets as goodwill. We believe that the investment value of the future enhancement of our product and solution offerings created as a result of this acquisition has principally contributed to a purchase price that resulted in the recognition of \$59.9 million of goodwill, which is not deductible for tax purposes.

Acquisition-related transaction costs (e.g., legal, due diligence, valuation, and other professional fees) and certain acquisition restructuring and related charges are not included as a component of consideration transferred but are required to be expensed as incurred. During the fiscal year ended November 30, 2020, we incurred approximately \$2.2 million of acquisition-related costs, which are included in acquisition-related expenses on our consolidated statement of operations.

The operations of Chef are included in our operating results as part of the Application Development and Deployment business segment from the date of acquisition. The amount of revenue of Chef included in our consolidated statement of operations during the fiscal year ended November 30, 2020 was approximately \$3.8 million. We determined that disclosing the amount of Chef related earnings included in the consolidated statements of operations is impracticable, as certain operations of Chef were integrated into the operations of the Company from the date of acquisition.

Pro Forma Information

The following pro forma financial information presents the combined results of operations of Progress and Chef as if the acquisition had occurred on December 1, 2018, after giving effect to certain pro forma adjustments. The pro forma adjustments reflected herein include only those adjustments that are directly attributable to the Chef acquisition and factually supportable. These pro forma adjustments include (i) a decrease in revenue from Chef due to the beginning balance of deferred revenue being adjusted to reflect the fair value of the acquired balance, (ii) a net increase in amortization expense to record amortization expense for the \$141.3 million of acquired identifiable intangible assets, (iii) an increase in interest expense to record interest for the period presented as a result of drawing down our revolving credit facility in connection with the acquisition, and (iv) the income tax effect of the adjustments made at the statutory tax rate of the U.S. (approximately 24.5%).

The pro forma financial information does not reflect any adjustments for anticipated expense savings resulting from the acquisition and is not necessarily indicative of the operating results that would have actually occurred had the transaction been consummated on December 1, 2018. These results are prepared in accordance with ASC 606.

	Pro Forma		Pro Forma	
	Fiscal Year Ended November 30,		Fiscal Year Ended November 30,	
	2020		2019	
<i>(In thousands, except per share data)</i>				
Revenue	\$	497,700	\$	459,665
Net income (loss)	\$	61,952	\$	(18,852)
Net income (loss) per basic share	\$	1.38	\$	(0.42)
Net income (loss) per diluted share	\$	1.37	\$	(0.42)

Ipswitch Acquisition

On April 30, 2019, we completed the acquisition of all of the outstanding equity interests of Ipswitch, Inc. (“Ipswitch”) from Roger Greene (the “Seller”) pursuant to the Stock Purchase Agreement, dated as of March 28, 2019, by and among Progress, Ipswitch and the Seller. The acquisition was completed for an aggregate purchase price of \$225.0 million, subject to certain customary adjustments as further described in the Stock Purchase Agreement, which was paid in cash. Pursuant to the Stock Purchase Agreement, \$22.5 million of the purchase price was deposited into an escrow account to secure certain indemnification and other potential obligations of the Seller to Progress. This escrow was released in full in May 2020 upon expiration of the twelve-month escrow period. The Seller also received an award of approximately \$2.0 million in Progress restricted stock as consideration for the Seller entering into a non-competition agreement for three years as set forth in the Stock Purchase Agreement.

Ipswitch enables approximately 24,000 small and medium-sized businesses and enterprises to provide secure data sharing and ensure high-performance infrastructure availability. Through this acquisition, we bolstered our core offerings to small and medium-sized businesses and enterprises, enabling those businesses to respond faster to business demands and to improve productivity. We funded the acquisition through a combination of existing cash resources and a \$185.0 million term loan, which is part of our \$401.0 million term loan and revolving line of credit (Note 8).

The purchase price has been allocated to Ipswitch’s tangible assets, identifiable intangible assets, and assumed liabilities based on their estimated fair values. The excess of the total consideration over the tangible assets, identifiable intangible assets, and assumed liabilities was recorded as goodwill.

We recorded measurement period adjustments in accordance with FASB’s guidance regarding business combinations in the fourth quarter of fiscal year 2019 and the second quarter of fiscal year 2020 based on our valuation and purchase price allocation procedures. The measurement period adjustments, which were completed during the second quarter of fiscal year 2020, resulted in a decrease to goodwill of \$0.6 million, primarily due to a decrease to the sales tax reserve, partially offset by increased accrued expenses.

The following table discloses the net assets acquired in the business combination (in thousands):

	Initial Purchase Price Allocation	Measurement Period Adjustments	Final Purchase Price Allocation	Life
Net working capital	\$ 6,068	\$ 651	\$ 6,719	
Property, plant and equipment	4,661		4,661	
Purchased technology	33,100		33,100	5 years
Trade name	9,600		9,600	5 years
Customer relationships	66,600		66,600	5 years
Other assets	314	(4)	310	
Deferred revenue	(12,696)	(29)	(12,725)	
Goodwill	117,651	(618)	117,033	
Net assets acquired	<u>\$ 225,298</u>	<u>\$ —</u>	<u>\$ 225,298</u>	

The fair value of the intangible assets has been estimated using the income approach in which the after-tax cash flows are discounted to present value. The cash flows are based on estimates used to value the acquisition, and the discount rates applied were benchmarked with reference to the implied rate of return from the transaction model as well as the weighted average cost of capital. The valuation assumptions take into consideration the Company's estimates of customer attrition, technology obsolescence, and revenue growth projections. Based on the valuation, the acquired intangible assets are comprised of customer relationships of approximately \$66.6 million, existing technology of approximately \$33.1 million, and trade names of approximately \$9.6 million.

Tangible assets acquired and assumed liabilities were recorded at fair value. The valuation of the assumed deferred revenue was based on our contractual commitment to provide post-contract customer support to Ipswitch customers and future contractual performance obligations under existing hosting arrangements. The fair value of this assumed liability was based on the estimated cost plus a reasonable margin to fulfill these service obligations. A significant portion of the deferred revenue was recognized in the 12 months following the acquisition.

We recorded the excess of the purchase price over the identified tangible and intangible assets as goodwill. We believe that the investment value of the future enhancement of our product offerings created as a result of this acquisition has principally contributed to a purchase price that resulted in the recognition of \$117.0 million of goodwill, which is deductible for tax purposes.

An election was made under Section 338(h)(10) of the Internal Revenue Code for Ipswitch to treat the transaction as a sale of all its assets on the acquisition date and subsequent liquidation. As a result, the identifiable intangible assets and goodwill are deductible for tax purposes.

As previously noted, the Seller received a restricted stock award of approximately \$2.0 million, subject to continued compliance with the three-year non-compete agreement. We concluded that the restricted stock award is not a compensation arrangement and we recorded the fair value of the award as an intangible asset separate from goodwill. We will recognize intangible asset amortization expense over the term of the agreement, which is 3 years. We recorded \$0.7 million of amortization expense related to this restricted stock award for the fiscal year ended November 30, 2020 in operating expenses on our condensed consolidated statement of operations.

Acquisition-related transaction costs (e.g., legal, due diligence, valuation, and other professional fees) and certain acquisition restructuring and related charges are not included as a component of consideration transferred but are required to be expensed as incurred. During the fiscal year ended November 30, 2020, we incurred approximately \$0.4 million of acquisition-related costs, which are included in acquisition-related expenses on our condensed consolidated statement of operations.

The operations of Ipswitch are included in our operating results as part of the OpenEdge business segment from the date of acquisition. The amount of revenue of Ipswitch included in our consolidated statement of operations during the fiscal year ended November 30, 2020 was approximately \$67.5 million. The amount of revenue of Ipswitch included in our consolidated statement of operations during the fiscal year ended November 30, 2019 was approximately \$28.2 million. We determined that disclosing the amount of Ipswitch related earnings included in the consolidated statements of operations is impracticable, as certain operations of Ipswitch were integrated into the operations of the Company from the date of acquisition.

Pro Forma Information

The following pro forma financial information presents the combined results of operations of Progress and Ipswitch as if the acquisition had occurred on December 1, 2017 after giving effect to certain pro forma adjustments. The pro forma adjustments reflected below include only those adjustments that are directly attributable to the Ipswitch acquisition and factually supportable. These pro forma adjustments include (i) a decrease in revenue from Ipswitch due to the beginning balance of deferred revenue being adjusted to reflect the fair value of the acquired balance, (ii) a net increase in amortization expense to record amortization expense for the \$111.3 million of acquired identifiable intangible assets and to eliminate historical amortization of Ipswitch intangible assets, (iii) an increase in interest expense to record interest for the period presented as a result of the new credit facility entered into by Progress in connection with the acquisition, and (iv) the income tax effect of the adjustments made at the statutory tax rate of the U.S. (approximately 24.5%). In addition, prior to the acquisition Ipswitch did not pay entity level corporate tax, with the exception of some states, because it was registered as an S-Corporation. Therefore, we applied the statutory tax rate of the U.S. (approximately 24.5%) to the income before tax of Ipswitch as if the acquisition had occurred on December 1, 2017.

The pro forma financial information does not reflect any adjustments for anticipated expense savings resulting from the acquisition and is not necessarily indicative of the operating results that would have actually occurred had the transaction been consummated on December 1, 2017. These results are prepared in accordance with ASC 606.

	Pro Forma Fiscal Year Ended November 30, 2019	
<i>(In thousands, except per share data)</i>		
Revenue	\$	442,286
Net income	\$	19,641
Net income per basic share	\$	0.44
Net income per diluted share	\$	0.43

Note 8: Term Loan and Line of Credit

On April 30, 2019, we entered into an amended and restated credit agreement (the "Credit Agreement"), which provides for a \$301.0 million secured term loan and a \$100.0 million secured revolving line of credit. The revolving line of credit may be made available in U.S. Dollars and certain other currencies and may be increased by up to an additional \$125.0 million if the existing or additional lenders are willing to make such increased commitments. The revolving line of credit has sublimits for swing line loans up to \$25.0 million and for the issuance of standby letters of credit in a face amount up to \$25.0 million.

The Credit Agreement modified our prior credit facility by extending the maturity date to April 30, 2024 and extending the principal repayments of the term loan. We borrowed an additional \$185.0 million under the term loan as part of this modified credit facility. The new term loan was used to partially fund our acquisition of Ipswitch in April 2019. During October 2020, we partially funded our acquisition of Chef by drawing down \$98.5 million under the revolving line of credit (Note 7).

