Kinaxis Inc.

Consolidated Financial Statements

for the years ended December 31, 2022 and 2021

(In thousands of USD)

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INDEPENDENT AUDITOR'S REPORT

To the Shareholders of Kinaxis Inc.

Opinion

We have audited the consolidated financial statements of Kinaxis Inc. (the "Entity"), which comprise:

- the consolidated statements of financial position as at December 31, 2022 and December 31, 2021
- the consolidated statements of comprehensive income (loss) for the years then ended
- the consolidated statements of changes in shareholders' equity for the years then ended
- the consolidated statements of cash flows for the years then ended
- and notes to the consolidated financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated financial position of the Entity as at December 31, 2022 and December 31, 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the ***"Auditor's Responsibilities for the Audit of the Financial Statements"*** section of our auditor's report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2022.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have determined the matters described below to be the key audit matters to be communicated in our auditor’s report.

Allocation of the transaction price to multiple performance obligations in contracts with customers

Description of the matter

We draw attention to Notes 2(f) and 3(b) to the financial statements. The Entity’s contracts with customers often include the delivery of multiple products and services, which are generally capable of being distinct and accounted for as separate performance obligations. The accounting for a contract or contracts with a customer that contain multiple performance obligations requires the Entity to allocate the contract or contracts’ transaction price to the identified distinct performance obligations. The allocation of the transaction price requires significant judgment and estimates relating to the determination of the standalone selling price (“SSP”) for each distinct performance obligation. The methodology used to determine the SSP depends on the nature of the products and services and how they are priced in contracts with customers. This allocation affects the amount and timing of revenue recognized for each performance obligation.

Why the matter is the key audit matter

We identified the allocation of the transaction price to multiple performance obligations in contracts with customers as a key audit matter. There was a significant risk of material misstatement relating to the methodology used to determine the SSP for each distinct performance obligation within a contract or contracts with a customer. In addition, significant auditor judgment was required to evaluate the results of our audit procedures due to the significant judgments and estimates associated with the determination of the SSP.

How the matter was addressed in the audit

The primary procedures we performed to address this key audit matter included the following:

We evaluated the methodology used to determine the SSP by comparing it to pricing patterns in customer contracts, historical methodologies used by the Entity, and general practices in the Entity’s industry.

For a selection of new customer contracts with multiple performance obligations, we examined the key terms and assessed the allocation of the transaction price to each distinct performance obligation based on its respective SSP derived from the underlying methodology.

Evaluation of the acquisition-date fair value of the intangible assets related to the MP Objects B.V. business combination

Description of the matter

We draw attention to Notes 2(f) and 4 to the financial statements. On August 15, 2022, the Entity acquired 100% of the outstanding shares of MP Objects B.V. (“MPO”) and all wholly owned subsidiaries in a business combination. The Entity paid cash consideration of $33,828 thousand and contingent consideration of 86,335 shares of the Entity that had a fair value at the date of acquisition of $9,972 thousand. The acquisition-date fair value of the customer relationships and technology (“intangible assets”) is valued at $7,600 thousand and $8,400 thousand, respectively. The Entity estimates the fair value of customer relationships and technology acquired in a business combination based on the income approach. The income approach is a valuation technique that calculates the fair value of an intangible asset based on the present value of future cash flows that the asset can be expected to generate over its remaining useful life. This valuation involves significant subjectivity and estimation uncertainty, including assumptions related to the future revenues attributable to acquired customer relationships or technology, customer attrition rates, technology migration rate, future expenses and discount rates.

Why the matter is the key audit matter

We identified the evaluation of the acquisition-date fair value of the intangible assets as a key audit matter. This matter represented an area of significant risk of material misstatement due to the magnitude of the balances and the high degree of subjectivity and estimation uncertainty in determining the fair value of intangible assets. In addition, significant auditor judgment and specialized skills and knowledge were required in evaluating the results of our audit procedures due to the sensitivity of the fair value of the intangible assets to minor changes in the significant assumptions.

How the matter was addressed in the audit

The primary procedures we performed to address this key audit matter included the following:

We evaluated the appropriateness of the future revenues and expenses, customer attrition rates, and technology migration rate assumptions by considering historical financial results, industry data, and assessing against comparable companies.

We involved valuation professionals with specialized skills and knowledge, who assisted in:

- evaluating the appropriateness of the valuation methodology used by the Entity to calculate the acquisition-date fair value of the intangible assets, and
- evaluating the Entity's discount rates by comparing against discount rate ranges that were independently developed using publicly available market and industry data.

Other Information

Management is responsible for the other information. Other information comprises:

- the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions.
- the information, other than the financial statements and the auditor's report thereon, included in a document likely to be entitled "Annual Report".

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions as at the date of this auditor's report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditor's report.

We have nothing to report in this regard.

The information, other than the financial statements and the auditor's report thereon, included in a document likely to be entitled "Annual Report" is expected to be made available to us after the date of this auditor's report. If, based on the work we will perform on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related

disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group Entity to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.
- Determine, from the matters communicated with those charged with governance, those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our auditor's report because the adverse consequence of doing so would reasonably be expected to outweigh the public benefits of such communication.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

The engagement partner on the audit resulting in this auditor's report is Anuj Madan.

Ottawa, Canada

March 1, 2023

Kinaxis Inc.

Consolidated Statements of Financial Position

As at December 31

(Expressed in thousands of USD)

	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 175,347	$ 203,220
Short-term investments	50,476	30,168
Trade and other receivables (note 5)	157,657	89,247
Prepaid expenses	13,660	8,502
	397,140	331,137
Non-current assets:		
Unbilled receivables (note 5)	7,245	512
Other receivables	971	1,096
Prepaid expenses	2,395	1,780
Investment tax credits recoverable (note 20)	7,591	3,616
Deferred tax assets (note 20)	1,065	6,000
Contract acquisition costs (note 6)	24,892	19,691
Property and equipment (note 7)	51,852	52,093
Right-of-use assets (note 8)	53,537	53,578
Intangible assets (note 9)	28,271	10,778
Goodwill (note 10)	73,314	39,988
	251,133	189,132
	$ 648,273	$ 520,269
Liabilities and Shareholders' Equity		
Current liabilities:		
Trade payables and accrued liabilities (note 11)	$ 40,107	$ 43,328
Deferred revenue (note 12)	133,467	99,239
Provisions (note 13)	296	716
Contingent consideration (note 4)	9,146	—
Lease obligations (note 14)	6,991	2,526
	190,007	145,809
Non-current liabilities:		
Lease obligations (note 14)	49,977	53,233
Deferred tax liabilities (note 20)	6,861	9
	56,838	53,242
Shareholders' equity:		
Share capital (note 15)	244,713	195,414
Contributed surplus	65,129	54,739
Accumulated other comprehensive loss	(156)	(597)
Retained earnings	91,742	71,662
	401,428	321,218
	$ 648,273	$ 520,269

See accompanying notes to consolidated financial statements.

On behalf of the Board of Directors:

(signed) John (Ian) Giffen Director *(signed) Elizabeth (Betsy) Rafael* Director

Kinaxis Inc.

Consolidated Statements of Comprehensive Income (Loss)

For the years ended December 31

(Expressed in thousands of USD, except share and per share data)

	2022	2021
Revenue (note 17)	$ 366,889	$ 250,726
Cost of revenue	131,102	86,755
Gross profit	235,787	163,971
Operating expenses:		
Selling and marketing	79,446	59,078
Research and development	74,147	57,424
General and administrative	54,273	45,550
	207,866	162,052
	27,921	1,919
Other income (expense):		
Foreign exchange gain (loss)	1,499	(558)
Net finance and other income (expense)	1,240	(264)
Change in fair value of contingent consideration (note 4)	826	—
	3,565	(822)
Profit before income taxes	31,486	1,097
Income Tax Expense (recovery) (note 20):		
Current	3,892	3,466
Deferred	7,514	(1,204)
	11,406	2,262
Profit (loss)	20,080	(1,165)
Other comprehensive income (loss):		
Items that are or may be reclassified subsequently to profit:		
Foreign currency translation differences - foreign operations	441	(577)
Total comprehensive income (loss)	$ 20,521	$ (1,742)
Basic earnings (loss) per share	$ 0.73	$ (0.04)
Weighted average number of basic Common Shares (note 16)	27,667,100	27,248,193
Diluted earnings (loss) per share	$ 0.70	$ (0.04)
Weighted average number of diluted Common Shares (note 16)	28,609,603	27,248,193

See accompanying notes to consolidated financial statements.

Kinaxis Inc.

