

Course ID  
**CLOUD-E2E**  
Course Duration  
**1 day**

Course Title  
**Cloud Computing End-to-End™**

**Related Courses**

- Cloud Computing Business and Technology Briefing™ (CLOUD-BRIEF, 1 day)
- Cloud Computing Market Briefing (CLOUD-MKT, 1 day)
- Cloud Computing Application Case Studies ( CLOUD-APP, 1 or more days)
- Cloud Computing Architecture and Implementation (CLOUD-AI, 3-4 days)
- Cloud Computing Standards and Protocols (CLOUD-STND, 3-5 days)
- Cloud Computing Security (CLOUD-SEC, 3-5 days)

**Aimed At** This briefing is suitable for all audiences.

**Group Size** 5-25

**Prerequisites** There are no prerequisites for this course.

**Course in a Nutshell**

To fully understand the symphony, it is necessary to hear all of the instruments play together. To compare different symphony orchestras, it is wise to hear them play the same music for purposes of comparison. Only then can a true appreciation be developed for the piece itself and the interpretations of the different orchestras. This course takes that comparison approach by providing an example of end-to-end communications of the same application four times with six different cloud implementations. In each iteration, the role of various components and their functionality in a basic WWW/ISP example, a corporate VPN example, an Infrastructure as a Service (IaaS) example, a Platform as a Service (PaaS) example, a Software as a Service (SaaS) example, and a Data/Storage as a Service (DaaS) example are repeated.

**Customize It!** This briefing can be scheduled as one full day standalone course, one day of a multi-day course, or as six one-hour modules for delivery over the web. Any single module or selected modules may also be scheduled for web delivery. This program can be delivered as the final course in a larger curriculum on cloud computing or can be delivered as the sole course to a diverse audience to introduce the concepts and implementations of cloud computing when very little depth is needed, or prior to further individual reading or study.

## Learn How To

- Identify and describe the major components of cloud computing for Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Data/Storage as a Service (DaaS)
- Contrast and compare Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Data/Storage as a Service (DaaS) with the traditional Web/ISP delivery model
- Describe the benefits and problems of the Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS), and Data/Storage as a Service (DaaS) delivery models compared with traditional Web/ISP delivery

## Course Outline

### End-to-End Introduction

*A high level overview of the topic and the briefing.*

### Application Overview

*Pat works is a registered nurse and does field work for a medical services company which provides home dialysis for patients who have suffered kidney failure. Pat is required to be present for initial set-up of the in-home machine and to provide training and support for each new client in their home for a period of one to two weeks. Pat works four ten-hour days and is on-call 24 hours per day on her scheduled days. Pat is partnered with Lee and their schedules overlap slightly allowing full coverage seven days per week. Pat's company has implemented a Unified Communications system using off-the-shelf applications which run on iPads and other tablet devices and allow Pat and Lee to locate each other as well as critical resources such as technicians, spare parts, and any needed medical supplies. They also have access to a variety of databases including patient medical information which is protected by HIPAA regulations.*

*The following six modules show, step-by-step, how the application is implemented on each of these delivery mechanisms. It is noteworthy that this application clearly meets or exceeds four of the five desirability criteria for cloud computing applications and the fifth is a matter of interpretation and implementation as will be seen in the following segments.*

- ✓ Applications, processes and data largely independent
- ✓ Points of integration well defined
- ✓ Stable or new applications
- ✓ Web is desired delivery platform
- ? Lower level of security acceptable

### Web/ISP

### Infrastructure as a Service (IaaS)

### Platform as a Service (PaaS)

### Software as a Service (SaaS)

### Data/Storage as a Service (DaaS)

### End-to-End Review and Summary

*A review of the briefing topics and summary of the program.*

**How You Will  
Learn**

- A seasoned instructor will present this course in interactive lecture format.
- Along with the lecture, we will use interesting group activities to enrich the class and drive home the essential points.
- If you already know something about the technology, we will build on that knowledge base. We'll compare and contrast what's familiar with what's new, making the new ideas easier to acquire as well as more job-relevant.
- If your background is less technical, we will use meaningful examples and analogies to reduce the subject matter complexity.
- You will receive a printed Participant Handbook which will help you remember and retain what you learned in class and apply it on your job.

*Revised*

*November 2f, 2011*