Interest rates for the term loan and revolving line of credit are based upon our leverage ratio and determined based on an index selected at our option. The rates range from 1.50% to 2.00% above the Eurocurrency rate for Eurocurrency-based borrowings or from 0.50% to 1.00% above the defined base rate for base rate borrowings. Additionally, we may borrow certain foreign currencies at rates set in the same respective range above the London interbank offered interest rates for those currencies. A quarterly commitment fee on the undrawn portion of the revolving credit facility is required and ranges from 0.25% to 0.35% per annum based on our leverage ratio. The average interest rate of the credit facility during the fiscal year ended November 30, 2020 was 2.41% and the interest rate as of November 30, 2020 was 1.81%.

The credit facility matures on April 30, 2024, when all amounts outstanding will be due and payable in full. The revolving line of credit does not require amortization of principal. The outstanding balance of the term loan as of November 30, 2020 was \$286.0 million, with \$18.8 million due in the next 12 months. The term loan requires repayment of principal at the end of each fiscal quarter, beginning with the fiscal quarter ended August 31, 2019. The principal repayment amounts are in accordance with the following schedule: (i) four payments of \$1.9 million each, (ii) four payments of \$3.8 million each, (iii) four payments of \$5.6 million each, (iv) four payments of \$7.5 million each, (v) three payments of \$9.4 million each, and (vi) the last payment is of the remaining principal amount. Any amounts outstanding under the term loan thereafter would be due on the maturity date. The term loan may be prepaid before maturity in whole or in part at our option without penalty or premium. As of November 30, 2020, the carrying value of the term loan approximates the fair value, based on Level 2 inputs (observable

market prices in less than active markets), as the interest rate is variable over the selected interest period and is similar to current rates at which we can borrow funds.

Costs incurred to obtain our long-term debt of \$1.6 million, along with \$1.2 million of unamortized debt issuance costs related to the previous credit agreement, are recorded as debt issuance costs as a direct deduction from the carrying value of the debt liability on our consolidated balance sheets as of November 30, 2020. These costs are being amortized over the term of the debt agreement using the effective interest rate method. Amortization expense related to the debt issuance costs of \$0.6 million for the fiscal year ended November 30, 2020 and \$0.4 million for the fiscal years ended November 30, 2019 and 2018 is recorded in interest expense on our consolidated statements of operations.

Revolving loans may be borrowed, repaid, and reborrowed until April 30, 2024, at which time all amounts outstanding must be repaid. Accrued interest on the loans is payable quarterly in arrears with respect to base rate loans and at the end of each interest rate period (or at each three-month interval in the case of loans with interest periods greater than three months) with respect to Eurocurrency rate loans. We may prepay the loans or terminate or reduce the commitments in whole or in part at any time, without premium or penalty, subject to certain conditions and reimbursement of certain costs in the case of Eurocurrency rate loans. As of November 30, 2020, there was \$98.5 million outstanding under the revolving line and \$2.1 million of letters of credit.

We are the sole borrower under the credit facility. Our obligations under the Credit Agreement are secured by substantially all of our assets and each of our material domestic subsidiaries, as well as 100% of the capital stock of our domestic subsidiaries and 65% of the capital stock of our first-tier foreign subsidiaries, in each case, subject to certain exceptions as described in the Credit Agreement. Future material domestic subsidiaries will be required to guaranty our obligations under the Credit Agreement, and to grant security interests in substantially all of their assets to secure such obligations. The Credit Agreement generally prohibits, with certain exceptions, any other liens on our assets, subject to certain exceptions as described in the Credit Agreement.

The Credit Agreement contains customary affirmative and negative covenants, including covenants that limit or restrict our ability to, among other things, grant liens, make investments, make acquisitions, incur indebtedness, merge or consolidate, dispose of assets, pay dividends or make distributions, repurchase stock, change the nature of the business, enter into certain transactions with affiliates and enter into burdensome agreements, in each case subject to customary exceptions for a credit facility of this size and type. We are also required to maintain compliance with a consolidated fixed charge coverage ratio, a consolidated total leverage ratio and a consolidated senior secured leverage ratio. We are in compliance with these financial covenants as of November 30, 2020.

As of November 30, 2020, aggregate future maturities of long-term debt were as follows (in thousands):

2021	\$	18,812
2022		26,338
2023		33,863
2024		305,437
Total	\$	<u>384,450</u>

Note 9: Leases

In February 2016, the FASB issued ASC 842 to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The Company adopted ASC 842 on December 1, 2019 using the modified retrospective method and as a result did not adjust comparative periods or modify disclosures in those comparative periods.

The new guidance provides a number of optional practical expedients in transition. The Company elected the package of practical expedients, which does not require the reassessment of prior conclusions about lease identification, lease classification and initial direct costs. Further, the Company elected the practical expedients to combine lease and non-lease components. Contracts may be comprised of lease components, non-lease components, and elements that are not components. Each lease component represents a lessee's right to use an underlying asset in the contract if the lessee can benefit from the right-of-use of the asset either on its own or together with other readily available resources and if the right-of-use is neither highly dependent or highly interrelated with other rights-of-use. Non-lease components include items such as common area maintenance and utilities provided by the lessor. We also elected the practical expedient to not recognize right-of-use assets and lease liabilities for short-term leases. Leases with an initial term of 12 months or less are classified as short-term leases.

Consideration in the contract is comprised of any fixed payments and variable payments that depend on an index or rate. Payments in the Company's operating lease arrangements primarily consist of base office rent. In accordance with ASC 842, variable payments in an agreement that are not dependent on an index or rate are excluded from the calculation of ROU assets and lease liabilities. The Company makes variable payments on certain of its leases related to taxes, insurance, common area maintenance, and utilities, among other things.

The adoption of ASC 842 on December 1, 2019 resulted in the recognition of operating lease ROU assets of approximately \$28.9 million and operating lease liabilities of approximately \$29.9 million. The difference between the value of the ROU assets and lease liabilities is due to the reclassification of existing deferred rent, prepaid rent, and unamortized lease incentives as of December 1, 2019. Operating leases are included in ROU assets and lease liabilities on the Company's balance sheets. ROU assets and lease liabilities are to be presented separately for operating and finance leases. However, the Company currently has no material finance leases. The adoption of ASC 842 did not have a material impact on the Company's condensed consolidated statement of operations, consolidated statement of stockholders' equity, consolidated statement of comprehensive income (loss) or consolidated statement of cash flows. The adoption of ASC 842 had no impact on liquidity or the Company's debt-covenant compliance under its current debt agreements.

The Company determines if an arrangement is a lease at inception. ROU assets represent the Company's right to use an underlying asset for the duration of the lease term. Lease liabilities represent the Company's contractual obligation to make lease payments over the lease term. ROU assets are recorded and recognized at commencement for the lease liability amount, plus initial direct costs incurred less lease incentives received. Lease liabilities are recorded at the present value of future lease payments over the lease term at commencement. Operating lease liabilities and their corresponding ROU assets are recorded based on the present value of lease payments over the expected lease term. The interest rate implicit in the lease contracts is not readily determinable. As such, we utilize the appropriate incremental borrowing rate, which is the rate incurred to borrow on a collateralized basis over a similar term at an amount equal to the lease payments in a similar economic environment. Lease expenses relating to operating leases are recognized on a straight-line basis over the lease term.

The Company has operating leases for administrative, product development, and sales and marketing facilities, vehicles, and equipment under various non-cancelable lease agreements. The Company's leases have remaining lease terms ranging from 1 year to 10 years. The Company's lease terms may include options to extend or terminate the lease where it is reasonably certain that the Company will exercise those options. The Company considers several economic factors when making the determination as to whether the Company will exercise options to extend or terminate the lease, including but not limited to, the significance of leasehold improvements incurred in the office space, the difficulty in replacing the asset, underlying contractual obligations, or specific characteristics unique to a particular lease. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The components of operating lease cost for the year ended November 30, 2020 was as follows (in thousands):

	Fiscal Year Ended November 30, 2020
Lease costs under long-term operating leases	\$ 7,605
Lease costs under short-term operating leases	426
Variable lease cost under short-term and long-term operating leases ⁽¹⁾	325
Operating lease right-of-use asset impairment	1,189
Total operating lease cost	\$ 9,545

⁽¹⁾ Lease costs that are not fixed at lease commencement.

The table below presents supplemental cash flow information related to leases during the year ended November 30, 2020 (in thousands):

	Fiscal Year Ended November 30, 2020	
Cash paid for leases	\$	8,101
Right-of-use assets recognized for new leases and amendments (non-cash)	\$	8,532

Weighted average remaining lease term in years and weighted average discount rate are as follows:

	November 30, 2020	
Weighted average remaining lease term in years		5.02
Weighted average discount rate		2.3 %

Future payments under non-cancellable leases at November 30, 2020 are as follows (in thousands):

2021	\$	7,708
2022		7,078
2023		6,994
2024		6,896
Thereafter		7,350
Total lease payments		36,026
Less imputed interest ⁽¹⁾		(2,045)
Present value of lease liabilities	\$	33,981

⁽¹⁾ Lease liabilities are measured at the present value of the remaining lease payments using a discount rate determined at lease commencement unless the discount rate is updated as a result of a lease reassessment event.

Our operating lease arrangements are subject to customary renewal and base rental fee escalation clauses. Total rent expense, net of sublease income which is insignificant, under operating lease arrangements was approximately \$9.6 million, \$8.9 million and \$6.8 million in fiscal years 2020, 2019 and 2018, respectively.

Note 10: Commitments and Contingencies

Guarantees and Indemnification Obligations

We include standard intellectual property indemnification provisions in our licensing agreements in the ordinary course of business. Pursuant to our product license agreements, we will indemnify, hold harmless, and agree to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally business partners or customers, in connection with certain patent, copyright or other intellectual property infringement claims by third parties with respect to our products. Other agreements with our customers provide indemnification for claims relating to property damage or personal injury resulting from the performance of services by us or our subcontractors. Historically, our costs to defend lawsuits or settle claims relating to such indemnity agreements have been insignificant. Accordingly, the estimated fair value of these indemnification provisions is immaterial.

Legal Proceedings

We are subject to various legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, management does not believe that the outcome of any of these other legal matters will have a material effect on our financial position, results of operations or cash flows.

Note 11: Shareholders' Equity

Preferred Stock

Our Board of Directors is authorized to establish one or more series of preferred stock and to fix and determine the number and conditions of preferred shares, including dividend rates, redemption and/or conversion provisions, if any, preferences and voting rights. As of November 30, 2020, there was no preferred stock issued or outstanding.

Common Stock

We have 200,000,000 shares of authorized common stock, \$0.01 par value per share, of which 44,240,635 were issued and outstanding at November 30, 2020.