Consolidated Statements of Changes in Shareholders' Equity

For the years ended December 31
(Expressed in thousands of USD)

	Share capital	Contributed surplus	Accumulated other comprehensive loss	Retained earnings	Total equity
Balance, December 31, 2020	$ 173,104	$ 35,846	$ (20)	$ 72,827	$ 281,757
Loss	—	—	—	(1,165)	(1,165)
Other comprehensive loss	—	—	(577)	—	(577)
Total comprehensive loss	—	—	(577)	(1,165)	(1,742)
Share options exercised	14,221	(3,459)	—	—	10,762
Restricted share units vested	8,089	(8,089)	—	—	—
Share based payments	—	30,441	—	—	30,441
Total shareholder transactions	22,310	18,893	—	—	41,203
Balance, December 31, 2021	195,414	54,739	(597)	71,662	321,218
Profit	—	—	—	20,080	20,080
Other comprehensive income	—	—	441	—	441
Total comprehensive income	—	—	441	20,080	20,521
Share options exercised	38,791	(9,076)	—	—	29,715
Restricted share units vested	10,091	(10,091)	—	—	—
Performance share units vested	417	(417)	—	—	—
Share based payments	—	29,974	—	—	29,974
Total shareholder transactions	49,299	10,390	—	—	59,689
Balance, December 31, 2022	$ 244,713	$ 65,129	$ (156)	$ 91,742	$ 401,428

See accompanying notes to consolidated financial statements.

Kinaxis Inc.

Consolidated Statements of Cash Flows

For the years ended December 31

(Expressed in thousands of USD)

	2022	2021
Cash flows from operating activities:		
Profit (loss)	$ 20,080	$ (1,165)
Items not affecting cash:		
Depreciation of property and equipment and right-of-use assets (note 19)	21,496	18,164
Amortization of intangible assets (note 19)	3,564	2,245
Share-based payments (note 15)	26,238	24,343
Net finance expense (income)	(1,013)	634
Change in fair value of contingent consideration (note 4)	(826)	—
Income tax expense (note 20)	11,406	2,262
Investment tax credits recoverable (note 20)	(3,975)	(1,527)
Change in operating assets and liabilities (note 21)	(49,123)	5,523
Interest received	2,546	428
Interest paid	(1,841)	(1,050)
Income taxes received (paid)	(4,034)	281
	24,518	50,138
Cash flows used in investing activities:		
Acquisition of business, net of cash acquired (note 4)	(36,738)	(800)
Purchase of property and equipment and intangible assets (note 7 and 9)	(18,249)	(33,833)
Purchase of short-term investments	(80,314)	(71,599)
Redemption of short-term investments	60,314	71,599
	(74,987)	(34,633)
Cash flows from financing activities:		
Payment of lease obligations (note 14)	(6,733)	(4,911)
Lease incentive received (note 14)	3,858	—
Proceeds from exercise of stock options	29,715	10,762
	26,840	5,851
Increase (decrease) in cash and cash equivalents	(23,629)	21,356
Cash and cash equivalents, beginning of year	203,220	182,958
Effects of exchange rates on cash and cash equivalents	(4,244)	(1,094)
Cash and cash equivalents, end of year	$ 175,347	$ 203,220

See accompanying notes to consolidated financial statements.

1. Corporate information:

Kinaxis Inc. ("Kinaxis" or the "Company") is incorporated under the Canada Business Corporations Act and domiciled in Ontario, Canada. The address of the Company's registered office is 3199 Palladium Drive, Ottawa, Ontario. The consolidated financial statements of the Company as at and for the years ended December 31, 2022 and 2021 comprise the Company and its subsidiaries.

Kinaxis is a leading provider of cloud-based subscription software that enables its customers to improve and accelerate analysis and decision-making across their supply chain operations. Kinaxis is a global enterprise with registered offices in the United States, Japan, Hong Kong, The Netherlands, South Korea, United Kingdom, Romania Singapore, France, Ireland, Germany, India, and Canada.

2. Basis of preparation:

(a) Statement of compliance:

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), and includes the accounts of Kinaxis Inc. and its wholly-owned subsidiaries, outlined in note 25.

The consolidated financial statements were authorized for issue by the Board of Directors on March 1, 2023.

(b) Comparative figures:

Certain comparative figures have been adjusted for the year ended December 31, 2021. Prepaid expenses previously reported as current assets have been classified as non-current assets. This adjustment was not considered material and did not affect the Company's consolidated revenue or consolidated profit.

(c) Measurement basis:

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments measured at fair value. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

(d) Presentation currency:

These consolidated financial statements are presented in United States dollars ("USD") which is the functional currency of the Company and its subsidiaries unless otherwise stated. Amounts are presented in thousands of USD.

(e) Foreign currency:

Foreign currency transactions

The financial statements of the Company are measured using USD as the functional currency. The functional currency of the Company's significant wholly-owned subsidiaries is outlined in note 25. Transactions in currencies other than the functional currency are translated at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated to USD at the rates prevailing at that date. Exchange differences on monetary items are recognized in profit or loss in the period in which they arise. Non-monetary items carried at fair value that are denominated in

2. Basis of preparation (continued):

(e) Foreign currency (continued):

foreign currencies are translated to the functional currency at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the rates at the date of the transaction.

Foreign operations

The consolidated financial statements include the accounts of the Company's wholly-owned subsidiaries. Assets and liabilities have been translated into USD using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in shareholders' equity.

(f) Use of estimates and judgments:

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenue, expenses and disclosure of contingent assets and liabilities. Actual results may differ from these estimates.

Estimates and judgments include, but are not limited to, allocation of the transaction price to multiple performance obligations in contracts with customers, revenue recognition on fixed price professional services contracts, recognition of deferred tax assets, valuation of trade and other receivables, valuation of share-based payments, valuation of contingent consideration, and valuation of acquired intangible assets. Estimates and assumptions are reviewed periodically and the effects of revisions are recorded in the consolidated financial statements in the period in which the estimates are revised and in any future periods affected.

Allocation of the transaction price to multiple performance obligations in contracts with customers

Contracts with customers often include promises to deliver multiple products and services. Determining whether such bundled products and services are considered i) distinct performance obligations that should be separately recognized, or ii) non-distinct and therefore should be combined with another good or service and recognized as a combined unit of accounting may require judgment. In general, the Company's professional services are capable of being distinct as they could be performed by third party service providers and do not involve significant customization of the licensed software.

The allocation of the transaction price requires significant judgment and estimates relating to the determination of the standalone selling price ("SSP") for each distinct performance obligation. The methodology used to determine the SSP depends on the nature of the products and services and how they are priced in contracts with customers. This allocation affects the amount and timing of revenue recognized for each performance obligation. In order to determine the SSP of promised products or services, the Company conducts a regular analysis to determine whether various products or services have an observable SSP. If the Company does not have an observable SSP for a particular product or service, then SSP for that particular good or service is estimated using reasonably available information and maximizing observable inputs with approaches including historical pricing, cost plus a margin, adjusted market assessment, and the residual approach. The Company uses a range of amounts to estimate SSP when it sells each of the products and services separately and needs to determine whether there is a discount that needs to be allocated based on the relative SSP of the various products and services. In general, SSP for maintenance and support bundled in on-premise and hybrid subscription arrangements is established as a percentage of the subscription license fee as supported by third party evidence and internal analysis of similar vendor contracts. SSP for hosting and professional services is

2. Basis of preparation (continued):

(f) Use of estimates and judgments (continued):

established based on observable prices for the same or similar services when sold separately, or estimated using a cost plus margin approach.

Revenue recognition on fixed price contracts

For professional services contracts billed on a fixed price basis, revenue is recognized over time based on the proportion of services performed. The Company determines this based on the actual labour hours incurred relative to the total forecasted hours. This requires the Company to estimate the labour hours required to complete the contract at the reporting date, the uncertainty inherent in which will not be resolved until the contract is completed.

Recognition of deferred tax assets

The recognition of deferred tax assets requires the Company to assess future taxable income available to utilize deferred tax assets related to deductible temporary differences. The Company considers the nature and carry-forward period of deferred tax assets, the Company's recent earnings history and forecast of future earnings in performing this assessment. The actual deferred tax assets realized may differ from the amount recorded due to factors having a negative impact on operating results of the Company and lower future taxable income.

Valuation of trade and other receivables

The recognition of trade and other receivables and loss allowances requires the Company to assess credit risk and collectability. The Company considers historical trends and any available information indicating a customer could be experiencing liquidity or going concern problems and the status of any contractual or legal disputes with customers in performing this assessment.

