The Secure Sockets Layer virtual private network is established as an alternative and a complementary technology to IPsec VPN for remote access. Consolidation of vendors and competition in end-user security and usability make SSL VPNs appealing.

WHAT YOU NEED TO KNOW
The Secure Sockets Layer (SSL) virtual private network (VPN) is a standard fixture in many companies. SSL VPNs have superseded IPsec (the Internet security protocol) as the easiest choice for casual and ad hoc employee VPN access requests and also for business partners, external maintenance providers and retired associates. They are regularly viewed as the best practice for application portals and also seen as viable replacements for IPsec remote access. Remote LAN access performance via tunnels over SSL can meet IPsec’s performance, and latency-sensitive applications, such as voice over Internet Protocol (VoIP), work well because of proprietary enhancements that can be delivered through the browser or a formally installed VPN client. Gartner clients no longer ask about new IPsec remote-access installations or expanding legacy IPsec remote access, and most Gartner clients are aware of the success of SSL VPNs. Gartner ranks vendors in the Magic Quadrant (see Figure 1) based on performance for calendar year 2005 through the end of September 2006, and on additional road map and client review received up to the date of publication. Our Magic Quadrant considers which vendors likely will dominate sales and influence technology directions through 2007, as well as which vendors are most visible among clients, generate the greatest number of requests for information and contract review, and account for the most new and ongoing installations in Gartner’s client base.

STRATEGIC PLANNING ASSUMPTION
By 2008, Secure Sockets Layer virtual private networks will be the primary remote-access method for more than two-thirds of business teleworking employees, more than three-quarters of contractors and more than 90% of casual employee access (0.8 probability).

Market Overview
SSL VPN is a mature and established market for the enablement of remote access. SSL is the most widely deployed virtual privacy system in the industry because it is integral to every browser and independent of platforms and operating systems (OSs). It is the ultimate VPN in terms of portability, and it is the easiest to understand because every user who has accessed the Internet is already comfortable with the browser. SSL can be delivered as a menu-driven portal, or it can be delivered as a LAN tunnel replacement for IPsec, with or without a browser client. Gartner clients – ranging from small to large global enterprises – generate a steady, daily stream of inquiries for advice. In 2006, SSL VPNs were sold primarily for desktop/laptop/workstation access. However, SSL VPNs are appearing in applications for smaller PDAs and smartphone platforms and are poised to challenge the niche market for small-device VPNs.
Gartner analysts receive client calls that indicate SSL VPN growth is steady and worldwide. Growth continues to be most significant in North America, where many global purchase decisions are made, so the focus of this Magic Quadrant analysis is centered on North America. However, client concerns and purchasing criteria are generally the same everywhere. Gartner estimates that more than 4.2 million concurrent enterprise SSL VPN remote-access user seats were activated cumulatively between 2003 and 2005 among companies surveyed for this document. The total, with numbers reported through the third quarter of 2006, increased to more than 6.2 million concurrent seats. Revenue in the SSL VPN market grew 26% through mid-2006 compared with 2005, and there is more room to grow. These numbers represent a small percentage of the market for business teleworking employees, business partners and independent and outsourced contractors. By 2008, SSL VPNs will be the primary remote-access method for more than two-thirds of business teleworking employees, more than three-quarters of contractors and more than 90% of casual employee access (0.8 probability). Growth potential has attracted every major network player and continues to sustain a sizable population of smaller incumbents, startups and investors.

SSL VPNs have long been able to emulate IPsec, and SSL VPN LAN connection speeds have become equivalent. Some Gartner clients have ceased to provision new IPsec remote-access accounts, and others have replaced IPsec with SSL, citing the benefits of easier administrative provisioning of user accounts and a simpler user experience with VPN sessions.

Advantages to SSL VPNs include:

- Only a browser is needed to initiate a VPN session.
- Access can be set up quickly – for example, during emergencies.
- Security and authentication can download as Java applets and ActiveX controls.
- A unique Internet IP address is not required for authentication.
- Poor, intermittent and disrupted connections won’t cause the VPN to fail.
- SSL sessions can “roam” across IP addresses and carriers.
- Access can be restricted to applications selected from a menu, or IPsec-style LAN access can be granted.

Challenges to SSL VPNs include:

- SSL’s ease of use and portability encourage more widespread use of remote access from unmanaged PCs.
- As access demand grows, policies and menu options can grow complex.
- Buyers must take responsibility to assure that endpoint security protection is sufficient and complete.

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• Roaming is not transparent for generic SSL sessions: It requires a browser refresh. However, a number of VPN vendors have enhanced their clients to support easier roaming.