There were 214,631 deferred stock units ("DSUs") outstanding at November 30, 2020. Each DSU represents one share of our common stock and all DSU grants have been made to non-employee members of our Board of Directors. DSUs do not have voting rights and can only be converted into common stock when the recipient ceases to be a member of the Board of Directors or a change in control of the Company occurs.

Common Stock Repurchases

In January 2020, our Board of Directors increased the total share repurchase authorization from \$75.0 million to \$250.0 million. In fiscal years 2020 and 2019, we repurchased and retired 1.4 million shares of our common stock for \$60.0 million and 0.7 million shares of our common stock for \$25.0 million, respectively, under this current authorization. In fiscal year 2018, we repurchased and retired 2.9 million shares of our common stock for \$120.0 million. As of November 30, 2020, there was \$190.0 million remaining under the current authorization.

Dividends

On September 27, 2016, our Board of Directors approved the initiation of a quarterly cash dividend of \$0.125 per share of common stock to Progress stockholders. We began paying quarterly cash dividends of \$0.125 per share of common stock to Progress stockholders in December 2016 and increased the quarterly cash dividend to \$0.14 per share in September 2017. In September 2018, the quarterly cash dividend was increased by 11% to \$0.155 per share of common stock. In September 2019, our Board of Directors approved an additional 6% increase to our quarterly cash dividend from \$0.155 to \$0.165 per share of common stock.

On September 22, 2020, our Board of Directors approved an additional increase of 6% to our quarterly cash dividend from \$0.165 to \$0.175 and declared a quarterly dividend of \$0.175 per share of common stock. We have declared aggregate per share quarterly cash dividends totaling \$0.670, \$0.630 and \$0.575 for the years ended November 30, 2020, November 30, 2019 and November 30, 2018, respectively. We have paid aggregate cash dividends totaling \$29.9 million, \$27.8 million, and \$25.8 million and for the years ended November 30, 2020, November 30, 2019 and November 30, 2018, respectively.

Note 12: Stock-Based Compensation

We currently have one stockholder-approved stock plan from which we can issue stock-based awards, which was approved by our stockholders in fiscal year 2008 ("2008 Plan"). The 2008 Plan replaced the 1992 Incentive and Nonqualified Stock Option Plan, the 1994 Stock Incentive Plan and the 1997 Stock Incentive Plan (collectively, the "Previous Plans"). The Previous Plans solely exist to satisfy outstanding options previously granted under those plans. The 2008 Plan permits the granting of stock awards to officers, members of the Board of Directors, employees and consultants. Awards under the 2008 Plan may include nonqualified stock options, incentive stock options, grants of conditioned or restricted stock, unrestricted grants of stock, grants of stock contingent upon the attainment of performance goals, deferred stock units and stock appreciation rights. A total of 54,510,000 shares are issuable under these plans, of which 3,043,910 shares were available for grant as of November 30, 2020.

We have adopted two stock plans for which the approval of stockholders was not required: the 2002 Nonqualified Stock Plan ("2002 Plan") and the 2004 Inducement Stock Plan ("2004 Plan"). The 2002 Plan permits the granting of stock awards to non-executive officer employees and consultants. Executive officers and members of the Board of Directors are not eligible for awards under the 2002 Plan. Awards under the 2002 Plan may include nonqualified stock options, grants of conditioned or restricted stock, unrestricted grants of stock, grants of stock contingent upon the attainment of performance goals and stock appreciation rights. A total of 9,750,000 shares are issuable under the 2002 Plan, of which 438,813 shares were available for grant as of November 30, 2020.

The 2004 Plan is reserved for persons to whom we may issue securities as an inducement to become employed by us pursuant to the rules and regulations of the NASDAQ Stock Market. Awards under the 2004 Plan may include nonqualified stock options, grants of conditioned or restricted stock, unrestricted grants of stock, grants of stock contingent upon the attainment of performance goals and stock appreciation rights. A total of 1,500,000 shares are issuable under the 2004 Plan, of which 462,859 shares were available for grant as of November 30, 2020.

Under all of our plans, the options granted generally begin to vest within one year of the grant.

A summary of stock option activity under all the plans is as follows:

	Shares (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value ⁽¹⁾ (in thousands)
Options outstanding, December 1, 2019	1,423	\$ 37.26		
Granted	611	43.34		
Exercised	(137)	31.84		
Canceled	(224)	42.08		
Options outstanding, November 30, 2020	1,673	\$ 39.28	4.9	\$ 7,125
Exercisable, November 30, 2020	711	\$ 37.28	4.0	\$ 4,315
Vested or expected to vest, November 30, 2020	1,672	\$ 39.28	4.9	\$ 7,125

⁽¹⁾ The aggregate intrinsic value was calculated based on the difference between the closing price of our stock on November 30, 2020 of \$40.39 and the exercise prices for all options outstanding.

A summary of restricted stock units' activity is as follows (in thousands, except per share data):

	Number of Shares	Weighted Average Fair Value
Restricted stock units outstanding, December 1, 2019	829	\$ 38.15
Granted	538	43.80
Issued	(416)	36.20
Canceled	(155)	39.96
Restricted stock units outstanding, November 30, 2020	796	\$ 42.65

Each restricted stock unit represents one share of common stock. The restricted stock units generally vest semi-annually over a three-year period. Performance-based restricted stock units are subject to multi-year performance criteria aligned with our business plan and are earned only to the extent the performance criteria are achieved.

The fair value of outright stock awards, restricted stock units and DSUs is equal to the closing price of our common stock on the date of grant, less the present value of expected dividends when applicable. Beginning in fiscal year 2020, restricted stock units have forfeitable dividend equivalent rights equal to the dividend paid on our common stock.

During the first quarter of fiscal years 2018, 2019 and 2020, we granted performance-based restricted stock units that include two performance metrics under a Long-Term Incentive Plan ("LTIP") where the performance measurement period is three years. Vesting of these LTIP awards is as follows: (i) 50% is based on our level of attainment of specified total stockholder return ("TSR") targets relative to the percentage appreciation of a specified index of companies for the respective three-year periods, and (ii) 50% is based on achievement of a three-year cumulative performance condition (operating income). The vesting of LTIP awards is also subject to continued employment of the grantees. In order to estimate the fair value of such awards, we used a Monte Carlo Simulation valuation model for the market condition portion of the award and used the closing

price of our common stock on the date of grant, less the present value of expected dividends when applicable, for the portion related to the performance condition.

The 1991 Employee Stock Purchase Plan ("ESPP") permits eligible employees to purchase up to an aggregate of 9,450,000 shares of our common stock through accumulated payroll deductions. The ESPP has a 27-month offering period comprised of nine three-month purchase periods. The purchase price of the stock is equal to 85% of the lesser of the market value of such shares at the beginning of a 27-month offering period or the end of each three-month segment within such offering period. If the market price at any of the nine purchase periods is less than the market price on the first date of the 27-month offering period, subsequent to the purchase, the offering period is canceled and the employee is entered into a new 27-month offering period with the then current market price as the new base price. We issued 237,000 shares, 189,000 shares and 225,000 shares with weighted average purchase prices of \$27.86, \$29.23 and \$24.27 per share, respectively, in fiscal years 2020, 2019 and 2018, respectively. At November 30, 2020, approximately 164,000 shares were available and reserved for issuance under the ESPP.

We estimated the fair value of stock options and ESPP awards granted in fiscal years 2020, 2019 and 2018 on the measurement dates using the Black-Scholes option valuation model, and LTIP awards using the Monte Carlo Simulation valuation model, with the following weighted average assumptions:

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018
Stock options:			
Expected volatility	29.0 %	25.0 %	22.8 %
Risk-free interest rate	1.1 %	2.5 %	2.3 %
Expected life (in years)	4.8	4.8	4.8
Expected dividend yield	1.6 %	1.8 %	1.1 %
Employee stock purchase plan:			
Expected volatility	38.2 %	30.6 %	23.8 %
Risk-free interest rate	0.2 %	2.3 %	2.3 %
Expected life (in years)	1.3	1.6	1.7
Expected dividend yield	2.0 %	1.7 %	1.5 %
Long-term incentive plan:			
Expected volatility	34.7 %	32.2 %	27.4 %
Risk-free interest rate	1.1 %	2.5 %	2.1 %
Expected life (in years)	2.8	2.8	2.9
Expected dividend yield	— %	1.7 %	1.7 %

For each stock option award, the expected life in years is based on historical exercise patterns and post-vesting termination behavior. Expected volatility is based on historical volatility of our stock, and the risk-free interest rate is based on the U.S. Treasury yield curve for the period that is commensurate with the expected life at the time of grant. The expected annual dividend yield is based on the weighted-average of the dividend yield assumptions used for options granted during the applicable period.

For each ESPP award, the expected life in years is based on the period of time between the beginning of the offering period and the date of purchase, plus an additional holding period of three months. Expected volatility is based on historical volatility of our stock, and the risk-free interest rate is based on the U.S. Treasury yield curve in effect at each purchase period. The expected annual dividend yield is based on the weighted-average of the dividend yield assumptions used for options granted during the applicable period.

Based on the above assumptions, the weighted average estimated fair value of stock options granted in fiscal years 2020, 2019, and 2018 was \$9.59, \$7.38 and \$10.30 per share, respectively. We amortize the estimated fair value of stock options to expense over the vesting period using the straight-line method. The weighted average estimated fair value for shares issued under our ESPP in fiscal years 2020, 2019 and 2018 was \$8.73, \$11.07 and \$10.24 per share, respectively. We amortize the estimated fair value of shares issued under the ESPP to expense over the vesting period using a graded vesting model.

Total unrecognized stock-based compensation expense, net of expected forfeitures, related to unvested stock options and unvested restricted stock awards amounted to \$33.3 million at November 30, 2020. These costs are expected to be recognized over a weighted average period of two years.

The following additional activity occurred under our plans (in thousands):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018
Total intrinsic value of stock options on date exercised	\$ 1,340	\$ 1,388	\$ 3,692
Total fair value of deferred stock units on date vested	1,547	1,853	1,690
Total fair value of restricted stock units on date vested	15,499	14,720	14,741

The following table provides the classification of stock-based compensation as reflected in our consolidated statements of operations (in thousands):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018
Cost of maintenance and services	\$ 1,336	\$ 1,134	\$ 616
Sales and marketing	4,462	4,155	2,959
Product development	7,286	7,205	8,242
General and administrative	10,398	10,817	8,752
Total stock-based compensation	\$ 23,482	\$ 23,311	\$ 20,569
Income tax benefit included in the provision for income taxes	\$ 4,541	\$ 4,661	\$ 4,345

Separation Arrangements

During fiscal year 2020, we entered into a separation agreement with one executive, which entitled them to accelerated vesting of certain stock-based awards. Due to the separation and accelerated vesting, we recognized additional stock-based compensation expense of \$0.3 million, which was recorded as general and administrative expense in the consolidated statement of operations.

