



## COMPLIANCE COMPONENT TEMPLATE

### DEFINITION

<i>Name</i>	OSI Layer 4 - Transport Layer
<i>Description</i>	<p>The transport layer accepts data from the session layer (OSI layer 5) and segments the data for transport across the network. Generally, the transport layer is responsible for making sure that the data is delivered error-free and in the proper sequence. Flow control generally occurs at the transport layer.</p> <p>Flow control manages data transmission between devices so that the transmitting device does not send more data than the receiving device can process. Multiplexing enables data from several applications to be transmitted onto a single physical link. Virtual circuits are established, maintained, and terminated by the transport layer. Error checking involves creating various mechanisms for detecting transmission errors, while error recovery involves acting, such as requesting that data be retransmitted, to resolve any errors that occur.</p> <p>The transport protocols used on the Internet are TCP and UDP.</p>
<i>Rationale</i>	The Open System Interconnection (OSI) reference model describes how information from a software application in one computer moves through a network medium to a software application in another computer. The OSI reference model is a conceptual model composed of seven layers, each specifying particular network functions. The model was developed by the International Organization for Standardization (ISO) in 1984, and it is now considered the primary architectural model for intercomputer communications.
<i>Benefits</i>	The OSI model divides the tasks involved with moving information between networked computers into seven smaller, more manageable task groups. A task or group of tasks is then assigned to each of the seven OSI layers. Each layer is reasonably self-contained so that the tasks assigned to each layer can be implemented independently. This enables the solutions offered by one layer to be updated without adversely affecting the other layers.

### ASSOCIATED ARCHITECTURE LEVELS

<i>Specify the Domain Name</i>	Infrastructure
<i>Specify the Discipline Name</i>	Network
<i>Specify the Technology Area Name</i>	Protocols
<i>Specify the Product Component Name</i>	

### COMPLIANCE COMPONENT TYPE

<i>Document the Compliance Component Type</i>	Guideline
<i>Component Sub-type</i>	

### COMPLIANCE DETAIL

<i>State the Guideline, Standard or Legislation</i>	RFC793: Transmission Control Protocol RFC768: User Datagram Protocol RFC 826: Ethernet Address Resolution Protocol RFC 903: Reverse Address Resolution Protocol RFC 951: Bootstrap Protocol RFC 2131: Dynamic Host Configuration Protocol RFC 2960: Stream Control Transmission Protocol RFC 3550: Real-time Transport Protocol  IANA Assigned Numbers: <a href="http://www.iana.org/assignments/port-numbers">http://www.iana.org/assignments/port-numbers</a>  Sequenced packet exchange (SPX)
<i>Document Source Reference #</i>	

### Compliance Sources

<i>Name</i>	Internet Engineering Task Force	<i>Website</i>	<a href="http://www.ietf.org">http://www.ietf.org</a>
<i>Contact Information</i>			
<i>Name</i>	Internet Assigned Numbers Authority	<i>Website</i>	<a href="http://iana.org">http://iana.org</a>
<i>Contact Information</i>			

### KEYWORDS

<i>List Keywords</i>	Layer 4, OSI, Transport Layer, TCP, UDP, Connectionless, Connection
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### COMPONENT CLASSIFICATION

<i>Provide the Classification</i>	<input type="checkbox"/> <i>Emerging</i> <input checked="" type="checkbox"/> <i>Current</i> <input type="checkbox"/> <i>Twilight</i> <input type="checkbox"/> <i>Sunset</i>
<i>Sunset Date</i>	

### COMPONENT SUB-CLASSIFICATION

Sub-Classification	Date	Additional Sub-Classification Information
<input type="checkbox"/> <i>Technology Watch</i>		
<input type="checkbox"/> <i>Variance</i>		
<input type="checkbox"/> <i>Conditional Use</i>		

### Rationale for Component Classification

<i>Document the Rationale for Component Classification</i>	
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### Migration Strategy

<i>Document the Migration Strategy</i>	
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### Impact Position Statement

<i>Document the Position Statement on Impact</i>	
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### CURRENT STATUS

<i>Provide the Current Status</i>	<input type="checkbox"/> <i>In Development</i> <input type="checkbox"/> <i>Under Review</i> <input checked="" type="checkbox"/> <i>Approved</i> <input type="checkbox"/> <i>Rejected</i>
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AUDIT TRAIL

<i>Creation Date</i>	9/2/04	<i>Date Approved / Rejected</i>	9/14/04
<i>Reason for Rejection</i>			
<i>Last Date Reviewed</i>		<i>Last Date Updated</i>	
<i>Reason for Update</i>			