Valuation of share-based payments

The Company uses the Black-Scholes valuation model to determine the fair value of equity settled stock options and the Monte Carlo valuation model to determine the fair value of performance share units. Estimates are required for inputs to these models, including the expected life of the option, volatility, forfeiture rate, expected dividend yield and the risk free interest rate. Variation in actual results for any of these inputs will result in a different value of the stock option or performance share unit realized from the original estimate. The assumptions and estimates used are further outlined in note 15.

Valuation of contingent consideration

The Company measures the contingent consideration payable in a business combination at the estimated fair value at each reporting date. The fair value is estimated based on the range of possible outcomes and the Company's assessment of the likelihood of each outcome.

Valuation of acquired intangible assets

The Company estimates the fair value of customer relationships and technology acquired in a business combination based on the income approach. The income approach is a valuation technique that calculates the fair value of an intangible asset based on the present value of future cash flows that the asset can be expected to generate over its remaining useful life. This valuation involves significant subjectivity and estimation uncertainty, including assumptions related to the future revenues attributable to acquired customer relationships or technology, customer attrition rates, technology migration rate, future expenses, and discount rates.

3. Significant Accounting Policies:

a) Basis of consolidation:

Subsidiaries are entities controlled by the Company. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Company. All intercompany transactions, balances, revenues and expenses between the Company and its subsidiaries have been eliminated.

(b) Revenue recognition:

Revenue is recognized upon transfer of control of products or services to customers at an amount that reflects the transaction price the Company expects to receive in exchange for the products or services. The Company's contracts with customers often include the delivery of multiple products and services, which are generally capable of being distinct and accounted for as separate performance obligations. The accounting for a contract or contracts with a customer that contain multiple performance obligations requires the Company to allocate the contract or contracts' transaction price to the identified distinct performance obligations.

The Company's hosted software-as-a-service ("SaaS") application, which allows customers to use hosted software over the contract period without taking possession of the software, is provided on a subscription basis, with revenue primarily recognized ratably over the contract period, commencing on the date an executed contract exists and the customer has the right-to-use and access to the platform. For certain contracts, a component of consideration is recognized on a unit basis in accordance with transaction volume.

On-premise, fixed term subscription licenses and hybrid software subscriptions (where the customer has the option to take the hosted software on-premise) provide the customer with a right-to-use the software as it exists when made available to the customer. Revenue from distinct on-premise subscription licenses is recognized upfront at the point in time when the software is made available to the customer and the right to use the software has commenced. On-premise subscription licenses and hybrid subscriptions are bundled with software maintenance and support services and/or hosting over the term. The license component and maintenance and support/hosting components are each allocated revenue using their relative estimated SSP. Revenue allocated to the bundled maintenance and support and hosting is recognized ratably over the term of the maintenance and support services. Professional services are provided for implementation and configuration of software licenses and SaaS, as well as ongoing technical services and training.

Professional services are typically billed on a time and material basis and revenue is recognized over time as the services are performed. For professional services contracts billed on a fixed price basis, revenue is recognized over time based on the proportion of services performed.

Maintenance and support services provided to customers on legacy perpetual software licenses is recognized ratably over the term of the maintenance and support services.

The Company recognizes an asset for the incremental costs of obtaining a contract with a customer if it expects the costs to be recoverable, and has determined that certain sales incentive programs meet the requirements to be capitalized. Capitalized contract acquisition costs are amortized consistent with the pattern of transfer to the customer for the goods and services to which the asset relates. The amortization period includes specifically identifiable contract renewals where there is no substantive renewal commission. The expected customer

3. Significant Accounting Policies (continued):

(b) Revenue recognition (continued):

renewal period is estimated based on the historical life of our customers, which the Company has determined to be six years. The Company applies the practical expedient available under IFRS 15 and does not capitalize incremental costs of obtaining contracts if the amortization period is one year or less.

The timing of revenue recognition often differs from contract payment schedules, resulting in revenue that has been earned but not billed. These amounts are included in unbilled receivables. Amounts billed in accordance with customer contracts, but not yet earned, are recorded and presented as part of deferred revenue.

The Company has elected to apply the practical expedient to not adjust the total consideration over the contract term for the effect of a financing component if the period between the transfer of services to the customer and the customer's payment for these services is expected to be one year or less.

(c) Financial instruments:

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instrument.

Trade receivables without a significant financing component are initially measured at the transaction price. All other financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss ("FVTPL")) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

Financial assets

All financial assets are recognized and de-recognized on trade date.

The Company determines the classification of its financial assets on the basis of both the business model for managing the financial assets and the contractual cash flow characteristics of the financial asset. Financial assets are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets.

A financial asset is measured at amortized cost if it is held within a business model whose objective is to hold assets to collect contractual cash flows, and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Company's financial assets are classified as follows:

Financial asset	Classification under IFRS 9
Cash and cash equivalents	Amortized cost
Short-term investments	Amortized cost
Trade and other receivables	Amortized cost
Unbilled receivables	Amortized cost

Amortized cost

Subsequent to initial recognition, financial assets at amortized cost are measured using the effective interest method, less any impairment. Interest income is recognized by applying the effective interest rate except for short-term receivables where the interest revenue would be immaterial. Interest income, foreign exchange gains and losses, impairment, and any gain or loss on de-recognition are recognized in profit or loss.

3. Significant Accounting Policies (continued):

(c) Financial instruments (continued):

Impairment of financial assets

The Company measures a loss allowance based on the lifetime expected credit losses. Lifetime expected credit losses are estimated based on factors such as the Company's past experience of collecting payments, the number of delayed payments in the portfolio past the average credit period, observable changes in national or local economic conditions that correlate with default on receivables, financial difficulty of the borrower, and it becoming probable that the borrower will enter bankruptcy or financial re-organization.

Financial assets are written off when there is no reasonable expectation of recovery.

Financial liabilities

The Company determines the classification of its financial liabilities at initial recognition. The Company's financial liabilities are classified as follows:

Financial liability	Classification under IFRS 9
Trade payables and accrued liabilities	Amortized cost
Contingent consideration	FVTPL

Amortized cost

Financial liabilities at amortized cost are measured using the effective interest rate method.

De-recognition of financial liabilities

The Company de-recognizes financial liabilities when the Company's obligations are discharged, cancelled or they expire.

(d) Cash and cash equivalents:

Cash and cash equivalents include cash investments in interest-bearing accounts and term deposits which can readily be redeemed for cash without penalty or are issued for terms of three months or less from the date of acquisition.

(e) Short-term investments:

Short-term investments consist of term deposits and guaranteed income certificates held with Schedule 1 Canadian banks for maturity terms of three to six months from the date of acquisition. Investments are measured at amortized cost. The carrying amount of these investments approximates fair value due to the short-term maturity of these instruments.

(f) Property and equipment:

Property and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. The assets are depreciated over their estimated useful lives using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits. Depreciation methods, useful lives and residual values are reviewed at each financial year end and adjusted prospectively, if appropriate.

3. Significant Accounting Policies (continued):

(f) Property and equipment (continued):

Property and Equipment	Rate
Computer equipment	3 to 5 years
Computer software	3 to 5 years
Office furniture and equipment	3 to 5 years
Leasehold improvements	Shorter of useful life or remaining term of lease

At the end of each reporting period, the Company reviews the carrying amounts of its property and equipment to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). The recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the “cash-generating unit”, or “CGU”).

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

(g) Leases:

At inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Company has elected to apply the practical expedient to account for each lease component and any non-lease components as a single lease component.

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The right-of-use assets are depreciated to the earlier of the end of the useful life of the right-of- use asset or the lease term using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company’s incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the

3. Significant Accounting Policies (continued):

(g) Leases (continued):

Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Company has elected to apply the practical expedient not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The lease payments associated with these leases are recognized as an expense on a straight-line basis over the lease term.

(h) Employee benefits:

The Company offers a defined contribution plan to its employees which is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognized as an employee benefit expense in profit or loss in the periods during which services are rendered by employees.

(i) Provisions:

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognized as finance cost.

A provision for onerous contracts is recognized when the expected benefits to be derived by the Company from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Company recognizes any impairment loss on the assets associated with that contract.

(j) Research and development expense:

Expenditures on research activities is recognized in profit or loss as incurred. Development costs for internally developed software, are recorded as an intangible asset if the criteria for capitalization is met. Expenditures relating to preliminary or post implementation project activities for internally developed software are expensed as incurred. Internally developed software recorded as an intangible asset will be amortized on a straight-line basis over the length of its useful life, which is typically three to five years.

(k) Government assistance:

Government assistance is recognized when there is reasonable assurance that it will be received and that compliance with all related conditions has been achieved. When the government assistance relates to an expense item, it is recognized as a reduction of the related expense to match the government assistance on a systematic basis to the costs that it is intended to subsidize.