Note 13: Retirement Plan

We maintain a retirement plan covering all U.S. employees under Section 401(k) of the Internal Revenue Code. Company contributions to the plan are at the discretion of the Board of Directors and totaled approximately \$3.6 million, \$2.3 million and \$3.1 million for fiscal years 2020, 2019 and 2018, respectively.

Note 14: Revenue Recognition

Contract Balances

Unbilled Receivables and Contract Assets

The timing of revenue recognition may differ from the timing of customer invoicing. When revenue is recognized prior to invoicing and the right to the amount due from customers is conditioned only on the passage of time, we record an unbilled receivable on our consolidated balance sheets. Our multi-year term license arrangements, which are typically billed annually, result in revenue recognition in advance of invoicing and the recognition of unbilled receivables.

As of November 30, 2020, invoicing of our long-term unbilled receivables is expected to occur as follows (in thousands):

2022	\$	8,436
2023		2,055
2024		285
Total	\$	10,776

Contract assets, which arise when products or services have begun to be transferred to the customer and our right to the amounts due from customers is conditioned on something other than the passage of time, such as the completion of a related performance obligation, were \$11.3 million and \$1.5 million as of November 30, 2020 and November 30, 2019, respectively. These amounts are included in unbilled receivables and contract assets or long-term unbilled receivables and contract assets on our consolidated balance sheets.

Deferred Revenue

Deferred revenue is recorded when revenue is recognized subsequent to customer invoicing. Deferred revenue expected to be recognized as revenue more than one year subsequent to the balance sheet date is included in long-term liabilities on the consolidated balance sheets. Our deferred revenue balance is primarily made up of deferred maintenance from our OpenEdge and Application Development and Deployment segments.

As of November 30, 2020, the changes in deferred revenue were as follows (in thousands):

Balance, December 1, 2019	\$	177,246
Billings and other		458,199
Revenue recognized		(442,150)
Balance, November 30, 2020	\$	193,295

Transaction price allocated to remaining performance obligations represents contracted revenue that has not yet been recognized, which includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods. As of November 30, 2020, transaction price allocated to remaining performance obligations was \$212.2 million. We expect to recognize approximately 83% of the revenue within the next year and the remainder thereafter.

Deferred Contract Costs

Deferred contract costs, which include certain sales incentive programs, are incremental and recoverable costs of obtaining a contract with a customer. Incremental costs of obtaining a contract with a customer are recognized as an asset if the expected benefit of those costs is longer than one year. We have applied the practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less. These costs include a large majority of our sales incentive programs as we have determined that annual compensation is commensurate with annual sales activities.

Certain of our sales incentive programs do meet the requirements to be capitalized. Depending upon the sales incentive program and the related revenue arrangement, such capitalized costs are amortized over the longer of (i) the product life, which is generally three to five years; or (ii) the term of the related revenue contract. We determined that a three to five year product life represents the period of benefit that we receive from these incremental costs based on both qualitative and quantitative factors, which include customer contracts, industry norms, and product upgrades. Total deferred contract costs were \$2.5 million, \$1.7 million and minimal as of November 30, 2020, November 30, 2019 and November 30, 2018, respectively, and are included in other current assets and other assets on our consolidated balance sheets. Amortization of deferred contract costs is included in sales and marketing expense on our consolidated statement of operations and was minimal in all periods presented.

Note 15: Restructuring

The following table provides a summary of activity for all of the restructuring actions, which are detailed further below (in thousands):

	Excess Facilities and Other Costs	Employee Severance and Related Benefits	Total
Balance, November 30, 2017	\$ 570	\$ 3,556	\$ 4,126
Costs incurred	1,011	1,240	2,251
Cash disbursements	(1,309)	(4,802)	(6,111)
Translation adjustments and other	35	10	45
Balance, November 30, 2018	\$ 307	\$ 4	\$ 311
Costs incurred	740	5,591	6,331
Cash disbursements	(760)	(3,647)	(4,407)
Translation adjustments and other	(91)	59	(32)
Balance, November 30, 2019	\$ 196	\$ 2,007	\$ 2,203
Costs incurred	1,812	4,094	5,906
Cash disbursements	(1,569)	(2,554)	(4,123)
Asset impairment	(20)	—	(20)
Translation adjustments and other	2	5	7
Balance, November 30, 2020	\$ 421	\$ 3,552	\$ 3,973

2020 Restructurings

During the fourth quarter of fiscal year 2020, we restructured our operations in connection with the acquisition of Chef (Note 7). This restructuring resulted in a reduction in redundant positions, primarily within administrative functions of Chef.

For the fiscal year ended November 30, 2020, we incurred expenses of \$3.9 million relating to this restructuring. The expenses are recorded as restructuring expenses in the consolidated statements of operations.

A summary of activity for this restructuring action is as follows (in thousands):

	Excess Facilities and Other Costs	Employee Severance and Related Benefits	Total
Balance, December 1, 2019	\$ —	\$ —	\$ —
Costs incurred	—	3,947	3,947
Cash disbursements	—	(429)	(429)
Translation adjustments and other	—	5	5
Balance, November 30, 2020	<u>\$ —</u>	<u>\$ 3,523</u>	<u>\$ 3,523</u>

Cash disbursements for expenses incurred to date under this restructuring are expected to be made through fiscal year 2021. Accordingly, the balance of the restructuring reserve of \$3.5 million is included in other accrued liabilities on the consolidated balance sheet at November 30, 2020.

We expect to incur additional expenses as part of this action related to employee costs and facility closures as we consolidate offices in various locations during fiscal year 2021, but we do not expect these costs to be material.

2019 Restructurings

During the fourth quarter of fiscal year 2019, we announced the reduction of our current and ongoing spending level within our cognitive application product lines, which consist primarily of our DataRPM and Kinvey products. This restructuring resulted in a reduction in positions primarily within the product development function. In connection with this restructuring action, during the fourth quarter of fiscal year 2019, we evaluated the ongoing value of the intangible assets primarily associated with the technologies and trade names obtained in the acquisitions of DataRPM and Kinvey. As a result, we wrote down these assets to fair value, which resulted in a \$22.7 million asset impairment charge (Note 4).

Restructuring expenses are related to employee costs, including severance, health benefits and outplacement services (but excluding stock-based compensation).

For the fiscal year ended November 30, 2020, we incurred expenses of \$0.1 million relating to this restructuring. The expenses are recorded as restructuring expenses in the consolidated statements of operations.

A summary of activity for this restructuring action is as follows (in thousands):

	Excess Facilities and Other Costs	Employee Severance and Related Benefits	Total
Balance, December 1, 2018	\$ —	\$ —	\$ —
Costs incurred	—	2,494	2,494
Cash disbursements	—	(1,035)	(1,035)
Translation adjustments and other	—	1	1
Balance, November 30, 2019	<u>\$ —</u>	<u>\$ 1,460</u>	<u>\$ 1,460</u>
Costs incurred	—	108	108
Cash disbursements	—	(1,546)	(1,546)
Balance, November 30, 2020	<u>\$ —</u>	<u>\$ 22</u>	<u>\$ 22</u>

Cash disbursements for expenses incurred to date under this restructuring are expected to be made through fiscal year 2021. Accordingly, the balance of the restructuring reserve, which is not material, is included in other accrued liabilities on the consolidated balance sheet at November 30, 2020. We do not expect to incur additional material costs with respect to this restructuring.

During the second quarter of fiscal year 2019, we restructured our operations in connection with the acquisition of Ipswitch (Note 7). This restructuring resulted in a reduction in redundant positions, primarily within administrative functions of Ipswitch.

For the fiscal years ended November 30, 2020 and 2019, we incurred expenses of \$1.5 million and \$3.1 million, respectively, relating to this restructuring. The expenses are recorded as restructuring expenses in the consolidated statements of operations.

A summary of activity for this restructuring action is as follows (in thousands):

	Excess Facilities and Other Costs	Employee Severance and Related Benefits	Total
Balance, December 1, 2018	\$ —	\$ —	\$ —
Costs incurred	5	3,093	3,098
Cash disbursements	—	(2,604)	(2,604)
Translation adjustments and other	—	58	58
Balance, November 30, 2019	\$ 5	\$ 547	\$ 552
Costs incurred	1,447	39	1,486
Cash disbursements	(1,020)	(579)	(1,599)
Asset impairment	(20)	—	(20)
Translation adjustments and other	5	—	5
Balance, November 30, 2020	\$ 417	\$ 7	\$ 424

Cash disbursements for expenses incurred to date under this restructuring are expected to be made through fiscal year 2021. Accordingly, the balance of the restructuring reserve of \$0.4 million is included in other accrued liabilities on the consolidated balance sheet at November 30, 2020.

We expect to incur additional expenses as part of this action related to facility closures as we consolidate offices in various locations during fiscal year 2021, but we do not expect these costs to be material.

2017 Restructuring

During the first quarter of fiscal year 2017, we undertook certain operational restructuring initiatives intended to significantly reduce annual costs. As part of this action, management committed to a new strategic plan highlighted by a new product strategy and a streamlined operating approach. To execute these operational restructuring initiatives, we reduced our global workforce by over 20%. These workforce reductions occurred in substantially all functional units and across all geographies in which we operate. During the fourth quarter of fiscal year 2017, we incurred additional costs with respect to this restructuring, including reduction in redundant positions primarily within the product development and sales functions. We also consolidated offices in various locations during fiscal years 2017 and 2018. We expect to incur additional expenses related to facility closures as part of this restructuring action through fiscal year 2021, but we do not expect these additional costs to be material.

Restructuring expenses are related to employee costs, including severance, health benefits and outplacement services (but excluding stock-based compensation), facilities costs, which include fees to terminate lease agreements and costs for unused space, net of sublease assumptions, and other costs, which include asset impairment charges.

As part of this fiscal year 2017 restructuring, for the fiscal years ended November 30, 2020, 2019 and 2018, we incurred expenses of \$0.4 million, \$0.7 million, \$2.3 million respectively, which are recorded as restructuring expenses in the consolidated statements of operations.

