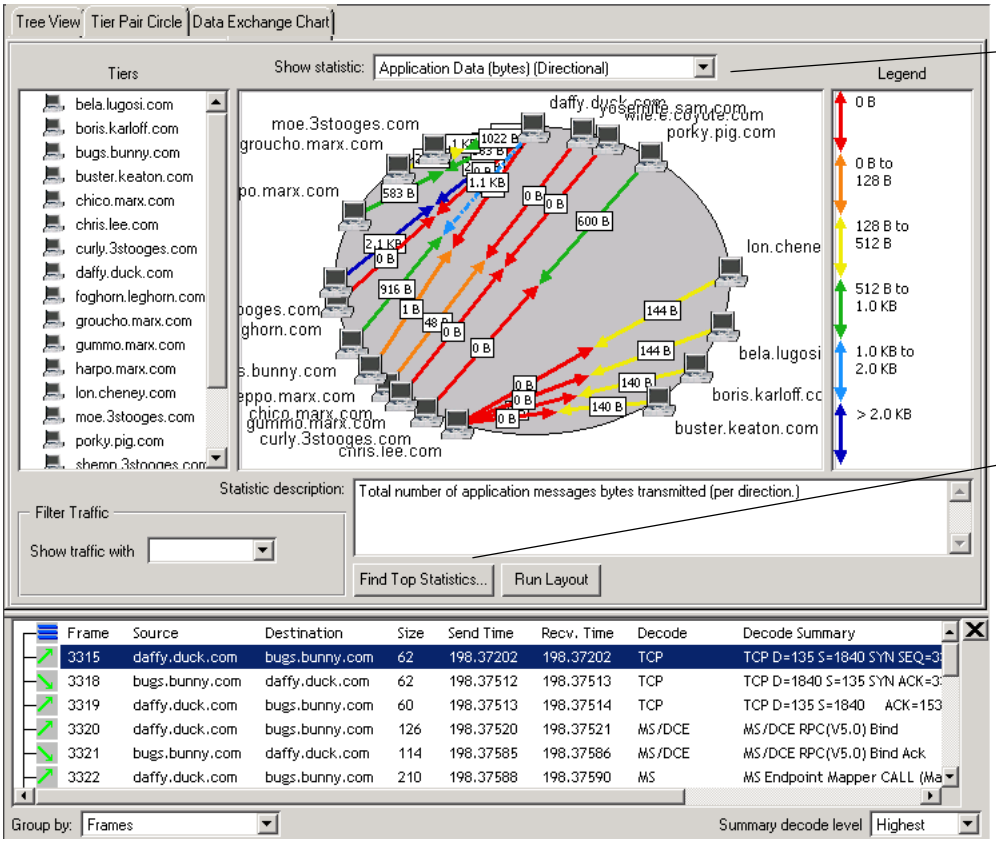
15 Tier Pair Circle

The Tier Pair Circle highlights the tier-pair conversations in the application task, and can be used to

- Determine which tier pairs are conversing and not conversing
- View and compare general statistic information for multiple conversations at once
- Identify which tier pairs are exchanging a specific type of traffic (for example, HTTP or TCP traffic)
- Select and filter conversations that meet certain statistic values (as described in Selecting Items)

Figure 15-1 Tier Pair Circle Page



Use this menu to select the statistic to display

The color of the arrows represents the statistic range indicated in the legend

Each arrow or arrow pair represents a conversation

Use “Find Top Statistics” to select tier pairs based on statistic criteria

Decodes for selected packets appear in the Protocol Decode Viewer (bottom)

Tier-Pair Statistic Information

Figure 15-1 shows tier-pair conversations in a Transaction Analyzer model. One or two arrows connect each tier pair and represent a conversation. Each arrow's color represents a statistic range as indicated by the legend on the right; set the Show Statistic pull-down menu (top center) to view the type of statistic information shown. You can also view specific statistic values for a conversation by placing the mouse pointer on an arrow.

