Chapter 17

Achieving a Net-Centric Service-Oriented Enterprise

CHAPTER CONTENT

As you explore Chapter 17, it will cover the following topics:

- Defining a Net-Centric Service-Oriented Enterprise
- Transition Mechanism based on Life Cycle Processes
- Service Oriented Enterprise Technology Features
- Example Set of Net-Centric Services
- Changes and Benefits to Different Industry Sectors

CHAPTER FOCUS

This last chapter focuses on the target state of achieving a Net-Centric Service-Oriented Enterprise (NCSOE). All of our previous discussions led to the point of defining this target state, the transition processes that allow us to get there, and the benefits of the future state. The transition mechanism

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provides a life cycle methodology that includes a business roadmap, service enablement, and service sustainment. We describe each of these transition processes, their inputs and outputs. We then discuss a number of the technology features that we obtain based on a service oriented enterprise. We provide example net-centric services that can be defined as the common set for the overall enterprise. We then provide a set of benefits of NCSOE to different industry sectors.

**DEFINING A NET-CENTRIC SERVICE-ORIENTED ENTERPRISE**

So far as a reader, you have read about the promise of net-centric transformation, but the target state has been hazy, since a specific description has not been given as to its formulation. Well, this chapter delineates this target state as the Net-Centric Service Oriented Enterprise (NCSOE). This is a new generation of the information enterprise that is now making headway within the commercial marketplace. Within the upcoming years, the market will further define the characteristics of an NCSOE.

At this time, the industry intention is to capitalize on the new technology changes brought forth by paradigm shifts such as the move from IPv4 to the IPv6-based Next Generation Internet. This allows large organizations to raise their enterprise operational efficiency to a whole new level. Our methods of information sharing and collaboration are also being pushed to a new level. It is no longer necessary for each of us to be working together real-time in offices and factories since we can choose to share information in an asynchronous manner at our own time. Decision making can rapidly take place at remote centers through the use of an expanded set of collaboration activities and the informed consent of management and leadership. The target NCSOE state allows us to make these dreams come true.

**Defining the Target State**

Net-Centric Service Oriented Enterprise takes advantage of the current DoD direction to create a Global Information Grid and capitalize on broadband communications and capabilities. It allows us to change our performance outcomes that lead to organizational adaptation, flexibility and decision making. NCSOE allows organizations to improve their ability to compete in the marketplace, or for the military to rapidly formulate assaults on real-time threats in the battlefield. NCSOE allows us to not ignore the technological trends of converging business and process management so that we not jeopardize our competitive edge.

NCSOE provides focus and direction to current enterprise technologies such as distributed computing and the transition from Object-Oriented Architecture (OOA) to Service-Oriented Architecture (SOA). Within the commercial and consumer market, there has been a rapid increase in information exchange across wired and wireless networks. This also raises the need for a greater infrastructure of broadband, high-demand networks that provide information in a timely and safe manner. The purpose of NCSOE target state is to provide the following:

- Provide an enterprise-level information collaboration solution that can enforce decision priorities and quality of service
- Provide a decentralized, loosely coupled enterprise that is highly interoperable
- Provide a system-of-systems environment that has a synergistic combination of data and system interfaces to allow rapid information processing