A summary of activity for this restructuring action is as follows (in thousands):

	Excess Facilities and Other Costs	Employee Severance and Related Benefits	Total
Balance, November 30, 2017	\$ 540	\$ 3,556	\$ 4,096
Costs incurred	1,011	1,240	2,251
Cash disbursements	(1,279)	(4,802)	(6,081)
Translation adjustments and other	35	10	45
Balance, November 30, 2018	\$ 307	\$ 4	\$ 311
Costs incurred	735	4	739
Cash disbursements	(760)	(8)	(768)
Asset impairment	(89)	—	(89)
Translation adjustments and other	(2)	—	(2)
Balance, November 30, 2019	\$ 191	\$ —	\$ 191
Costs incurred	365	—	365
Cash disbursements	(549)	—	(549)
Translation adjustments and other	(3)	—	(3)
Balance, November 30, 2020	\$ 4	\$ —	\$ 4

Cash disbursements for expenses incurred to date under this restructuring are expected to be made through fiscal year 2020. Accordingly, a minimal balance of the restructuring reserve is included in other accrued liabilities on the consolidated balance sheet at November 30, 2020.

Note 16: Income Taxes

The components of income before income taxes are as follows (in thousands):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
U.S.	\$ 83,279	\$ (11,778)	\$ 59,440
Foreign	13,356	40,273	1,356
Total	\$ 96,635	\$ 28,495	\$ 60,796

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

The provision for income taxes is comprised of the following (in thousands):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018
Current:			
Federal	\$ 12,294	\$ 9,294	\$ 8,979
State	3,871	1,862	1,387
Foreign	3,370	5,808	3,088
Total current	19,535	16,964	13,454
Deferred, as adjusted⁽¹⁾:			
Federal	(1,613)	(12,191)	(863)
State	(969)	(2,399)	(51)
Foreign	(40)	(279)	(1,414)
Total deferred	(2,622)	(14,869)	(2,328)
Total	\$ 16,913	\$ 2,095	\$ 11,126

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

A reconciliation of the income taxes incurred at the U.S. Federal statutory rate compared to the effective tax rate is as follows (in thousands):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
Tax at U.S. Federal statutory rate	\$ 20,293	\$ 5,984	\$ 13,513
Foreign rate differences	(200)	(2,619)	1,281
Effects of foreign operations included in U.S. Federal provision	(167)	451	550
State income taxes, net	2,087	(918)	1,180
Research credits	(905)	(1,086)	(302)
Domestic production activities deduction	—	(248)	(1,283)
Tax-exempt interest	(3)	(27)	(66)
Nondeductible stock-based compensation	422	1,043	502
Meals and entertainment	162	198	192
Compensation subject to 162(m)	324	422	227
Uncertain tax positions and tax settlements	245	(720)	(1,626)
Remeasurement of net deferred tax liabilities due to the Act	—	—	(1,660)
Net excess tax benefit or detriment from stock-based compensation plans	61	(103)	(861)
Global intangible low tax inclusion	(307)	2,100	—
Foreign derived intangible deduction	(5,297)	(2,300)	—
Other	198	(82)	(521)
Total	\$ 16,913	\$ 2,095	\$ 11,126

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

The effective income tax rate is based on the income for the year, the composition of the income in different countries, changes related to valuation allowances and adjustments, if any, for the potential tax consequences or benefits of audits or other tax contingencies. Our aggregate income tax rate in foreign jurisdictions is lower than our effective income tax rate in the United States. The majority of our income before provision for income taxes from foreign operations has been earned by our subsidiary in Bulgaria that is taxed at a 10% tax rate.

Our United States income before provision for income taxes was at a deficit for fiscal year 2019 largely due to increased expense for amortization of acquired intangibles and due to an impairment expense of intangibles and long-lived assets.

During the first quarter of fiscal year 2018, the Tax Cuts and Jobs Act (the "Act") was enacted in the United States. The Act reduced the U.S. federal corporate tax rate from 35% to 21% effective January 1, 2018, moved to a territorial tax system and eliminated the domestic production activities deduction. The Act also provided for a one-time deemed repatriation transition tax on the post-1986 undistributed foreign subsidiary earnings and profits through December 31, 2017. However, the Company concluded that it is not subject to the one-time transition tax due to the Company's foreign subsidiaries being in a net accumulated deficit position.

Other international provisions of the Act became effective in fiscal year 2019 for the Company. The global intangible low-taxed income ("GILTI") provisions require the Company to include in its U.S. income tax base foreign subsidiary earnings in excess of an allowable return of the foreign subsidiary's tangible assets.

During fiscal year 2018, the Company recognized a \$1.7 million income tax benefit due to the re-measurement of its net U.S. deferred tax liabilities due to the Act.

The components of deferred tax assets and liabilities are as follows (in thousands):

	November 30, 2020	November 30, 2019
Deferred tax assets:		
Accounts receivable	\$ 241	\$ 174
Accrued compensation	2,861	3,283
Accrued liabilities and other	4,430	2,690
Deferred revenue	9,032	3,995
Stock-based compensation	4,814	4,342
Depreciation and amortization	—	15,341
Tax credit and loss carryforwards	42,189	21,867
Operating lease liabilities	5,531	—
Gross deferred tax assets	69,098	51,692
Valuation allowance	(9,876)	(8,864)
Total deferred tax assets	59,222	42,828
Deferred tax liabilities:		
Goodwill	(20,624)	(18,879)
Right-of-use lease assets	(4,837)	—
Deferred revenue	(3,027)	(4,541)
Depreciation and amortization	(15,924)	—
Prepaid expenses	(334)	(810)
Total deferred tax liabilities	(44,746)	(24,230)
Total	\$ 14,476	\$ 18,598

The valuation allowance primarily applies to net operating loss carryforwards and unutilized tax credits in jurisdictions or under conditions where realization is not more likely than not. The \$1.0 million increase in the valuation allowance during fiscal year 2020 primarily relates to the currency revaluation of foreign net operating losses which have a valuation allowance recorded against them. The \$0.1 million increase in the valuation allowance during fiscal year 2019 primarily relates to acquired foreign net operating losses which have a valuation allowance recorded against them. The \$7.3 million increase in the valuation allowance during fiscal year 2018 primarily relates to losses in a foreign subsidiary that are more likely than not going to expire prior to utilization.

At November 30, 2020, we have federal and foreign net operating loss carryforwards of \$208.4 million expiring on various dates through 2034. In addition, we have state net operating loss carryforwards of \$26.9 million expiring on various dates through 2028. At November 30, 2020, we have state tax credit carryforwards of approximately \$3.6 million expiring on various

dates through 2035 and \$2.3 million that may be carried forward indefinitely. In addition, we have federal tax credit carryforwards of approximately \$5.7 million expiring on various dates through 2038.

It is our intention to indefinitely reinvest the earnings of our non-U.S. subsidiaries. We have not provided for U.S. income taxes on the undistributed earnings of non-U.S. subsidiaries, which totaled \$97.2 million as of November 30, 2020, as these earnings have been indefinitely reinvested. It is not practicable to determine the amount of the unrecognized deferred tax liability if the undistributed earnings were to be repatriated due to the complexity of the income tax laws and regulations and the effects of the Tax Reform Act. These earnings could be subject to non-U.S. withholding taxes and other federal, state and/or foreign taxes if they were remitted to the U.S.

As of November 30, 2020, the total amount of unrecognized tax benefits was \$6.2 million, of which \$2.6 million was recorded in other noncurrent liabilities on the consolidated balance sheet and \$3.6 million of deferred tax assets, principally related to U.S and foreign net operating loss carry-forwards and state research and development tax credits, have not been recorded.

A reconciliation of the balance of our unrecognized tax benefits is as follows (in thousands):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018
Balance, beginning of year	\$ 4,993	\$ 5,787	\$ 7,520
Tax positions related to a prior period	539	110	(15)
Tax positions acquired	1,596	—	—
Settlements with tax authorities	(12)	(181)	(39)
Lapses due to expiration of the statute of limitations	(897)	(723)	(1,679)
Balance, end of year	<u>\$ 6,219</u>	<u>\$ 4,993</u>	<u>\$ 5,787</u>

If recognized, all amounts of unrecognized tax benefits would affect the effective tax rate.

We recognize interest and penalties related to uncertain tax positions as a component of our provision for income taxes. The amount of interest and penalties accrued are not material in any of the periods presented. We do not expect any significant changes to the amount of unrecognized tax benefits in the next twelve months.

Our Federal income tax returns have been examined or are closed by statute for all years prior to fiscal year 2017. Our state income tax returns have been examined or are closed by statute for all years prior to fiscal year 2016, and we are no longer subject to audit for those periods.

Tax authorities for certain non-U.S. jurisdictions are also examining tax returns and the Company does not expect the results of these examinations to be material to our consolidated balance sheets, cash flows or statements of income. With some exceptions, we are generally no longer subject to tax examinations in non-U.S. jurisdictions for years prior to fiscal year 2014.

Note 17: Earnings Per Share

We compute basic earnings per share using the weighted average number of common shares outstanding. We compute diluted earnings per share using the weighted average number of common shares outstanding plus the effect of outstanding dilutive stock options, restricted stock units and deferred stock units, using the treasury stock method. The following table sets forth the calculation of basic and diluted earnings per share from continuing operations (in thousands, except per share data):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
Net income	\$ 79,722	\$ 26,400	\$ 49,670
Weighted average shares outstanding	44,886	44,791	45,561
Dilutive impact from common stock equivalents	435	549	574
Diluted weighted average shares outstanding	45,321	45,340	46,135
Basic earnings per share	\$ 1.78	\$ 0.59	\$ 1.09
Diluted earnings per share	\$ 1.76	\$ 0.58	\$ 1.08

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

We excluded stock awards representing approximately 1,268,000 shares, 932,000 shares, and 602,000 shares of common stock from the calculation of diluted earnings per share in the fiscal years ended November 30, 2020, 2019 and 2018, respectively, because these awards were anti-dilutive.

Note 18: Business Segments and International Operations

Operating segments are components of an enterprise that engage in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and assess performance. Our chief operating decision maker is our Chief Executive Officer.

We operate as three distinct business segments: OpenEdge, Data Connectivity and Integration, and Application Development and Deployment.

We do not manage our assets or capital expenditures by segment or assign other income (expense) and income taxes to segments. We manage and report such items on a consolidated company basis.

