continuum of cloud services. These services range from an open and shared public environment to private cloud that's tightly managed with the highest level of security and service. You also discover two key foundational cloud delivery models: IaaS and PaaS. In addition, Software as a Service (SaaS) provides packaged business process offerings that live in the cloud and leverage both IaaS and PaaS services.

Discovering Cloud Basics

Cloud computing is a method of providing a set of shared computing resources that includes applications, computing, storage, networking, development, and deployment platforms as well as business processes. Cloud computing turns traditional siloed computing assets into shared pools of resources that are based on an underlying Internet foundation.

Clouds come in different versions, depending on your needs. There are two primary deployment models of cloud: public and private. Most organizations use a combination of private computing resources (data centers and private clouds) and public services as a hybrid environment. These clouds are covered in more detail throughout this chapter.

The cloud doesn't exist in isolation to other corporate IT investments. The reality is that most companies use a combination of public and private cloud services in conjunction with their data center. Companies use different methods, depending on their business requirements to link and integrate these services. The way you construct your hybrid computing environment is determined by the complexity of the workloads and how you want to optimize the performance of those workloads to support your constituents.

Foundational Cloud Delivery Services

Understanding the foundations of cloud computing calls for understanding three main cloud delivery models: