

accounted for separately versus together may require significant judgment. When a cloud-based service includes both on-premises software licenses and cloud services, judgment is required to determine whether the software license is considered distinct and accounted for separately, or not distinct and accounted for together with the cloud service and recognized over time. Certain cloud services, primarily Office 365, depend on a significant level of integration, interdependency, and interrelation between the desktop applications and cloud services, and are accounted for together as one performance obligation. Revenue from Office 365 is recognized ratably over the period in which the cloud services are provided.

Judgment is required to determine the SSP for each distinct performance obligation. We use a single amount to estimate SSP for items that are not sold separately, including on-premises licenses sold with SA or software updates provided at no additional charge. We use a range of amounts to estimate SSP when we sell each of the products and services separately and need to determine whether there is a discount to be allocated based on the relative SSP of the various products and services.

In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information such as the size of the customer and geographic region in determining the SSP.

Due to the various benefits from and the nature of our SA program, judgment is required to assess the pattern of delivery, including the exercise pattern of certain benefits across our portfolio of customers.

Our products are generally sold with a right of return, we may provide other credits or incentives, and in certain instances we estimate customer usage of our products and services, which are accounted for as variable consideration when determining the amount of revenue to recognize. Returns and credits are estimated at contract inception and updated at the end of each reporting period if additional information becomes available. Changes to our estimated variable consideration were not material for the periods presented.

#### *Contract Balances*

Timing of revenue recognition may differ from the timing of invoicing to customers. We record a receivable when revenue is recognized prior to invoicing, or unearned revenue when revenue is recognized subsequent to invoicing. For multi-year agreements, we generally invoice customers annually at the beginning of each annual coverage period. We record a receivable related to revenue recognized for multi-year on-premises licenses as we have an unconditional right to invoice and receive payment in the future related to those licenses.

The opening balance of current and long-term accounts receivable, net of allowance for doubtful accounts, was \$22.3 billion as of July 1, 2016.

As of June 30, 2018 and 2017, long-term accounts receivable, net of allowance for doubtful accounts, were \$1.8 billion and \$1.7 billion, respectively, and are included in other long-term assets in our consolidated balance sheets.

The allowance for doubtful accounts reflects our best estimate of probable losses inherent in the accounts receivable balance. We determine the allowance based on known troubled accounts, historical experience, and other currently available evidence.

Activity in the allowance for doubtful accounts was as follows:

(In millions)

| Year Ended June 30,          | 2018          | 2017          | 2016          |
|------------------------------|---------------|---------------|---------------|
| Balance, beginning of period | \$ 361        | \$ 409        | \$ 289        |
| Charged to costs and other   | 134           | 58            | 175           |
| Write-offs                   | (98)          | (106)         | (55)          |
| Balance, end of period       | <u>\$ 397</u> | <u>\$ 361</u> | <u>\$ 409</u> |