The following table lists the options on the Show Statistic pull-down menu:

Table 15-1 Statistic Options (Tier-Pair Circle)

Statistic	Description
Response Time (sec)	Application response time, measured from the first application-payload packet to the last application-payload packet (i.e., network packet containing application data).
Application Turns	Total number of application turns. An application turn is a change in direction of the application-message flow.
Application Messages	Total number of application messages.
Application Messages (directional)	Total number of application messages, per direction.
Application data (bytes)	Total number of application bytes transmitted.
Application data (bytes) (directional)	Total number of application message bytes transmitted, per direction.
Average Application Message (bytes)	Average size, in bytes, of application messages.
Network Packets	Total number of network packets.
Network Packets (directional)	Total number of network packets, per direction.
Network Data (bytes)	Total number of bytes sent at all network layers.
Network Data (bytes) (directional)	Total number of bytes sent at all network layers, per direction.
Average Network Packet (bytes)	Average number of total bytes in network packets.
Latency (ms)	Propagation time for a single packet transmitted between two tiers, per tier-pair only.
Bandwidth (Kbps)	Transmission speed of the link connecting the two tiers.
Effect of Protocol (sec)	Total delay due to network protocols.

Table 15-1 Statistic Options (Tier-Pair Circle) (Continued)

Statistic	Description
Effect of Congestion (sec)	Total delay due to congestion.
Max Application Bytes Per Turn (directional)	Maximum number of bytes transmitted between tiers in a single application turn, per direction.
Max Unacknowledged Data (directional)	Maximum number of bytes transmitted, but unacknowledged, between tiers in a single application turn, per direction.
Retransmissions	Total number of packet retransmissions.
Common Resets	Total number of transport-connection resets.
Protocol Information	Protocol information.
Bandwidth (Kbps) (directional)	Transmission speed of the link connecting two tiers.

Circle and Layout View

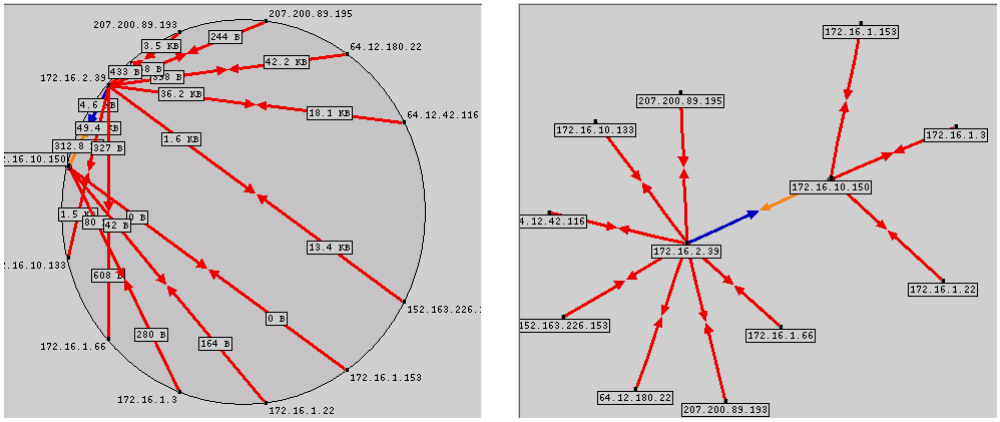
You can switch between two views in the Tier Pair Circle page:

- Circle View
- Layout View

To switch between views, choose View > Set Layout Type and select the view.

Use the Run Layout operation to re-apply the layout algorithm after making changes that affect the layout (such as including/excluding tiers, or dragging tiers in the circle/layout pane).

Figure 15-2 Circle and Layout Views of the Same Application



Selecting Items

To select a tier-pair conversation, click on the arrow that represents that conversation. This selects all packets or messages that make up the conversation. You can also shift-click to select multiple arrows. After you make a selection, you can exclude, delete, or view information on the selected packets/messages.

For information about the available operations, see Miscellaneous Operations.

Related Topics

- *Tree View*
- *Data Exchange Chart*