The following table provides revenue and contribution margin from our reportable segments and reconciles to the consolidated income from continuing operations before income taxes:

(In thousands)	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
Segment revenue:			
OpenEdge	\$ 326,444	\$ 296,929	\$ 277,806
Data Connectivity and Integration	34,187	39,903	23,129
Application Development and Deployment	81,519	76,466	78,046
Total revenue	442,150	413,298	378,981
Segment costs of revenue and operating expenses:			
OpenEdge	76,352	85,209	67,820
Data Connectivity and Integration	8,397	7,973	7,634
Application Development and Deployment	36,749	23,993	27,087
Total costs of revenue and operating expenses	121,498	117,175	102,541
Segment contribution margin:			
OpenEdge	250,092	211,720	209,986
Data Connectivity and Integration	25,790	31,930	15,495
Application Development and Deployment	44,770	52,473	50,959
Total contribution margin	320,652	296,123	276,440
Other unallocated expenses ⁽²⁾	212,924	256,039	208,626
Income from operations	107,728	40,084	67,814
Other expense, net	(11,093)	(11,589)	(7,018)
Income before income taxes	\$ 96,635	\$ 28,495	\$ 60,796

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

⁽²⁾The following expenses are not allocated to our segments as we manage and report our business in these functional areas on a consolidated basis only: product development, corporate marketing, administration, amortization and impairment of acquired intangibles, impairment of long-lived assets, stock-based compensation, restructuring, acquisition-related expenses, loss on assets held for sale, and fees related to shareholder activist.

Our revenues are derived from licensing our products, and from related services, which consist of maintenance, hosting services, and consulting and education. Information relating to revenue from external customers by revenue type is as follows (in thousands):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
Performance obligations transferred at a point in time:			
Software licenses	\$ 115,249	\$ 122,552	\$ 99,800
Performance obligations transferred over time:			
Maintenance	288,887	259,006	249,171
Services	38,014	31,740	30,010
Total revenue	\$ 442,150	\$ 413,298	\$ 378,981

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

In the following table, revenue attributed to the United States includes sales to customers in the U.S. and sales to certain multinational organizations. Revenue from Canada, EMEA, Latin America and the Asia Pacific region includes sales to customers in each region plus sales from the U.S. to distributors in these regions. Information relating to revenue from external customers from different geographical areas is as follows (in thousands):

	Fiscal Year Ended		
	November 30, 2020	November 30, 2019	November 30, 2018 As Adjusted ⁽¹⁾
United States	\$ 240,717	\$ 213,252	\$ 187,627
Canada	20,281	20,659	16,630
EMEA	143,754	137,301	135,055
Latin America	14,574	19,665	18,046
Asia Pacific	22,824	22,421	21,623
Total revenue	\$ 442,150	\$ 413,298	\$ 378,981

⁽¹⁾The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Summary of Significant Accounting Policies* for further information.

No single customer, partner, or country outside of the U.S. has accounted for more than 10% of our consolidated revenue in any year presented. Long-lived assets totaled \$22.8 million, \$25.7 million and \$25.8 million in the U.S. and \$7.0 million, \$4.1 million and \$4.9 million outside of the U.S. at the end of fiscal years 2020, 2019 and 2018, respectively. No individual country outside of the U.S. accounted for more than 10% of our consolidated long-lived assets.

Note 19: Selected Quarterly Financial Data (unaudited)

(in thousands, except per share data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal year 2020:				
Revenue	\$ 109,683	\$ 100,383	\$ 109,699	\$ 122,385
Gross profit	94,797	86,124	94,961	104,154
Income from operations	30,712	25,309	33,193	18,514
Net income	21,116	16,968	23,977	17,661
Basic earnings per share	0.47	0.38	0.53	0.39
Diluted earnings per share	0.46	0.37	0.53	0.39
Fiscal year 2019:				
Revenue	\$ 89,549	\$ 99,995	\$ 106,716	\$ 117,038
Gross profit	73,510	82,384	85,891	96,272
Income (loss) from operations	15,409	14,741	15,960	(6,026)
Net income (loss)	9,402	8,181	13,557	(4,740)
Basic earnings (loss) per share	0.21	0.18	0.30	(0.11)
Diluted earnings (loss) per share	0.21	0.18	0.30	(0.11)

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

(a) Evaluation of disclosure controls and procedures

Our management maintains disclosure controls and procedures as defined in Rule 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934, as amended (the “Exchange Act”) that are designed to provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Exchange Act is processed, recorded, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer (our principal executive officer and principal financial officer, respectively), as appropriate, to allow for timely decisions regarding required disclosure.

Our management, including the Chief Executive Officer and Chief Financial Officer, carried out an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective to ensure that the information required to be disclosed in the reports filed or submitted by us under the Securities Exchange Act of 1934 was recorded, processed, summarized and reported within the requisite time periods and that such information was accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow for timely decisions regarding required disclosure.

(b) Management’s Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. Our internal control system was designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of published financial statements.

Our management assessed the effectiveness of our internal control over financial reporting as of November 30, 2020. Our assessment was based on the framework in the updated *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our assessment we believe that as of November 30, 2020, our internal control over financial reporting is effective based on those criteria.

The Company acquired Chef on October 5, 2020. Management excluded this business from its assessment of the effectiveness of the Company’s internal control over financial reporting as of November 30, 2020. This exclusion was in accordance with SEC guidance that an assessment of a recently acquired business’s internal control over financial reporting may be omitted from management’s report on internal control over financial reporting in the year of acquisition of the business. Chef represented, in aggregate, approximately 7% of the Company’s total consolidated assets (excluding goodwill and intangibles, which are included within the scope of the assessment) and less than 1% of total consolidated revenues, as of and for the year ended November 30, 2020.

Deloitte & Touche LLP, our independent registered public accounting firm, which audited our consolidated financial statements, has issued an attestation report on our internal control over financial reporting, which is included in this Item 9A below.

(c) Changes in internal control over financial reporting

Our management, including our Chief Executive Officer and Chief Financial Officer, evaluated our “internal control over financial reporting” as defined in Exchange Act Rule 13a-15(f) to determine whether any changes in our internal control over financial reporting occurred during the fiscal quarter ended November 30, 2020 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, there were no changes in our internal control over financial reporting during the fiscal quarter ended November 30, 2020 that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

(d) Report of independent registered public accounting firm

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Progress Software Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Progress Software Corporation and subsidiaries (the “Company”) as of November 30, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of November 30, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended November 30, 2020, of the Company and our report dated January 27, 2021, expressed an unqualified opinion on those financial statements.

As described in Management’s Annual Report on Internal Control Over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Chef Software, Inc. acquired on October 5th, 2020 whose financial statements constitute approximately 7% of total assets (excluding goodwill and intangibles, which are included within the scope assessment) and less than 1% of total revenues of the consolidated financial statement amounts as of and for the year ended November 30, 2020. Accordingly, our audit did not include the internal control over financial reporting at Chef Software.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
January 27, 2021

Item 9B. Other Information

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Executive and Other Key Officers of the Registrant

The following table sets forth certain information regarding our executive and other key officers.

Name	Age	Position
John Ainsworth	56	Senior Vice President, Products - Core
Stephen Faberman	51	Chief Legal Officer
Anthony Folger	47	Chief Financial Officer
Yogesh Gupta	60	President and Chief Executive Officer
Loren Jarrett	46	Senior Vice President, General Manager - Developer Tools Business
Katie Kulikoski	44	Chief People Officer
Tony Murphy	50	Chief Information Officer and Chief Information Security Officer
Jennifer Ortiz	44	Vice President Corporate Marketing
Gary Quinn	60	Senior Vice President, Core Field Organization
Jeremy Segal	50	Senior Vice President, Corporate Development
Sundar Subramanian	43	Senior Vice President, General Manager - Chef Products

Mr. Ainsworth became Senior Vice President, Products-Core in January 2017. Mr. Ainsworth is responsible for the product management, product marketing, technical support and engineering functions for Progress OpenEdge, Progress Corticon, Progress DataDirect Connect, Progress DataDirect Hybrid Data Pipeline, Sitefinity, MOVEit and WhatsUp Gold. Prior to joining our company, Mr. Ainsworth was Senior Vice President, Engineering Services at CA Technologies, Inc., a position he assumed in April 2016. Prior to that time, Mr. Ainsworth held various senior positions within CA Technologies, Inc., which he joined through acquisition in 1994.

Mr. Faberman became Chief Legal Officer in December 2015. As Chief Legal Officer, Mr. Faberman is responsible for our legal and compliance, risk management, license compliance, product security compliance and facilities. Prior to becoming Chief Legal Officer, Mr. Faberman was Senior Vice President, General Counsel. Mr. Faberman became General Counsel in December 2012 and a Senior Vice President in January 2014. Prior to that time, from October 2012 to December 2012, Mr. Faberman was Vice President, Acting General Counsel, and from January 2012 to October 2012, Mr. Faberman was Vice President, Deputy General Counsel. Prior roles included Senior Vice President, Corporate Counsel at Heritage Property Investment Trust, Inc. from October 2003 until October 2006, and Partner, Bingham McCutcheon LLP until October 2003.

Mr. Folger became Chief Financial Officer in January 2020. As CFO, Mr. Folger is responsible for our finance and accounting, financial planning, treasury, tax and investor relations functions. Prior to joining our company, Mr. Folger was Chief Financial Officer and Treasurer of Carbonite, Inc., from January 2013 until Carbonite was acquired by OpenText Corporation in late December 2019. Prior to that time, from June 2006 to December 2012, Mr. Folger held senior leadership positions at Acronis AG, including Chief Financial Officer from October 2008 to December 2012.

Mr. Gupta became President and Chief Executive Officer in October 2016. Prior to that time, Mr. Gupta served as an advisor to various venture capital and private equity firms from October 2015 until September 2016. Prior to that time, Mr. Gupta was President and Chief Executive Officer at Kaseya, Inc., from June 2013 until July 2015, at which time, Mr. Gupta became Chairman of the Board of Directors, a position he held until October 2015. From July 2012 until June 2013, Mr. Gupta served as an advisor to various venture capital and private equity firms in several mergers and acquisitions opportunities. Mr. Gupta was previously President and Chief Executive Officer of FatWire Software from July 2007 until February 2012, prior to the acquisition of FatWire Software by Oracle Corporation. Prior roles included Chief Technology Officer at CA Technologies, with whom Mr. Gupta held various senior positions.

Ms. Jarrett became Senior Vice President and General Manager, Developer Tools Business in June 2019. As General Manager, Ms. Jarrett is responsible for the sales, product management, product marketing, field marketing, technical support and engineering for our DevTools product line. Prior to this role, Ms. Jarrett was our Chief Marketing Officer, a position she held from January 2017 to June 2019. Prior to that time, Ms. Jarrett was Chief Marketing Officer at Acquia, from 2015 until December 2016. Previously, Ms. Jarrett was Chief Marketing Officer at Kaseya, Inc. from 2013 until 2015, and Vice President, Corporate Charge Card and Loyalty Products at American Express, in 2013. Prior to that time, Ms. Jarrett was Vice President, Product Management and Strategy at Oracle Corporation from 2011 until 2012, and Senior Vice President of Marketing and Product Management at FatWire from 2007 until its acquisition by Oracle in 2011.

