Product Comparison Methodology

Heavy Reading's resources were used to identify as many vendors as possible. Websites were trawled to obtain initial product information from online brochures, data sheets, and any other relevant material. Vendors were then contacted and asked to participate. Those responding positively were interviewed about the key points of their products, the markets they served, and their strategy (each interview lasted about an hour).

After the vendor interviews were completed, a set of important product features and metrics was put into a series of tables. These empty tables were then sent to the vendors to complete.

When all of the data was returned, a related set of comparative scoring tables was constructed. Scoring systems were devised and tables constructed by taking the most important features and metrics and weighting them to reflect our view of their importance to network operators. For example, the following weights were assigned to the intercarrier peering SBC scoring categories:

- Equipment and Interfaces – 10
- Scaleability – 40
- Protocols and Codecs – 25
- Features – 15
- Quality of Service – 10
- TOTAL – 100

The other top-level scores were also marked out of a total of 100, to make judging the relative success of the products in each category easier. Each top-level category had several sub-categories, which were assigned portions of the weights. For example, the largest weighted category (scaleability) was made up of five sub-categories, all quantitative metrics in this case:

- Concurrent Sessions per Rack Unit of Height (U) – 15
- Maximum BHCA per Rack Unit of Height – 10
- Maximum Calls Set Up per Second per Rack Unit of Height – 5
- Maximum IP Throughput per Rack Unit of Height – 10
- TOTAL – 40

Quantitative metrics were used mainly where a majority of the product responses had provided the requested numerical values. Metrics for which there was a potential for vendor misinterpretation were not used.

Another point calling for explanation is the choice of thresholds for top scores in the categories. The basic idea for the carrier applications of SBCs was to link them to the requirement for 1 million BHCA in an average chassis, as was similarly done in last year's Heavy Reading's survey report *VOIP: A Comprehensive Competitive Analysis of Media Gateways*. This worked in the majority of cases, but some maxima were altered according to the number of products that had high values. If one stood out from the rest, the maximum was located below that one and possibly above the next. If there were several close together, the maximum was placed among them.

Other general scoring procedures were applied as follows:

- Non-disclosure of a feature drew zero marks.
- Features on the roadmap, in development, or as software upgrade scored zero marks.
- Quantitative non-disclosures (just a check-mark) for integer capabilities drew one mark.
- The vendor-completed tables were checked for self-consistency. Any irregularity or confusion was discussed with the vendor concerned.