Reasons to continue to use IPsec VPNs include:
• IPsec allows flexibility in the choice of encryption algorithms and key strengths.
• IPsec is well-suited for use in bridging sites over untrusted networks.

Challenges to IPsec VPNs include:
• Companies can choose to implement remote access with a simple user ID and password, increasing the risk of a break-in. This is a behavioral and awareness issue when the VPN client runs in the background and becomes “transparent” to the user. The same concern can spread to SSL VPN installations that use nonbrowser clients.
• Variability exists in the quality and coding of user clients.
• IPsec remote-access users generally require a unique Internet-facing IP address for client authentication.
• IPsec does not roam (that is, does not allow a live session to stay online while switching Internet connections) without extra investment in third-party products.

Market Definition/Description
Products in the SSL VPN market provide secure and private connections for individuals to reach company gateways via the Internet using VPN from a workstation, such as a desktop, laptop or a smaller end-user computing device, such as a PDA or smartphone. This Research Note evaluates SSL VPN products sold for purchase and use within enterprises. The primary focus of this document is midsize to large enterprises in North America, for which the United States provides the largest single-border worldwide growth market. Global market presence is regarded as a contributing factor to execution and vision. Services built from the products and offered by third parties are considered additive to the product vendor ranking but do not drive the evaluation. SSL VPN products combine browser security enhancement software with a VPN gateway that may be delivered either as a stand-alone gateway appliance or as software to be installed on a user-supplied gateway server. The market is dominated by appliances; pure software products have proved to be less competitive than drop-in, plug-and-play solutions. Menu-driven, “point and click” browser access to programs and resources characterize the default interface for an SSL VPN; however, several companies offer nonbrowser clients to more closely imitate an IPsec VPN, and a few companies omit the menu interface altogether. SSL VPNs support strong authentication and logging desired for VPN protection and application access audits, and also support roaming required for mobile users. End-user security features are a visionary competitive differentiator that drives vendors to provide on-demand protection mechanisms — either embedded or bundled — that perform network access control (NAC) functions, block malicious code, clean up data, and enforce firewall settings, even on completely unmanaged workstations.

Inclusion and Exclusion Criteria

Inclusion Criteria
SSL VPN companies that meet the market definition and description were considered for the document under the following conditions:
• Gartner analysts have a generally favorable opinion about the company’s ability to compete in the market.
• Gartner clients generate inquiries about the company.
• The company causes clients to change or delay their procurement plans for competing products.
• The company is regarded as a serious threat by competitors.
• The company regularly appears on shortlists for final selection.
• The company demonstrates competitive presence and sales to Gartner analysts.
• Gartner analysts consider that aspects of the company’s product execution and vision are important enough to merit inclusion.

Exclusion Criteria
SSL VPN companies that were not included in the document might have been excluded for one or more of the following conditions:
• Companies that did not have a product on the market for a sufficient time during the study period to establish a visible, competitive position
• Companies that were invited to participate but did not reply to an annual request for information and did not otherwise meet the inclusion criteria
• Companies with minimal or negligible apparent market share among Gartner clients, or with no shipping products
• Companies that are not the original manufacturer of SSL VPN products – this includes resellers, which repackage products that would qualify from their original manufacturers, as well as carriers and ISPs, which provide managed services.
• Products sold as application firewalls and not directly competing with the larger SSL VPN product/function view
• SSL accelerators and load balancers sold stand-alone for other purposes
• Web-enabled personal remote control products that are not true multiuser access gateways

Other Companies
Caveo, NeoAccel, Secure Computing and Sun were newly considered for this document, but they were not ranked.

NeoAccel is a new company that was founded by leadership from NetScaler (acquired by Citrix Systems). NeoAccel sold OEM products in 2004 and released branded products for enterprises in May 2005. NeoAccel has insufficient market share and competitive influence on the market under its own brand to be ranked in this document, but it will be reviewed again in 2007.

Secure Computing recently entered the market with SafeWire SecureWire and declined to participate at this time, having too short a time on the market to be included.
Sun also declined to participate, and Caveo did not respond. Their rankings have not been pursued because analysts have not observed competitive influence in the market.

Symantec made good in 2006 on its strategy to pursue the on-demand security market for SSL VPNs. Symantec’s acquisitions of Sygate and WholeSecurity, combined with its exit from competition in the SSL VPN market, have allowed the company to dominate the on-demand security area by licensing technology to other VPN vendors. Eleven out of 13 vendors surveyed license some or all of their on-demand security from Symantec instead of Check Point Software Technologies and other companies with on-demand tools. SSL VPN vendors generally report increased interest to work long term with Symantec.