No government grants were received in 2022. During 2021, the Company received $7,906 of non-refundable government grants relating to the COVID-19 pandemic. The grants are offset against cost of revenue and operating expenses.

3. Significant Accounting Policies (continued):

(l) Income taxes:

Current and deferred income taxes are recognized as an expense or recovery in profit or loss, except when they relate to items that are recognized outside profit or loss (whether in other comprehensive income or directly in equity), in which case the tax is also recognized outside of profit or loss.

Current income tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from, or paid to, the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, by the reporting date, in the countries where the Company operates and generates taxable income.

Deferred income tax

Deferred income tax assets and liabilities are recorded for the temporary differences between transactions that have been included in the consolidated financial statements or income tax returns. Deferred income taxes are provided for using the liability method. Under the liability method, deferred income taxes are recognized for all significant temporary differences between the tax and financial statement bases of assets and liabilities and for certain carry-forward items. Deferred income tax assets are recognized only to the extent that, in the opinion of management, it is probable that the deferred income tax assets will be realized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. Deferred income tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of the enactment or substantive enactment. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Company intends to settle its current tax assets and liabilities on a net basis.

Uncertain tax positions

The Company periodically evaluates the positions taken in its tax returns with respect to situations in which applicable tax rules may be subject to interpretations. The Company establishes provisions related to tax uncertainties where appropriate, based on an estimate of the amount that ultimately will be paid to the tax authorities.

Investment tax credits

Investment tax credits relating to scientific research and experimental development expenditures are recorded in the fiscal period the qualifying expenditures are incurred based on management’s interpretation of applicable legislation in the Income Tax Act of Canada. Credits are recorded provided there is reasonable assurance that the tax credit will be realized. Credits claimed are subject to review by the Canada Revenue Agency.

Credits claimed in connection with research and development activities are accounted for using the cost reduction method. Under this method, assistance and credits relating to the acquisition of equipment is deducted from the cost of the related assets, and those relating to current expenditures, which are primarily salaries and related benefits, are included in the determination of profit or loss as a reduction of the related research and development expenses.

(m) Share-based payments:

The Company uses the fair value based method to measure share-based compensation for all share-based awards made to employees and directors. The grant date fair value of equity-settled share-based payment awards granted to employees is generally recognized as an expense, with a corresponding increase in equity,

3. Significant Accounting Policies (continued):

(m) Share-based payments (continued):

over the vesting period of the awards. The grant date fair value is determined using the Black-Scholes model for option grants and the Monte Carlo model for performance share unit grants. The market value of the Company's shares on the date of the grant is used to determine the fair value of restricted and deferred share units issued. Each tranche of an award is considered a separate award with its own vesting period and grant date fair value. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting (i.e. performance) conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

Where the terms of an equity-settled transaction award are modified, the minimum expense recognized is the expense as if the terms had not been modified and if the original terms of the award are met. An additional expense is recognized for any modification that increases the total fair value of the share-based payment transaction, or is otherwise beneficial to the employee as measured at the date of modification.

(n) Earnings per share:

Basic earnings per share is calculated by dividing profit or loss by the weighted average number of common shares outstanding during the reporting period. Diluted earnings per share is calculated similar to basic earnings per share except the weighted average number of common shares outstanding is adjusted for the effects of all dilutive potential common shares, which are comprised of additional shares from the assumed exercise of stock options or vesting of share units. Options and share units that have a dilutive impact are assumed to have been exercised or vested on the later of the beginning of the period or the date granted.

(o) Business combinations:

The Company accounts for business combinations using the acquisition method. Goodwill arising on acquisitions is measured as the fair value of the consideration transferred less the net recognized amount of the estimated fair value of identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. Transaction costs that the Company incurs in connection with a business combination are expensed as incurred.

The Company uses its best estimates and assumptions to reasonably value assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, and these estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the assets acquired and liabilities assumed with a corresponding offset to goodwill. Upon conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded in profit or loss.

(p) Acquired intangible assets:

The Company's intangible assets consist of customer relationships and technology acquired in a business combination. These intangible assets are recorded at their fair value at the acquisition date. The Company uses the income approach to value acquired technology and customer relationships intangible assets, which are the two material intangible asset categories reported in the financial statements.

3. Significant Accounting Policies (continued):

(p) Acquired intangible assets (continued):

The income approach is a valuation technique that calculates the fair value of an intangible asset based on the present value of future cash flows that the asset can be expected to generate over its remaining useful life. The discounted cash flow ("DCF") is the methodology used, which is a form of the income approach that begins with a forecast of the annual cash flows a market participant would expect the subject intangible asset to generate over a discrete projection period. The future cash flows for each of the years in the discrete projection period are then converted to their present value equivalent using a rate of return appropriate for the risk of achieving the intangible assets' projected cash flows, again, from a market participant perspective. The present value of the future cash flows are then added to the present value of the residual value of the intangible asset (if any) at the end of the discrete projection period to arrive at a conclusion with respect to the estimated fair value of the subject intangible asset. After initial recognition, intangible assets are measured at cost less any accumulated amortization and impairment losses.

Intangible assets with finite useful lives are amortized on a straight-line basis over their estimated useful lives. The estimated useful life for customer relationships is three to nine years and the useful life for technology is four to seven years. Amortization methods, useful lives and residual values are reviewed at each financial year end and adjusted prospectively if appropriate.

Intangible assets with finite useful lives are tested for impairment whenever there is an indication that the asset may be impaired. An impairment loss is recognized if the recoverable amount of the asset is less than the carrying amount. The recoverable amount is the higher of fair value less costs to sell and value in use.

(q) Goodwill:

Goodwill arises from a business combination as the excess of the consideration transferred over the identifiable net assets acquired. After initial recognition, goodwill is measured at cost less any accumulated impairment losses.

For the purpose of impairment testing, goodwill is allocated to the cash-generating unit that is expected to benefit from the related business combination. The Company as a whole has been assessed as a single CGU. The CGU is tested for impairment annually on December 31 and whenever there is an indication that the CGU may be impaired. The impairment testing methodology is based on a comparison between the recoverable amount (higher of fair value less costs to sell and value-in-use of the CGU) and the net asset carrying value (including goodwill). If the recoverable amount of the CGU is less than the carrying amount of the CGU, the impairment loss is first allocated to reduce the carrying amount of any goodwill allocated to the CGU and then to the other assets of the CGU. An impairment loss is recognized immediately in profit or loss. Any impairment loss in respect of goodwill is not reversed.

(Expressed in thousands of USD, except share and per share amounts)

4. Business combinations:

On February 11, 2022, the Company acquired 100% of the outstanding shares of a supply chain solutions company in exchange for cash. The acquired company is a provider of algorithm-driven supply chain planning software modules. The operating results of the acquired company have been consolidated into the Company's results subsequent to the acquisition date. The Company incurred acquisition-related costs of $199 which have been recorded in general and administrative expense.

The purchase price consists of cash consideration of $3,144, adjusted for the acquired company's closing cash at the date of acquisition and subject to post-closing working capital adjustments, resulting in total consideration of $3,084.

The following table presents the purchase price allocation at the acquisition date:

Assets acquired and liabilities assumed:		
Cash and cash equivalents	$	65
Trade and other receivables		423
Right-of-use assets		82
Intangible assets:		
Technology		550
Customer relationships		350
Trade payables and accrued liabilities		(82)
Deferred revenue		(407)
Lease obligation		(82)
Deferred tax liability		(239)
		660
Goodwill		2,424
Total consideration	$	3,084

The trade and other receivables included gross contractual amounts of $381, all of which has been fully collected.

The goodwill is primarily attributable to the expected synergies that will result from the value of integrating the acquired company's intellectual property to the Company's future product direction, and the relevant industry and technical knowledge of the assembled workforce. The goodwill is not deductible for tax purposes.

Since the date of acquisition, the acquisition has not had a significant impact on revenue and net earnings for the year ended December 31, 2022. Pro forma results of operations for this acquisition have not been presented because they are not material to our consolidated results of operations.

(Expressed in thousands of USD, except share and per share amounts)

4. Business combinations (continued):

On August 15, 2022, the Company acquired 100% of the outstanding shares of MP Objects B.V. ("MPO") and all wholly owned subsidiaries. MPO offers a natively unified cloud platform for Multi-Party Orchestration, which optimizes order, inventory, and transportation across dynamic, multi-party networks. The Company incurred acquisition-related costs of $1,688 which have been recorded in general and administrative expense.