Ms. Kulikoski became Chief People Officer in November 2019. As Chief People Officer, Ms. Kulikoski is responsible for all aspects of the company's global human resources function, including culture development, talent acquisition, retention, change management and process effectiveness. Prior to joining our Company, from May 2014 to September 2019, Ms. Kulikoski held a variety of positions of increasing responsibility and scope at Brightcove, Inc. Her tenure at Brightcove included serving as Chief People Officer from November 2018 to September 2019. Prior to May 2014, Ms. Kulikoski held leadership positions at Optaros, CIDC and ConnectEdu.

Mr. Murphy became Chief Information Officer in June 2017 and Chief Information Security Officer in September 2018. As our Chief Information Officer and Chief Information Security Officer, Mr. Murphy is responsible for the development and implementation of our overall technology strategy for all internal systems and business processes and for monitoring and preventing security related incidents. Prior to joining our company, Mr. Murphy was Vice President of Global IT at Stratus Technologies, from January 2013 until May 2017. Previously, Mr. Murphy was Director of IT and Business Systems at Acme Packet, Inc. from May 2011 until its acquisition by Oracle Corporation in 2013.

Ms. Ortiz became Vice President of Corporate Marketing in October 2019. In this role, Ms. Ortiz is responsible for the development and execution of our corporate marketing programs. Prior to becoming Vice President of Corporate Marketing, Ms. Ortiz held a variety of positions of increasing responsibility and scope at Progress during her fifteen-year tenure with the company.

Mr. Quinn became Senior Vice President, Core Field Organization in August 2017. Mr. Quinn is responsible for global field operations for Progress OpenEdge, Progress Corticon, Progress DataDirect Connect, Progress DataDirect Hybrid Data Pipeline, Sitefinity, MOVEit and WhatsUp Gold. Prior to joining our company, Mr. Quinn was President and Chief Executive Officer of FalconStor Software, Inc. Mr. Quinn joined FalconStor Software in April 2012 as vice president of sales and marketing for North America, and he was named executive vice president and chief operating officer (COO) in April 2013, interim CEO in June 2013 and CEO in July 2013. Prior roles included Executive Vice President of Global Partners and International Sales at CA Technologies until 2006 and Commissioner of Information Technology (CIO) at Suffolk County Department of Information Technology (DoIT) from 2008 until 2012.

Mr. Segal became Senior Vice President, Corporate Development in May 2020. In this role, Mr. Segal is responsible for leading our inorganic growth strategy to deliver sustained shareholder value through accretive acquisitions. Prior to joining our company, Mr. Segal was Global Head of Corporate Development at LogMeIn, a position he assumed in September 2019. Prior to that time, Mr. Segal was Vice President, Corporate Development at LogMeIn beginning in March 2016. Prior to that time, Mr. Segal was Vice President, Corporate Development at Akamai Technologies, which he joined in April 2000.

Mr. Subramanian became Senior Vice President and General Manager, Chef in October 2020 upon completion of our acquisition of Chef. As General Manager, Mr. Subramanian is responsible for the sales, product management, product marketing, field marketing, technical support and engineering for the Chef product lines. Prior to that time, upon joining our company in August 2019, Mr. Subramanian was responsible for driving all facets of the company's early stage products including the Kinvey, Kinvey Health Cloud, DataRPM, NativeChat and NativeScript product lines. Prior to joining Progress, Mr. Subramanian was an Executive Director at athenahealth, Inc., from August 2016 to July 2019, and Vice President, Products at Citrus Payment Solutions Pvt. Ltd., from September 2015 to August 2016. Previously, he served as Vice President, SaaS at Kaseya, Inc., from January 2014 to August 2015.

Code of Conduct

We have adopted a Code of Conduct and Business Ethics that applies to all employees and directors. A copy of the Code of Conduct and Business Ethics is publicly available on our website at www.progress.com. If we make any substantive amendments to the Code of Conduct and Business Ethics or grant any waiver, including any implicit waiver, from the Code of Conduct and Business Ethics to our executive officers or directors, we will disclose the nature of such amendment or waiver in a Current Report on Form 8-K.

The remainder of the information required by Item 10 is incorporated by reference to our definitive Proxy Statement.

Item 11. Executive Compensation

The information required by Item 11 is incorporated by reference to our definitive Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information related to securities authorized for issuance under equity compensation plans as of November 30, 2020 is as follows (in thousands, except per share data):

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available For Future Issuance
Equity compensation plans approved by stockholders ⁽¹⁾	2,025 ⁽²⁾	\$ 38.68	3,208 ⁽³⁾
Equity compensation plans not approved by stockholders ⁽⁴⁾	443	41.02	902
Total	2,468	\$ 39.28	4,110

⁽¹⁾ Consists of the 1992 Incentive and Nonqualified Stock Option Plan, 1994 Stock Incentive Plan, 1997 Stock Incentive Plan, 2008 Stock Option and Incentive Plan and 1991 Employee Stock Purchase Plan ("ESPP").

⁽²⁾ Includes 796,000 restricted stock units under our 2008 Plan. Does not include purchase rights accruing under the ESPP because the purchase price (and therefore the number of shares to be purchased) will not be determined until the end of the purchase period.

⁽³⁾ Includes 164,000 shares available for future issuance under the ESPP.

⁽⁴⁾ Consists of the 2002 Nonqualified Stock Plan and the 2004 Inducement Plan described below.

We have adopted two equity compensation plans, the 2002 Nonqualified Stock Plan (2002 Plan) and the 2004 Inducement Stock Plan (2004 Plan), for which the approval of stockholders was not required. We intend that the 2004 Plan be reserved for persons to whom we may issue securities as an inducement to become employed by us pursuant to the rules and regulations of NASDAQ. Executive officers and members of the Board of Directors are not eligible for awards under the 2002 Plan. An executive officer would be eligible to receive an award under the 2004 Plan only as an inducement to join us. Awards under the 2002 Plan and the 2004 Plan may include nonqualified stock options, grants of conditioned stock, unrestricted grants of stock, grants of stock contingent upon the attainment of performance goals and stock appreciation rights. A total of 11,250,000 shares are issuable under the two plans, of which, 901,672 shares are available for future issuance.

The information required by Item 12 with respect to security ownership and our equity compensation plans may be found under the headings captioned "Information About Progress Software Common Stock Ownership" and "Equity Compensation Plan Information" in our definitive Proxy Statement and is incorporated by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by Item 13 is incorporated by reference to our definitive Proxy Statement.

Item 14. Principal Accounting Fees and Services

The information required by Item 14 is incorporated by reference to our definitive Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) Documents Filed as Part of this Annual Report on Form 10-K

1. Financial Statements (included in Item 8 of this Annual Report on Form 10-K):

- [Report of Independent Registered Public Accounting Firm](#)
- [Consolidated Balance Sheets as of November 30, 2020 and 2019](#)
- [Consolidated Statements of Operations for the years ended November 30, 2020, 2019 and 2018](#)
- [Consolidated Statements of Comprehensive Income \(Loss\) for the years ended November 30, 2020, 2019 and 2018](#)
- [Consolidated Statements of Shareholders' Equity for the years ended November 30, 2020, 2019 and 2018](#)
- [Consolidated Statements of Cash Flows for the years ended November 30, 2020, 2019 and 2018](#)
- [Notes to Consolidated Financial Statements](#)

2. Financial Statement Schedules

Financial statement schedules are omitted as they are either not required or the information is otherwise included in the consolidated financial statements.

(b) Exhibits

Documents listed below, except for documents followed by parenthetical numbers, are being filed as exhibits. Documents followed by parenthetical numbers are not being filed herewith and, pursuant to Rule 12b-32 of the General Rules and Regulations promulgated by the SEC under the Exchange Act, reference is made to such documents as previously filed as exhibits with the SEC. Our file number under the Exchange Act is 0-19417.

- 2.1* [Stock Purchase Agreement, dated March 28, 2019, by and among Progress Software Corporation, Ipswitch, Inc. and Roger Greene \(1\)](#)
- 2.2* [Agreement and Plan of Merger, dated September 4, 2020, by and among Progress Software Corporation, Go Big Transitory Subsidiary, Inc., Chef Software Inc. and Shareholder Representative Services LLC \(2\)](#)
- 2.3 [Plan of Domestication \(3\)](#)
- 3.1 [Certificate of Conversion from Non-Delaware Corporation to Delaware Corporation \(4\)](#)
- 3.2 [Certificate of Incorporation \(5\)](#)
- 3.2.1 [Certificate of Correction to Certification of Incorporation \(6\)](#)
- 3.3 [Amended and Restated By-Laws, as amended March 19, 2019 \(7\)](#)
- 4.1 [Specimen certificate for the Common Stock \(8\)](#)
- 4.2 [Description of Registered Securities \(9\)](#)
- 10.1** [1992 Incentive and Nonqualified Stock Option Plan \(10\)](#)
- 10.2** [1994 Stock Incentive Plan \(11\)](#)
- 10.3** [1997 Stock Incentive Plan, as amended and restated \(12\)](#)
- 10.4** [Form of Employee Retention and Motivation Agreement \(effective prior to September 2014\) \(13\)](#)
- 10.5** [2002 Nonqualified Stock Plan, as amended and restated \(14\)](#)
- 10.6** [2004 Inducement Stock Plan, as amended and restated \(15\)](#)
- 10.7** [Progress Software Corporation 1991 Employee Stock Purchase Plan, as amended and restated \(16\)](#)
- 10.8** [Progress Software Corporation 2008 Stock Option and Incentive Plan, as amended and restated \(17\)](#)
- 10.9** [Form of Notice of Grant of Stock Options and Grant Agreement under the Progress Software Corporation 2008 Stock Option and Incentive Plan \(18\)](#)
- 10.10** [Progress Software Corporation Corporate Executive Bonus Plan \(19\)](#)
- 10.11** [Progress Software Corporation 2020 Fiscal Year Compensation Program for Non-Employee Directors \(20\)](#)
- 10.12** [Form of Deferred Stock Unit Agreement under the Progress Software Corporation 2008 Stock Option and Incentive Plan \(21\)](#)