**Added**
Microsoft is now listed, following its acquisition of Whale Communications.

**Dropped**
Blue Coat Systems acquired Permeo’s SSL VPN and officially released the Blue Coat RA in October 2006. Because of the timing, Blue Coat was unable to participate in the survey and was not on the market for a sufficient time in 2006.

Nokia’s SSL VPN doesn’t meet Gartner’s 2006 thresholds for visibility, client interest and competitiveness.

Whale Communications is now listed under Microsoft.

**Evaluation Criteria**

**Ability to Execute**

*Execution* considers factors related to getting products sold, installed, supported and in users’ hands. Companies that execute strongly generate pervasive awareness and loyalty among Gartner clients and generate a steady stream of inquiries to Gartner analysts. Execution is not primarily about company size and income; the ongoing competitive battle between leaders Juniper Networks and Aventail is evidence that small and large companies have can have similar influence. Execution is also not decided primarily by sales, although in a growth market sales are an important indicator.

*Product/Service* compares the completeness and appropriateness of core SSL VPN products sold for use in the enterprise remote-access market. The SSL VPN market defined in this document is product-focused, but related service areas may contribute, including consulting services and managed service resellers. This factor is critical to demonstrating that the vendor can generate market awareness.

*Overall Viability* considers company history and demonstrated commitment in the SSL VPN market, and the difference between a company’s stated goals for the evaluation period vs. the company’s actual performance compared with the rest of the market. Growth of the customer base and revenue derived from sales are also considered. All vendors were asked to disclose comparable market data, such as SSL VPN revenue, number of unique companies under contract, and information about seats sold year by year (defined as concurrent active license seats deployed on sold products). Several vendors did not provide competitive information in the format requested for comparison. In these situations, other quantitative sources of Gartner information were considered, but qualitative evidence from client feedback and peer analyst feedback become more important. Indirect measures of product penetration, such as “boxes shipped,” is not a measure of execution in this report. Instead, we consider concurrent seats sold, licensed and accessible to the buyer as evidence that products are being used. Vendors are asked to convert to the concurrent seat formula as necessary, and the actual numbers reported are treated as guidance rather than as hard facts.

*Sales Execution/Pricing* compares the strength of vendors’ sales and distribution operations, as well as their discounted list pricing for systems supporting as few as 50 concurrent users to more than 10,000 concurrent users. Pricing was compared in terms of first-year cost per concurrent active license seats, including the cost of all hardware and support. Low pricing will not guarantee high execution or client interest, and the market did not move to commodity status in 2006, although Cisco Systems and Microsoft are indicative of the trend. Buyers want good results more than they want bargains, and they respond more strongly to sales techniques led by case studies and return on investment (ROI) projections. In any case, the benefits of a well-implemented SSL VPN can outweigh initial costs.

*Market Responsiveness and Track Record and Marketing Execution* rate competitive visibility as the key factor, including which vendors are most commonly considered top competitive threats during the RFP process, and also which are considered top threats by each other. In addition to buyer and analyst feedback, this ranking considers which vendors consider each other to be direct competitive threats. Strong ratings mean that a company

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**Table 1. Ability to Execute Evaluation Criteria**

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Product/Service</td>
<td>standard</td>
</tr>
<tr>
<td>Overall Viability (Business Unit, Financial, Strategy, Organization)</td>
<td>standard</td>
</tr>
<tr>
<td>Sales Execution/Pricing</td>
<td>standard</td>
</tr>
<tr>
<td>Market Responsiveness and Track Record</td>
<td>standard</td>
</tr>
<tr>
<td>Marketing Execution</td>
<td>standard</td>
</tr>
<tr>
<td>Customer Experience</td>
<td>standard</td>
</tr>
<tr>
<td>Operations</td>
<td>standard</td>
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</tbody>
</table>

Source: Gartner (December 2006)
has demonstrated to Gartner analysts that it can get in RFPs early and ultimately win a large percentage of competition with other vendors.

Customer Experience is subjectively rated from client feedback to analysts, opinions of Gartner analysts in security, network and platform research groups, and vendor-supplied references, where needed. Intense interest in SSL VPNs from Gartner clients provided a year’s worth of ample feedback to frame the market.

Operations consider the ability of a vendor to pursue its goals in a manner that enhances and grows its influence in all execution categories.

See Table 1 for an overview of the evaluation criteria for the ability to execute.