The purchase price consists of cash consideration of $33,828 and contingent consideration of 86,335 shares of the Company that had a fair value at the date of acquisition of $9,972. This fair value was remeasured to $9,146 at December 31, 2022. The contingent consideration will be paid to the selling shareholders upon the delivery of specific contracted backlog within the first six and twelve month intervals or upon achieving an agreed trailing twelve month revenue target. The consideration was adjusted for the acquired company's closing cash at the date of acquisition and post-closing working capital adjustments, resulting in total consideration of $44,731.

The following table presents the purchase price allocation at the acquisition date:

Assets acquired and liabilities assumed:		
Cash and cash equivalents	$	1,040
Trade and other receivables		1,753
Prepaid expenses		230
Contract acquisition costs		195
Property and equipment		95
Right-of-use assets		1,470
Intangible assets:		
Technology		8,400
Customer relationships		7,600
Trade payables and accrued liabilities		(1,008)
Deferred revenue		(531)
Lease obligations		(1,470)
Deferred tax liability		(2,875)
		14,899
Goodwill		29,832
Total consideration	$	44,731

The trade and other receivables include gross contractual amounts of $986, of which $696 has been fully collected. Accounts receivable are discussed further in note 5.

The goodwill is primarily attributable to the expected synergies that will result from the value of integrating the acquired company's intellectual property to the Company's future product direction, and the relevant industry and technical knowledge of the assembled workforce. The goodwill is not deductible for tax purposes.

Since the date of acquisition, the acquisition has not had a significant impact on revenue and net earnings for the year ended December 31, 2022. Pro forma results of operations for this acquisition have not been presented because they are not material to our consolidated results of operations.

(Expressed in thousands of USD, except share and per share amounts)

5. Trade and other receivables:

	2022	2021
Trade accounts receivable	$ 121,669	$ 71,118
Unbilled receivables	30,623	15,413
Taxes receivable	1,830	217
Other	3,847	2,499
	157,969	89,247
Loss allowance	(312)	—
	$ 157,657	$ 89,247

There were no trade accounts receivable written off in 2022 (2021 – $nil).

The following table presents changes in unbilled receivables:

	2022	2021
Balance, beginning of year	$ 15,925	$ 15,813
Amounts transferred to trade accounts receivable	(10,353)	$ (13,752)
Amounts written off	—	(288)
Revenue in excess of billings	32,296	14,152
Balance, end of year	$ 37,868	$ 15,925

The following table presents current and non-current unbilled receivables:

	2022	2021
Current	$ 30,623	$ 15,413
Non-current	7,245	512

(Expressed in thousands of USD, except share and per share amounts)

6. Contract acquisition costs:

		2022		2021
Balance, beginning of year	$	19,691	$	16,484
Additions		13,232		9,713
Amortization		(7,439)		(6,359)
Effects of movements in exchange rates		(592)		(147)
Balance, end of year	$	24,892	$	19,691

Amortization of contract acquisition costs is recorded in selling and marketing expense.

7. Property and equipment:

Cost		December 31, 2021		Additions		Dispositions		Effects of exchange rates		December 31, 2022
Land	$	18	$	—	$	—	$	—	$	18
Computer equipment		67,920		9,073		(10,552)		(1,023)		65,418
Computer software		3,735		861		(505)		(25)		4,066
Office furniture and equipment		3,731		906		(83)		(33)		4,521
Leasehold improvements		23,657		4,109		(2,935)		(266)		24,565
Total cost	$	99,061	$	14,949	$	(14,075)	$	(1,347)	$	98,588

Accumulated depreciation		December 31, 2021		Depreciation		Dispositions		Effects of exchange rates		December 31, 2022
Computer equipment	$	38,411	$	10,556	$	(10,549)	$	(595)	$	37,823
Computer software		2,954		658		(505)		(25)		3,082
Office furniture and equipment		900		1,271		(83)		38		2,126
Leasehold improvements		4,703		2,004		(2,911)		(91)		3,705
Total accumulated depreciation	$	46,968	$	14,489	$	(14,048)	$	(673)	$	46,736

(Expressed in thousands of USD, except share and per share amounts)

7. Property and equipment (continued):

Cost	December 31, 2020	Additions	Dispositions	Effects of exchange rates	December 31, 2021
Land	$ 18	$ —	$ —	$ —	$ 18
Computer equipment	54,187	14,881	—	(1,148)	67,920
Computer software	3,234	529	—	(28)	3,735
Office furniture and equipment	1,154	2,603	—	(26)	3,731
Leasehold improvements	8,476	15,820	(450)	(189)	23,657
Total cost	$ 67,069	$ 33,833	$ (450)	$ (1,391)	$ 99,061

Accumulated depreciation	December 31, 2020	Depreciation	Dispositions	Effects of exchange rates	December 31, 2021
Computer equipment	$ 29,340	$ 9,601	$ —	$ (530)	$ 38,411
Computer software	2,317	659	—	(22)	2,954
Office furniture and equipment	567	339	—	(6)	900
Leasehold improvements	4,099	1,153	(450)	(99)	4,703
Total accumulated depreciation	$ 36,323	$ 11,752	$ (450)	$ (657)	$ 46,968

Carrying value	December 31, 2022	December 31, 2021
Land	$ 18	$ 18
Computer equipment	27,595	29,509
Computer software	984	781
Office furniture and equipment	2,395	2,831
Leasehold improvements	20,860	18,954
Total property and equipment	$ 51,852	$ 52,093

There were no proceeds associated with asset dispositions in 2022 (2021 – $nil). Additions in 2022 include $95 (2021 – $nil) of property and equipment acquired through business combinations, as outlined in note 4.

(Expressed in thousands of USD, except share and per share amounts)

8. Right-of-use assets:

	December 31, 2021	Additions	Depreciation	Effects of exchange rates	December 31, 2022
Offices	$ 45,236	$ 7,281	$ (3,876)	$ (618)	$ 48,023
Data centres	8,342	547	(3,131)	(244)	5,514
Total right-of-use assets	$ 53,578	$ 7,828	$ (7,007)	$ (862)	$ 53,537

	December 31, 2020	Additions	Depreciation	Effects of exchange rates	December 31, 2021
Offices	$ 7,317	$ 41,795	$ (3,581)	$ (295)	$ 45,236
Data centres	8,405	3,096	(2,831)	(328)	8,342
Total right-of-use assets	$ 15,722	$ 44,891	$ (6,412)	$ (623)	$ 53,578

Additions in 2022 include $1,552 (2021 – $nil) of right-of-use assets acquired through business combinations, as outlined in note 4. During 2021, the Company recorded additions of $41,552 for new leased office space in Ottawa, Canada.

9. Intangible assets:

The estimated useful life of customer relationships is three to nine years and the estimated useful life of technology is four to seven years.

	December 31, 2021	Additions	Amortization	Effect of exchange rates	December 31, 2022
Customer relationships	$ 2,370	$ 7,950	$ (1,186)	$ 334	$ 9,468
Technology	8,408	8,950	(2,245)	428	15,541
Internally developed software	—	3,395	(133)	—	3,262
Total intangible assets	$ 10,778	$ 20,295	$ (3,564)	$ 762	$ 28,271

	December 31, 2020	Additions	Amortization	Effect of exchange rates	December 31, 2021
Customer relationships	$ 3,087	$ —	$ (717)	$ —	$ 2,370
Technology	9,936	—	(1,528)	—	8,408
Total intangible assets	$ 13,023	$ —	$ (2,245)	$ —	$ 10,778

(Expressed in thousands of USD, except share and per share amounts)

9. Intangible assets (continued):

In 2022, the Company began developing software to be used internally to support its strategy in utilizing the public cloud to deliver its SaaS product. The qualifying internal and external development costs associated with this software asset have been capitalized as an intangible asset and consist primarily of consultant fees and compensation costs of internal staff performing the development activity. The amortization period for the intangible asset began once the asset became available for use. It is amortized on a straight-line basis over its useful life which has been determined to be five years.

10. Goodwill:

		2022		2021
Balance, beginning of year	$	39,988	$	39,988
Acquisitions (note 4)		32,256		—
Effect of foreign exchange		1,070		—
Balance, end of year	$	73,314	$	39,988

The annual impairment test of goodwill was performed as of December 31, 2022 and did not result in an impairment loss.

11. Trade payables and accrued liabilities:

		2022		2021
Trade accounts payable	$	10,403	$	10,584
Accrued liabilities		27,024		26,299
Taxes payable		2,680		6,445
	$	40,107	$	43,328

12. Deferred revenue:

		2022		2021
Balance, beginning of year	$	99,239	$	94,275
Deferred revenue from acquisition (note 4)		938		—
Recognition of deferred revenue		(101,118)		(91,157)
Amounts invoiced and revenue deferred		134,408		96,121
Balance, end of year	$	133,467	$	99,239

(Expressed in thousands of USD, except share and per share amounts)

13. Provisions:

In 2021, the Company recorded a provision of $716 for the estimated future variable lease payments for office space which the Company has ceased using. These costs have been recorded in general and administrative expense. The remaining provision as of December 31, 2022 is $296.

