



APPENDIX **A**

Shadow IT and Cisco Cloud Consumption Professional Services

Rogue cloud applications, or shadow IT, can be identified by deploying the Cisco Cloud Usage Collector in the customer network. NetFlow data is sent from customer routers to the collector to identify the cloud service providers that are being accessed, the number of unique IP addresses being used, and the volume of traffic to these providers. This information together reveals shadow IT consumption.

Cloud computing has dramatically changed the IT landscape. To help lower costs and obtain greater business agility, companies are shifting from a primarily on-premises IT structure to a mix of cloud and on-premises applications. In 2014 an estimated 10 percent of IT budgets will be spent on cloud services, and by 2020 the cloud marketplace is expected to be worth US\$159 billion.

The increase in public cloud service adoption has also led to an increase in rogue cloud applications. This shadow IT occurs when a business implements a public cloud that is not managed by or integrated into the company's IT infrastructure. Although many IT teams are aware that shadow IT exists in their enterprises, they are often unaware of the number of cloud applications that have entered the enterprise. Initial assessments with customers reveal that authorized cloud service vendors typically represent only 20 percent of their actual cloud use, and that 5 to 10 times more cloud services are consumed than those IT is aware of.

Industry surveys also support this trend. A recent survey conducted by advisory firm CEB shows that chief information officers (CIOs) of 165 organizations (representing more than US\$47 billion in IT spending) estimate shadow IT to be 40 percent beyond the official IT budget. Additionally, Gartner predictions show IT budgets are moving out of the control of IT departments. By 2015, 35 percent of enterprise IT expenditures for most organizations will be managed outside the IT department's budget (Gartner Top Predictions for IT Organizations and Users for 2012 and Beyond).

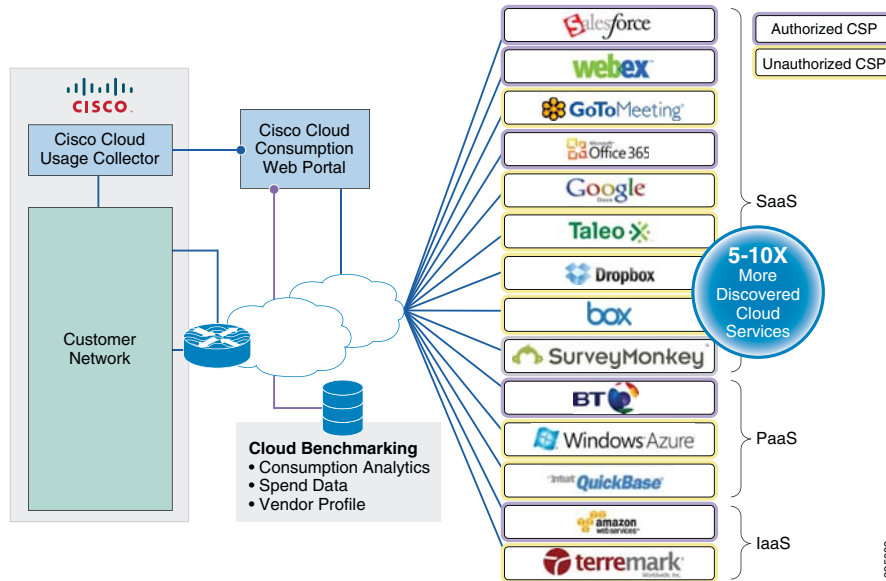
Shadow IT presents a new set of challenges for business and IT leaders, including how to manage the costs and risks associated with cloud adoption and how to establish effective cloud management processes.

The Cisco Cloud Consumption Professional Services offering was created to help customers gain visibility into cloud services and implement stronger cloud management practices. Cisco Cloud Consumption Professional Services helps customers become more agile, reduce risks, and optimize public cloud costs. Cisco Cloud Consumption Professional Services uses the network to help customers determine which cloud service providers (CSPs) are being accessed by employees across their entire organization. The services provide customers with full visibility into their organizations' authorized and unauthorized public cloud use.

By placing data collection tools in the customer network, Cisco can gather enterprise-wide cloud service provider usage data to identify redundant cloud services, public cloud spending, potential risks, and cloud usage trends.

Cisco Cloud Consumption Professional Services typically discovers 5 to 10 times more cloud services than those authorized by IT and gives organizations the tools to understand the risks and costs associated with cloud use (Figure A-1).

Figure A-1 Shadow IT Control



For example, despite blocking 90 percent of public Internet traffic and authorizing only 11 cloud providers, the IT department for the Government of New Brunswick, Canada, uncovered more than 220 cloud providers with potential savings of US\$750,000 with Cisco Cloud Consumption Assessment Service.

The Cisco Cloud Consumption Professional Services offering is an add-on to the Cisco Intercloud Fabric solution through Cisco Advanced Services, but in future releases this offering will be fully incorporated into the product.