Completeness of Vision
Market Understanding and Marketing Strategy are assessed through direct observation of the degree to which a vendor’s products, road maps and mission anticipate leading-edge thinking about buyers’ wants and needs. Gartner makes this assessment subjectively by several means, including interaction with vendors in briefings, and by reading planning documents, marketing and sales literature, and press releases. Incumbent vendor market performance is reviewed year by year against specific recommendations that have been made to each vendor and against future trends identified in Gartner research. Vendors cannot merely state an aggressive future goal; they must put a plan in place, show that they are following their plan and modify their plan as market directions change.

Sales Strategy examines the vendor’s strategy for selling products, including sales messages, techniques, marketing, distribution and channels. This ranking factor is the bridge between marketing execution and product strategy.

Offering (Product) Strategy is ranked through an examination of the breadth of functions, platform and OS support for the SSL client, the VPN gateway system OS and features, and the investments made by the vendor to optimize and support applications accessed through the gateway. R&D investments are credited in this category.

Business Model takes into account a vendor’s underlying business objectives for its products and its ongoing ability to pursue R&D goals in a manner that enhances all vision categories.

Vertical/Industry Strategy considers a vendor’s ability to communicate a vision that appeals to specific industries and verticals. Good performance in selected markets improves a vendor’s ability to communicate its reputation and vision generally.

Innovation takes into consideration the degree to which vendors invest in core requirements for successful use of their products. Criteria include both a vendor’s internal investments in value-added security tools and technology road maps, and external efforts to expand interoperability, alliances and partnerships with companies in related security markets. Vendors with strong vision create communities with other companies, and this, in turn, helps other companies, as well as buyers, view the SSL VPN vendor as a necessary component of larger business solutions.

Geographic Strategy takes into account a vendor’s strategy to direct resources, skills, products and services outside North American markets. However, all vendors are ranked in this Magic Quadrant primarily for their performance in North America.

See Table 2 for an overview of the evaluation criteria for completeness of vision.

Leaders
Leaders demonstrate balanced progress and effort on all execution and vision categories. Their actions raise the competitive bar for all products in the market, and they can change the course of the industry. To remain in the Leaders quadrant, these vendors must excel in mobile access and protection and dominate in sales. A leading vendor is not a default choice for every buyer, and clients are warned not to assume that they should buy only from the Leaders quadrant. Juniper and Aventail held on to leading positions for 2005. Nortel was re-evaluated as a niche player. Some clients may actually feel that leaders are spreading efforts too thinly and not pursuing their special needs.

Challengers
Challengers have solid products that address the typical needs of the market with strong sales, visibility and clout that add up to higher execution than niche players. Challengers are good at winning contracts, but they do so by competing on basic or a limited selection of functions rather than on advanced features. Challengers are efficient and expedient choices for defined access problems. Many clients consider challengers to be the conservative, safe alternative to niche players.

Visionaries
Visionaries invest in the leading/"bleeding"-edge features that will be significant in the next generation of products and will give buyers early access to improved security and management. Visionaries can affect the course of technological developments in the market, but they lack the execution influence to outmaneuver challengers and leaders. Clients pick visionaries for best-of-breed

<table>
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<tr>
<td>Innovation</td>
<td>standard</td>
</tr>
<tr>
<td>Geographic Strategy</td>
<td>standard</td>
</tr>
</tbody>
</table>

Source: Gartner (December 2006)
features, and in the case of small vendors, they may enjoy more personal attention.

Niche Players

Niche players offer viable, dependable solutions that meet the typical needs of buyers, and they fare well when given a chance to compete in a product evaluation. Niche players respond to market changes and new technologies, but they generally lack the clout to change the course of the market. Niche players may serve conservative and risk-averse buyers more efficiently than the leaders. Clients tend to pick niche players when stability and focus on a few important functions and features are more important than a wide and long road map.

Vendor Comments

AEP Networks

AEP Networks has a large client base of 3,000 companies and a respectable but relatively low concurrent user seat share representing about 2.2% of the seats of surveyed vendors (counted for 2003, 2004, and 2005 and the first three quarters of 2006). The ratio of client companies to seats indicates smaller average installations and lower revenue per account. AEP is best known in Europe where it was founded, but it is gaining awareness among North American customers through the acquisition of V-One and Netilla. AEP's product has also gained many features from the company's acquisitions, including identity-based technology from V-One. AEP's low-end entry prices for seats are still at the midrange offered in the market, but its prices drop acceptably as quantities increase. The company's greatest strengths come from its commitment to provide extensive and flexible policy-based access controls. Its vision ranking indicates steady progress to keep pace with industry standards and user wants and needs. These factors, combined with a relatively lower market share against strong competition, merits AEP a niche ranking. AEP should pursue more-aggressive sales and increase upward sales in the client base. The company needs to appear in more Gartner client feedback as a shortlist contender.