14. Lease obligations:

The Company's leases are for office space and data centres with lease terms ranging from two to twenty years. These leases contain no renewal options or a renewal option for one, two or five years. The Company has included renewal options in the lease term when it is reasonably certain to exercise the renewal option.

	2022	2021
Current	$ 6,991	$ 2,526
Non-current	49,977	53,233
Total lease obligations	$ 56,968	$ 55,759

The following table presents the contractual undiscounted cash flows for lease obligations as at December 31, 2022:

Less than one year	$ 8,614
One to five years	18,369
More than five years	43,400
Total undiscounted lease obligations	$ 70,383

The following table presents payments for lease obligations:

	2022	2021
Principal payments	$ 6,733	$ 4,911
Interest payments	1,841	1,050
Variable lease payments	1,775	1,624
Short-term lease payments	513	480
Total cash outflow for leases	10,862	8,065
Lease incentives received	(3,858)	—
Net cash outflow for leases	$ 7,004	$ 8,065

(Expressed in thousands of USD, except share and per share amounts)

15. Share capital:

Authorized

The Company is authorized to issue an unlimited number of Common Shares.

Issued Common Shares

	2022			2021		
	Shares		Amount	Shares		Amount
Shares outstanding, beginning of year	27,462,834	$	195,414	27,085,922	$	173,104
Shares issued from exercised options	492,631		38,791	291,680		14,221
Shares issued from vested RSUs	93,388		10,091	85,232		8,089
Shares issued from vested PSUs	3,776		417	—		—
Shares outstanding, end of year	28,052,629	$	244,713	27,462,834	$	195,414

Stock option plans

The Company has outstanding stock options issued under its 2012 Stock Option Plan. No further options may be granted under the 2012 plan. In June 2017, the Company adopted a new Canadian Resident Stock Option Plan and a new Non-Canadian Resident Stock Option Plan ("the Plans"). Stock options granted under the Plans have an exercise price equal to the stock's TSX price at the date of grant and the maximum term of these options is five years. Options are granted periodically and typically vest over four years.

In June 2021, Kinaxis shareholders voted to approve an amendment to the Plans to increase the maximum number of shares reserved for issue by 500,000. At December 31, 2022, there were 715,727 stock options available for grant under the Plans.

The following table presents changes in stock options outstanding:

	2022			2021		
	Shares		Weighted average exercise price	Shares		Weighted average exercise price
Options outstanding, beginning of year	2,143,375	$	76.56	2,228,456	$	68.82
Granted	194,646		125.04	275,973		108.61
Exercised	(492,631)		60.32	(291,680)		36.89
Forfeited	(125,064)		149.26	(69,374)		126.21
Options outstanding, end of year	1,720,326	$	75.53	2,143,375	$	76.56
Options exercisable, end of year	1,028,146	$	59.91	1,150,389	$	58.44

(Expressed in thousands of USD, except share and per share amounts)

15. Share capital (continued):

The following table presents information about stock options outstanding at December 31, 2022:

	Options outstanding			Options exercisable	
Range of exercise prices	Number outstanding	Weighted average remaining contractual life	Weighted average exercise price	Number exercisable	Weighted average exercise price
$1 to $30	46,850	2.41	$ 22.61	46,850	$ 22.61
$30 to $60	772,848	2.39	47.18	677,716	45.88
$60 to $90	328,972	1.91	80.31	179,723	78.49
$90 to $120	277,225	3.35	99.87	56,482	98.64
$120 to $150	200,931	4.11	122.58	22,750	126.68
$150 to $180	93,500	2.72	154.24	44,625	154.21
	1,720,326	2.67	$ 75.96	1,028,146	$ 59.91

The per share weighted-average fair value of stock options granted during 2022 was $42.82 (year ended December 31, 2021 – $32.77) on the date of grant using the Black Scholes option-pricing model with the following weighted-average assumptions:

	2022	2021
Expected dividend yield	0%	0%
Risk-free interest rate	2.75%	0.53%
Expected life	3 to 5 years	3 to 5 years
Estimated volatility	41%	39%

Share Unit Plan

In June 2021, Kinaxis shareholders voted to approve an amendment to the Company's Share Unit Plan to increase the maximum number of shares reserved for issue by 500,000. In June 2022, Kinaxis shareholders voted to approve an amendment to the Company's Share Unit Plan to increase the maximum number of shares reserved for issue by 1,250,000. At December 31, 2022, there were 1,579,703 share units available for grant under the Share Unit Plan.

(Expressed in thousands of USD, except share and per share amounts)

15. Share capital (continued):

The following table presents changes in share units outstanding:

	2022			2021		
	RSU	PSU	DSU	RSU	PSU	DSU
Units outstanding, beginning of year	96,583	31,640	65,441	78,305	—	55,928
Granted	200,865	52,209	9,954	106,001	31,640	9,513
Exercised	(93,388)	(3,776)	—	(85,232)	—	—
Forfeited	(23,321)	(8,695)	—	(2,491)	—	—
Units outstanding, end of year	180,739	71,378	75,395	96,583	31,640	65,441

Each restricted share unit ("RSU") entitles the participant to receive one Common Share. The RSUs generally vest over time in three equal annual tranches. The weighted-average grant date fair value of the RSUs granted during 2022 was $120.84 per unit (year ended December 31, 2021 – $118.49) using the fair value of a Common Share at time of grant.

Each performance share unit ("PSU") entitles the participant to receive up to two Common Shares based on the Company's total shareholder return relative to the total shareholder return of the constituents of the S&P Software & Services Select Industry Index over two- and three-year vesting periods. The weighted-average grant date fair value of the PSUs granted during 2022 was $164.68 per unit (December 31, 2021 – $129.74). The PSUs were valued using a Monte Carlo pricing model based on the fair value of a Common Share at time of grant and the following assumptions:

	2022	2021
Expected dividend yield	0%	0%
Risk-free interest rate	1.40%	0.51%
Performance measurement period	2 to 3 years	2 to 3 years
Estimated volatility	41%	41%
Correlation coefficient to Industry Index	0.53	0.52

Each deferred share unit (DSU) entitles the participant to receive one Common Share. The DSUs vest immediately as the participants are entitled to the shares upon termination of their service. The fair value of the DSUs granted during the 2022 was $116.07 per unit (year ended December 31, 2021 – $110.36) using the fair value of a Common Share at time of grant.

(Expressed in thousands of USD, except share and per share amounts)

15. Share capital (continued):

Share-based payments expense

The Company estimates a forfeiture rate, based on an analysis of actual forfeitures, to determine share-based payments expense. The following table presents share-based payments expense:

	2022	2021
Stock options	$ 8,438	$ 11,759
Restricted share units	12,888	9,875
Performance share units	3,757	1,659
Deferred share units	1,155	1,050
	$ 26,238	$ 24,343

The following table presents share-based payments expense by function:

	2022	2021
Cost of revenue	$ 3,624	$ 2,001
Selling and marketing	6,191	4,950
Research and development	4,980	6,334
General and administrative	11,443	11,058
	$ 26,238	$ 24,343

16. Earnings per share:

The following table summarizes the calculation of the weighted average number of basic and diluted common shares:

	2022	2021
Issued Common Shares at beginning of year	27,462,834	27,085,922
Effect of shares issued from exercise of options	189,588	157,367
Effect of shares issued from vesting of restricted share units	10,902	4,904
Effect of shares issued from vesting of performance share units	3,776	—
Weighted average number of basic Common Shares	27,667,100	27,248,193
Effect of share options on issue	701,616	—
Effect of share units on issue	240,887	—
Weighted average number of diluted Common Shares	28,609,603	27,248,193

For 2022, 373,309 share options and no share units outstanding (2021 – all share options and share units) were excluded from the weighted average number of diluted common shares as their effect would have been anti-dilutive.

(Expressed in thousands of USD, except share and per share amounts)

17. Revenue:

The following table presents revenue of the Company:

	2022	2021
SaaS	$ 213,306	$ 174,463
Subscription term license	38,810	6,118
Professional services	98,613	57,640
Maintenance and support	16,160	12,505
	$ 366,889	$ 250,726

The following table presents revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at December 31, 2022:

	2023	2024	2025 and thereafter	Total
SaaS	$ 230,147	$ 173,670	$ 145,921	$ 549,738
Maintenance and support	16,181	13,995	12,081	42,257
Subscription term license	6,057	193	—	6,250
	$ 252,385	$ 187,858	$ 158,002	$ 598,245

18. Personnel expenses:

	2022	2021
Salaries including bonuses	$ 158,414	$ 128,890
Benefits	24,300	20,105
Commissions	12,710	10,000
Share-based payments	26,238	24,343
	$ 221,662	$ 183,338

(Expressed in thousands of USD, except share and per share amounts)

19. Depreciation and amortization:

The following table presents depreciation expense of property and equipment and right-of-use assets by function:

	2022	2021
Cost of revenue	$ 11,217	$ 9,461
Selling and marketing	3	3
Research and development	2,660	3,047
General and administrative	7,616	5,653
	$ 21,496	$ 18,164

The following table presents amortization expense of intangible assets by function:

	2022	2021
Cost of revenue	$ 2,345	$ 1,528
General and administrative	1,219	717
	$ 3,564	$ 2,245

20. Income tax expense:

The income tax amounts recognized in profit and loss are as follows:

	2022	2021
Current tax expense		
Current income tax	$ 3,892	$ 3,466
Deferred tax expense		
Origination and reversal of temporary differences	7,514	(1,204)
	$ 11,406	$ 2,262

(Expressed in thousands of USD, except share and per share amounts)

20. Income tax expense (continued):

A reconciliation of the income tax expense to the expected amount using the Company's Canadian tax rate is as follows:

	2022	2021
Canadian tax rate	26.50 %	26.50 %
Expected Canadian income tax expense	$ 8,393	$ 291
Increase (reduction) in income taxes resulting from:		
Permanent differences	3,083	2,880
Change in estimates related to prior years	(681)	(1,015)
Change in unrecognized deferred tax assets/liabilities	—	295
Foreign tax rate differences	(25)	78
Future tax rate differential	252	(71)
Other	384	(196)
	$ 11,406	$ 2,262

The following tables present tax effects of temporary differences and carry-forwards, as well as movements in the deferred tax balances:

Deferred tax assets (liabilities)	December 31, 2021	Recognized in profit and loss	Recognized to goodwill	Recognized in equity	December 31, 2022
Tax effect on investment tax credits	$ (918)	$ (857)	$ —	$ —	$ (1,775)
Property and equipment	(3,044)	(1,304)	—	—	(4,348)
Right-of-use assets and liabilities	799	141	—	—	940
Contract acquisition costs	(4,760)	(1,695)	2	—	(6,453)
Intangible assets	(2,724)	648	(4,367)	—	(6,443)
Reserves and accruals	577	75	—	—	652
Share-based payments	9,415	(1,275)	—	(1,159)	6,981
Net operating loss carryforwards	7,196	(4,111)	1,211	—	4,296
Other	(550)	864	40	—	354
	$ 5,991	$ (7,514)	$ (3,114)	$ (1,159)	$ (5,796)

During 2022, the Company recorded $111 of current tax expense directly in equity (2021 – $890) related to tax deductions on share-based payments.

Deferred tax liabilities have not been recognized for temporary differences associated with investments in subsidiaries as the Company is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future. The aggregate amount of these temporary differences at December 31, 2022 was $41,729 (2021 – $31,771).

(Expressed in thousands of USD, except share and per share amounts)

20. Income tax expense (continued):

Deferred tax assets (liabilities)	December 31, 2020	Recognized in profit and loss	Recognized in equity	December 31, 2021
Tax effect on investment tax credits	$ (508)	$ (410)	$ —	$ (918)
Property and equipment	(3,916)	872	—	(3,044)
Right-of-use assets and liabilities	309	490	—	799
Contract acquisition costs	(4,471)	(289)	—	(4,760)
Intangible assets	(3,333)	609	—	(2,724)
Reserves and accruals	1,107	(530)	—	577
Share-based payments	2,294	1,913	5,208	9,415
Net operating loss carryforwards	8,100	(904)	—	7,196
Other	(3)	(547)	—	(550)
	$ (421)	$ 1,204	$ 5,208	$ 5,991

21. Statement of cash flows:

The following table presents changes in operating assets and liabilities:

	2022	2021
Trade and other receivables	$ (75,128)	$ (6,782)
Prepaid expenses	(5,632)	(1,100)
Contract acquisition costs	(5,416)	(3,407)
Trade payables and accrued liabilities	1,677	8,790
Deferred revenue	35,796	7,306
Provisions	(420)	716
	$ (49,123)	$ 5,523

22. Credit facility:

The Company has a CAD$20.0 million revolving demand credit facility which bears interest at bank prime per annum and has not been drawn as at December 31, 2022. As part of the acquisition of Rubikloud Technologies, Inc. in 2020, a Standby Letter of Credit has been issued against this facility in the amount of CAD$1.4 million.

The facility is secured by a general security agreement representing a first charge over the Company's assets. In the event that the Company's aggregate borrowings under the revolving facility exceed CAD$5.0 million, a borrowing limit applies that is based principally on the Company's accounts receivable.

23. Financial instruments:

(a) Fair value of financial instruments:

The carrying amounts of short-term investments, trade and other receivables, unbilled receivables, and trade payables and accrued liabilities approximate fair value due to the short-term maturity of these instruments and

(Expressed in thousands of USD, except share and per share amounts)

23. Financial instruments (continued):

(a) Fair value of financial instruments (continued):

are considered to be Level 1 financial instruments. The fair value of the contingent consideration has been determined by applying a discounted cash flow technique on the expected future value of shares to be issued and has been recorded as a Level 3 liability as the inputs are not observable and there is no market based activity. Short-term investments consist of term deposits and guaranteed income certificates held with Schedule 1 Canadian banks for maturity terms of three to six months from the date of acquisition. In 2022, there have been no transfers of fair value measurements between Level 1, Level 2 and Level 3 financial instruments.

Reconciliation of Level 3 financial instruments

The following table shows a reconciliation from the opening balance to the closing balance for all Level 3 financial instruments:

	Contingent Consideration	Other income (expense)	Accumulated other comprehensive income (loss)
Balance, December 31, 2021	$ —	$ —	$ —
Assumed in a business combination	9,972	—	—
Net change in fair value (unrealized)	(826)	826	—
Balance, December 31, 2022	$ 9,146	$ 826	$ —

Sensitivity of Level 3 financial instruments

There are no unobservable inputs which, if changed by 10% would significantly impact the fair value of the contingent consideration.

(b) Credit risk:

The following table presents maximum exposure to credit risk for net trade accounts receivable by geographic region:

	2022	2021
United States	$ 77,174	$ 41,031
Europe	35,828	20,153
Asia	4,678	4,658
Canada	3,677	5,276
	$ 121,357	$ 71,118

(Expressed in thousands of USD, except share and per share amounts)

23. Financial instruments (continued):

(b) Credit risk (continued):

The following table presents aging of net trade accounts receivable:

	2022	2021
Current	$ 91,360	$ 57,431
Past due:		
0 – 30 days	19,355	8,351
31 – 60 days	6,126	1,040
Greater than 60 days	4,516	4,296
	$ 121,357	$ 71,118

At December 31, 2022, no customer individually accounted for greater than 10% of total trade accounts receivable (December 31, 2021 – one customer). For 2022, no customer individually accounted for greater than 10% of revenue (2021 – no customers).

The Company measures a loss allowance based on the lifetime expected credit losses. Lifetime expected credit losses are estimated based on factors such as the Company's past experience of collecting payments, the number of delayed payments in the portfolio past the average credit period, observable changes in national or local economic conditions that correlate with default on receivables, financial difficulty of the borrower, and it becoming probable that the borrower will enter bankruptcy or financial re-organization. Financial assets are written off when there is no reasonable expectation of recovery. During the year ended December 31, 2022, the Company wrote off $nil unbilled receivables that were deemed not collectible (2021 – $288). As at December 31, 2022, the Company has recorded a loss allowance of $312 (2021 – $nil).

The Company invests its excess cash in short-term investments with the objective of maintaining safety of principal and providing adequate liquidity to meet all current payment obligations and future planned capital expenditures with the secondary objective of maximizing the overall yield of the investment. The Company manages its credit risk on short-term investments by dealing only with major Canadian banks and investing only in instruments that management believes have high credit ratings. Given these high credit ratings, the Company does not expect any counterparties to these investments to fail to meet their obligations.

The Company's exposure to credit risk is limited to the carrying amount of financial assets.

(c) Liquidity risk:

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due.

The Company's approach to managing liquidity risk is to ensure, as far as possible, that it will always have sufficient liquidity to meet liabilities when due. The Company also manages liquidity risk by continuously monitoring actual and budgeted expenses. Furthermore, the Board of Directors reviews and approves the Company's operating and capital budgets, as well as any material transactions out of the ordinary course of business, including acquisitions or other major investments or divestitures.