10.13**	Form of Non-Qualified Stock Option Agreement for Non-Employee Directors under the Progress Software Corporation 2008 Stock Option and Incentive Plan (Initial Grant).(22)
10.14**	Form of Non-Qualified Stock Option Agreement for Non-Employee Directors under the Progress Software Corporation 2008 Stock Option and Incentive Plan (Annual Grant) (23)
10.15**	Form of Restricted Stock Unit Agreement under the Progress Software Corporation 2008 Stock Option and Incentive Plan (24)
10.16*	Second Amended and Restated Credit Agreement, dated as of April 30, 2019, by and among Progress Software Corporation, each of the lenders party thereto, JPMorgan Chase Bank, N.A., as Administrative Agent, Wells Fargo Bank, N.A. and Citizens Bank, N.A., as Syndication Agents, and Bank of America, N.A., Citibank, N.A., Silicon Valley Bank, Santander Bank, N.A. and TD Bank, N.A., as Documentation Agents, and JPMorgan Chase Bank, N.A., as Sole Bookrunner and Sole Lead Arranger (25)
10.17**	Employment Agreement, dated October 10, 2016, by and between Progress Software Corporation and Yogesh Gupta (26)
10.18**	Employee Retention and Motivation Agreement, dated as of October 10, 2016, by and between Progress Software Corporation and Yogesh Gupta (27)
10.19**	Employment Agreement, dated January 16, 2020, by and between Progress Software Corporation and Anthony Folger (28)
10.20	Form of Employee Retention and Motivation Agreement (effective after September 2014).(29)
10.21	Form of Termination Letter (Executive Officers).(30)
10.22	Form of Separation Form of Separation Agreement and Release (Executive Officers).(31)
21.1	List of Subsidiaries of the Registrant
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 - Yogesh Gupta
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 - Anthony Folger
32.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101***	The following materials from Progress Software Corporation’s Annual Report on Form 10-K for the year ended November 30, 2020, formatted in iXBRL (Inline eXtensible Business Reporting Language): (i) Consolidated Balance Sheets as of November 30, 2020 and 2019, (ii) Consolidated Statements of Income for the years ended November 30, 2020, 2019 and 2018, (iii) Consolidated Statements of Comprehensive Income for the years ended November 30, 2020, 2019 and 2018, (iv) Consolidated Statements of Shareholders’ Equity for the years ended November 30, 2020, 2019 and 2018, and (v) Consolidated Statements of Cash Flows for the years ended November 30, 2020, 2019 and 2018.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

- (1) Incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on April 1, 2019.
- (2) Incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on September 9, 2020.
- (3) Incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on May 14, 2015.
- (4) Incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed on May 14, 2015.
- (5) Incorporated by reference to Exhibit 3.2 to our Current Report on Form 8-K filed on May 14, 2015.
- (6) Incorporated by reference to Exhibit 3.2.1 to our Annual Report on Form 10-K for the year ended November 30, 2015.
- (7) Incorporated by reference to Exhibit 3.1 to our Quarterly Report on Form 10-Q for the quarter ended May 31, 2019.
- (8) Incorporated by reference to Exhibit 4.1 to our Annual Report on Form 10-K for the year ended November 30, 2011.
- (9) Incorporated by reference to Exhibit 4.2 to our Annual Report on Form 10-K for the year ended November 30, 2019.
- (10) Incorporated by reference to Exhibit 10.1 to our Annual Report on Form 10-K for the year ended November 30, 2009.
- (11) Incorporated by reference to Exhibit 10.2 to our Annual Report on Form 10-K for the year ended November 30, 2009.
- (12) Incorporated by reference to Exhibit 10.3 to our Annual Report on Form 10-K for the year ended November 30, 2012.
- (13) Incorporated by reference to Exhibit 10.4 to our Annual Report on Form 10-K for the year ended November 30, 2013.
- (14) Incorporated by reference to Exhibit 10.5 to our Annual Report on Form 10-K for the year ended November 30, 2015.
- (15) Incorporated by reference to Exhibit 10.6 to our Annual Report on Form 10-K for the year ended November 30, 2015.
- (16) Incorporated by reference to Appendix A to our definitive Proxy Statement filed April 15, 2016.
- (17) Incorporated by reference to Annex A to our definitive Proxy Statement filed May 7, 2013.
- (18) Incorporated by reference to Exhibit 10.9 to our Annual Report on Form 10-K for the year ended November 30, 2013.
- (19) Incorporated by reference to Exhibit 10.10 to our Annual Report on Form 10-K for the year ended November 30, 2012.
- (20) Incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended February 29, 2020 filed on April 7, 2020.
- (21) Incorporated by reference to Exhibit 10.12 to our Annual Report on Form 10-K for the year ended November 30, 2013.
- (22) Incorporated by reference to Exhibit 10.13 to our Annual Report on Form 10-K for the year ended November 30, 2013.
- (23) Incorporated by reference to Exhibit 10.14 to our Annual Report on Form 10-K for the year ended November 30, 2013.
- (24) Incorporated by reference to Exhibit 10.15 to our Annual Report on Form 10-K for the year ended November 30, 2014.
- (25) Incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on May 1, 2019.
- (26) Incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on October 14, 2016.
- (27) Incorporated by reference to Exhibit 10.2 to our Current Report on Form 8-K filed on October 14, 2016.
- (28) Incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on January 17, 2020.
- (29) Incorporated by reference to Exhibit 10.20 to our Annual Report on Form 10-K for the year ended November 30, 2019.

(30) Incorporated by reference to Exhibit 10.21 to our Annual Report on Form 10-K for the year ended November 30, 2019.

(31) Incorporated by reference to Exhibit 10.22 to our Annual Report on Form 10-K for the year ended November 30, 2019.

- * Certain schedules and exhibits have been omitted from this Exhibit pursuant to Item 601(a)(5) of Regulation S-K. Progress Software Corporation will furnish a copy of any omitted schedule or exhibit to the U.S. Securities and Exchange Commission or its staff upon request.
- ** Management contract or compensatory plan or arrangement in which an executive officer or director of Progress Software Corporation participates.
- *** Pursuant to Rule 406T of Regulations S-T, the Interactive Data Files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

(c) Financial Statement Schedules

All schedules are omitted because they are not applicable or the required information is shown on the financial statements or notes hereto.

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 27th day of January 2021.

PROGRESS SOFTWARE CORPORATION

By: /s/ YOGESH K. GUPTA
Yogesh K. Gupta
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ YOGESH K. GUPTA</u> Yogesh K. Gupta	President and Chief Executive Officer (Principal Executive Officer)	January 27, 2021
<u>/s/ ANTHONY FOLGER</u> Anthony Folger	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	January 27, 2021
<u>/s/ JOHN R. EGAN</u> John R. Egan	Non-Executive Chairman	January 27, 2021
<u>/s/ PAUL T. DACIER</u> Paul T. Dacier	Director	January 27, 2021
<u>/s/ RAINER GAWLICK</u> Rainer Gawlick	Director	January 27, 2021
<u>/s/ CHARLES F. KANE</u> Charles F. Kane	Director	January 27, 2021
<u>/s/ SAMSKRITI KING</u> Sanskriti King	Director	January 27, 2021
<u>/s/ DAVID A. KRALL</u> David A. Krall	Director	January 27, 2021
<u>/s/ ANGELA TUCCI</u> Angela Tucci	Director	January 27, 2021
<u>/s/ VIVIAN VITALE</u> Vivian Vitale	Director	January 27, 2021

Subsidiaries of Progress Software Corporation

Jurisdiction	Name
North America	
California	Savvion, Inc.
Canada	Progress Software Corporation of Canada Ltd.
Delaware	Apama Inc.
Delaware	Chef Software International, Inc.
Delaware	Progress Software International LLC
Delaware	Progress Software Denmark A/S
Delaware	Progress Software Germany GmbH
EMEA	
Austria	Progress Software GesmbH
Belgium	Progress Software NV
Bulgaria	Progress Software EAD
Bulgaria	Trident Acquisition EAD
Denmark	Progress Software A/S
Finland	Progress Software Oy
France	Progress Software S.A.S.
Germany	Chef Software GmbH
Germany	Progress Software GmbH
Ireland	Progress Software Technologies Limited
Ireland	SPK Acquisitions Limited
Italy	Progress Software Italy S.r.l.
Netherlands	Progress Software B.V.
Netherlands	Progress Software Europe B.V.
Norway	Progress Software A/S
Poland	Progress Software Sp. z.o o.
South Africa	Progress Software (Pty) Ltd
Spain	IONA Technologies Spain SL
Spain	Progress Software S.L.
Sweden	Progress Software Svenska AB
Switzerland	Progress Software AG
United Kingdom	Apama (UK) Limited
United Kingdom	Chef Software UK Limited
United Kingdom	Trident Acquisition Limited
United Kingdom	Progress Software Limited
Latin America	
Brazil	Progress Software do Brasil Ltda.
Asia Pacific	
Australia	Progress Software Pty. Ltd.
Australia	Chef Software Pty. Ltd.
China	Progress (Shanghai) Software System Company Limited

Hong Kong	IONA Technologies China Limited
Hong Kong	Progress Software Corporation Limited
India	Progress Software Development Private Limited
India	Progress Software Solutions India Private Limited
Japan	Progress Software Japan KK
Malaysia	Progress Software (M) Sdn. Bhd.
Singapore	Progress Software Corporation (S) Pte. Ltd.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 33-50654, 33-96320, 333-41403, 333-80571, 333-98035, 333-101239, 333-122962, 333-146233 and 333-150555 on Form S-8 and No. 333-133724 on Form S-3 of our reports dated January 27, 2021, relating to the financial statements of Progress Software Corporation, and the effectiveness of Progress Software Corporation's internal control over financial reporting, appearing in this Annual Report on Form 10-K of Progress Software Corporation for the year ended November 30, 2020.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
January 27, 2021

CERTIFICATION

I, Yogesh K. Gupta, certify that:

1. I have reviewed this Annual Report on Form 10-K of Progress Software Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure control and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: January 27, 2021

/s/ YOGESH K. GUPTA

Yogesh K. Gupta

President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

I, Anthony Folger, certify that:

1. I have reviewed this Annual Report on Form 10-K of Progress Software Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure control and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: January 27, 2021

/s/ ANTHONY FOLGER

Anthony Folger

Chief Financial Officer

(Principal Financial Officer)

Certification Pursuant To 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report on Form 10-K of Progress Software Corporation (the Company) for the year ended November 30, 2020, as filed with the Securities and Exchange Commission on the date hereof (the Report), each of the undersigned, Yogesh K. Gupta, President and Chief Executive Officer, and Anthony Folger, Chief Financial Officer, of the Company, certifies, to the best knowledge and belief of the signatory, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ YOGESH K. GUPTA
President and Chief Executive Officer

/s/ ANTHONY FOLGER
Chief Financial Officer

Date: January 27, 2021

Date: January 27, 2021