At December 31, 2022, the Company had cash and cash equivalents and short-term investments totaling $225,823 (2021 – $233,388). Further, the Company has a credit facility as disclosed in note 22. The Company's trade payables and accrued liabilities are generally due within three months or less.

23. Financial instruments (continued):

(d) Market risk:

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Company's income or the value of its holdings of financial instruments.

Currency risk

A portion of the Company's revenues and operating costs are realized in currencies other than its functional currency, such as the Canadian dollar, Japanese Yen, Euro, and Great British Pound. As a result, the Company is exposed to currency risk on these transactions. Additional earnings volatility arises from the translation of monetary assets and liabilities denominated in foreign currencies at the rate of exchange on each date of the Consolidated Statements of Financial Position, the impact of which is reported as a foreign exchange gain or loss.

The Company is also subject to currency risk on its income tax expense due to foreign exchange impacts resulting from translating financial results to local currency for Canadian tax reporting purposes.

The Company's objective in managing its currency risk is to minimize its exposure to currencies other than its functional currency. The Company does so by matching foreign denominated assets with foreign denominated liabilities.

The Company is mainly exposed to fluctuations between the U.S. dollar and the Canadian dollar. For the year ended December 31, 2022, if the Canadian dollar had strengthened 5% against the U.S. dollar, with all other variables held constant, pre-tax profit for the year would have been $7,619 lower (2021 – $6,783 lower). Conversely, if the Canadian dollar had weakened 5% against the U.S. dollar with all other variables held constant, there would be an equal, and opposite impact, on pre-tax profit.

The summary quantitative data about the Company's exposure to currency risk is as follows:

December 31, 2022 In thousands of local currency	USD	CAD	EUR	GBP	JPY
Trade receivables	$ 95,743	$ 1,473	$ 14,194	$ 4,813	$ 418,603
Unbilled receivables	27,016	—	1,174	729	191,212
Other receivables	732	810	1,041	224	3,927
Trade payables	(1,853)	(5,808)	(1,324)	(714)	(193,204)
Accrued liabilities	(13,258)	(9,859)	(1,623)	(193)	(110,587)
	$ 108,380	$ (13,384)	$ 13,462	$ 4,859	$ 309,951

December 31, 2021 In thousands of local currency	USD	CAD	EUR	GBP	JPY
Trade receivables	$ 60,018	$ 1,204	$ 4,431	$ 1,412	$ 365,154
Unbilled receivables	12,838	—	652	1,058	46,998
Other receivables	626	1,564	286	—	—
Trade payables	(7,612)	(1,974)	(231)	(539)	(47,267)
Accrued liabilities	(12,552)	(11,895)	(981)	(1,216)	(123,780)
	$ 53,318	$ (11,101)	$ 4,157	$ 715	$ 241,105

(Expressed in thousands of USD, except share and per share amounts)

23. Financial instruments (continued):

(d) Market risk (continued):

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company believes that interest rate risk is low as the majority of investments are made in fixed rate instruments. As of December 31, 2022, the Company has not drawn on the revolving demand credit facility as disclosed in note 22.

24. Segmented information:

The Company's Chief Executive Officer ("CEO") has been identified as the chief operating decision maker. The CEO evaluates the performance of the Company and allocates resources based on the information provided by the Company's internal management system at a consolidated level. The Company has determined that it has only one operating segment: the design, development, marketing and sale of supply chain management software and solutions.

Geographic information

The following table presents external revenue on a geographic basis:

	2022	2021
United States	$ 218,110	$ 147,115
Europe	99,645	62,461
Asia	40,727	33,719
Canada	8,407	7,431
	$ 366,889	$ 250,726

The following table presents property and equipment on a geographic basis:

	2022	2021
Canada	$ 32,798	$ 34,789
United States	10,368	10,486
Asia	4,745	3,915
Europe	3,941	2,903
	$ 51,852	$ 52,093

(Expressed in thousands of USD, except share and per share amounts)

24. Segmented information (continued):

The following table presents right-of-use assets on a geographic basis:

		2022		2021
Canada	$	42,217	$	45,955
Asia		6,833		3,713
United States		2,658		3,155
Europe		1,829		755
	$	53,537	$	53,578

The following table presents intangible assets on a geographic basis:

		2022		2021
Europe	$	15,787	$	—
Canada		12,484		10,778
	$	28,271	$	10,778

25. Related party transactions:

Details of the Company's significant subsidiaries at December 31, 2022 and 2021 are as follows:

Name of subsidiary	Principal Activity	Place of incorporation and operation	Functional Currency	Ownership interest	
				2022	2021
Kinaxis Corp.	Sales	State of Delaware, USA	USA	100%	100%
Kinaxis Europe B.V.	Sales	The Netherlands	EUR	100%	100%
Kinaxis India Private Limited	Support	India	INR	100%	100%
Kinaxis Japan K.K.	Sales	Japan	JPY	100%	100%
Kinaxis UK Limited	Sales	United Kingdom	GBP	100%	100%

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note.

During the year, the Company did not enter into any transactions with related parties other than key management personnel, as described below.

Compensation of key management personnel

The Company defines key management personnel as being the Board of Directors, the CEO and his direct reports. The remuneration of key management personnel during the year were as follows:

(Expressed in thousands of USD, except share and per share amounts)

25. Related party transactions (continued):

		2022		2021
Salary and other short-term benefits	$	7,399	$	7,377
Share-based payments		14,770		17,123
	$	22,169	$	24,500

26. Capital management:

The Company's capital is composed of its shareholders' equity. The Company's objective in managing its capital is to ensure financial stability and sufficient liquidity to increase shareholder value through organic growth and investment in sales, marketing and product development. The Company's senior management is responsible for managing the capital through regular review of financial information to ensure sufficient resources are available to meet operating requirements and investments to support its growth strategy. The Board of Directors is responsible for overseeing this process. In order to maintain or adjust its capital structure, the Company could issue new shares, repurchase shares, approve special dividends or issue debt.

The Company has access to a revolving demand credit facility which bears interest at bank prime per annum which has not been drawn as at December 31, 2022. The terms of the facility require the Company to meet certain financial covenants which are monitored by senior management to ensure compliance, as outlined in note 22.

27. Contingencies and commitments:

a) Lease agreements:

In the normal course of business, the Company and its subsidiaries enter into lease agreements for facilities or equipment. It is common in such commercial lease transactions for the Company or its subsidiaries as the lessee to agree to indemnify the lessor and other related third parties for liabilities that may arise from the use of the leased assets. The maximum amount potentially payable under the foregoing indemnities cannot be reasonably estimated. The Company has liability insurance that relates to the indemnifications described above.

b) Intellectual property:

The Company includes standard intellectual property indemnification clauses in its software license and service agreements. Pursuant to these clauses, and subject to certain limitations, the Company holds harmless and agrees to defend the indemnified party, generally the Company's business partners and customers, in connection with certain patent, copyright or trade secret infringement claims by third parties with respect to the Company's products. The term of the indemnification clauses is generally for the subscription term and applicable statutory period after execution of the software license and service agreement. In the event an infringement claim against the Company or an indemnified party is successful, the Company, at its sole option, agrees to do one of the following: (i) procure for the indemnified party the right to continue use of software; (ii) provide a modification to the software so that its use becomes non-infringing; (iii) replace the software with software which is substantially similar in functionality and performance; or (iv) refund the residual value of the software license fees paid by the indemnified party for the infringing software. The Company believes the estimated fair value of these intellectual property indemnification clauses is minimal.

Historically, the Company has not made any significant payments related to the above-noted guarantees and indemnities and accordingly, no liabilities have been accrued in the consolidated financial statements.

27. Contingencies and commitments (continued):

c) Litigation:

The Company is involved in litigation with a competitor, whereby the competitor has made certain allegations concerning patent infringement. The Company will accrue a liability if the Company determines that it is more likely than not that a present obligation exists that will result in an outflow of resources and the amount of the obligation can be reliably estimated. Significant judgment is required in both the determination of probability and the determination as to whether an amount of an obligation is reliably estimable. The Company has assessed that its defense against these allegations will more likely than not be successful and a present obligation does not exist. At December 31, 2022, the Company has not recorded a liability regarding these allegations.

The Company is required to apply judgment with respect to any potential loss or range of loss in connection with litigation. The outcome of litigation and claims is intrinsically subject to considerable uncertainty.

d) Commitments:

During 2022, the Company contracted to purchase cloud data services for a minimum purchase commitment of $100.0 million over a seven-year term.