Array Networks

Array Networks has increased its client base threefold compared with last year. Concurrent seat share grew by 150,000 in 2005, and that number is on schedule to be exceeded before year-end 2006. Array, as with F5, has markets in SSL acceleration and load balancing that can attract sales: Typical buyers cite gateway performance as the major selection criterion. Array's high-performance SSL VPN, excellent scalability and the first industry foray into site-to-site SSL VPN are opening new opportunities with ISPs that will lead to increasing managed service revenue in carrier markets. However, general visibility and "mind share" with typical enterprise buyers remain low: Array is not readily recognized by Gartner enterprise clients, and buyers who speak to Gartner analysts continue to report Array's low visibility as a procurement challenge. Clients who set high performance and low latency as their top criteria have been the most likely to pursue this vendor. Higher-execution ratings this year reflect that Array is winning important contracts based on raw performance. The company's overall vision still merits a challenger ranking because more progress is needed on the client interface, as well as in the development of partnerships and interoperability with companies in related markets. Although Array is making progress, it is in the role of following, rather than leading, in terms of the full range of vision and execution criteria.

Aventail

Aventail maintains a leadership ranking through effective sales and messaging, combined with an aggressive road map that anticipates future user needs and changes to industry directions. Aventail is small company, yet it competes directly against some of the largest players in the market, and it earned a third place in concurrent seats reported for the survey. According to other Gartner estimates, Aventail ranks fourth in the industry for income derived from specialized VPN equipment, behind Juniper, F5 and Citrix. Fourth place is about 25% of Juniper's revenue, but that's not bad, considering Juniper has about 17 times more employees than Aventail. The company's revenue is strong when the number of seats sold are compared with the number of companies under contract. Aventail's mission is to stay ahead of industry challenges and user wants and needs, and its effect is evidenced by the continuous, intense competition between Aventail and Juniper, which sets the agenda for the entire SSL VPN market. Aventail holds second place as a perceived competitive threat, cited by two-thirds of peer vendors surveyed in the market.

Aventail switched from software to appliances in 2001, and it exited the managed service market by selling that business to Netifice Communications in 2004. Both moves reduced operating costs and stimulated sales, while causing minimal effect on existing customers. For example, by ending competition, Aventail has for two years been the leading global supplier of SSL VPN equipment to ISPs and carriers, with deals in place with AT&T, Sprint, MCI, BT Infonet, MegaPath Networks, NextCom and more than eight additional regional and country carriers in Europe and Asia/Pacific. Aventail's efforts to build small mobile tools from SSL began in 2002, and they are now paying off with interesting customer applications and will position the company to serve mainstream VPN buyers and users of products in older, less-visible mobile VPN specialty markets in 2007. Aventail's future road map contains new "course changes" intended to maintain the company's competitive position in the SSL VPN market and to lead it into new and different security markets with additional growth potential.

Caymas Systems

Caymas Systems is a startup in its second year of shipping products that feature custom chip designs to develop high-performance acceleration, a low entry cost, easy management, all features available at all price points, and no license restrictions on concurrent users. The company's policy of "no limit on the user license" puts it in a unique position with respect to emergency increases in VPN usage. All other vendors either require the installation of a temporary license, mostly for a fee and bound by an expiration date, or expect the buyer to purchase enough capacity for emergencies in advance. Caymas' mix of high-performance hardware and client-side features maintains the company's visionary placement in the quadrant. Caymas supports a variety of high-performance deep-traffic inspection access control and intrusion prevention features with more capability than other products in the market. Caymas should pursue more-aggressive sales tactics against longer-term vendors, and it needs to be seen prevailing in sales contests that reach the attention of Gartner analysts.
Check Point Software Technologies

Check Point Software Technologies’ SSL VPN product line spans dedicated appliances and incumbent routers, and is even available as software. The company’s products are an excellent choice for existing customers who want to leverage a single management interface. However, the company’s execution ratings are still limited for a variety of reasons. Comparative user market share data was not available. Using other factors as a guide, we’ve determined that Gartner client feedback and interest in Check Point is lower than average. Estimated income as of 3Q06 is in sixth place, behind Juniper, Citrix, F5, Aventail and Microsoft/Whale. Gartner clients report mixed experiences with Check Point and its partner support, although most issues have been with partner appliance products. Check Point should pursue more-aggressive marketing and sales led by case studies and ROI, as well as demonstrate overwhelming evidence of competitive wins.

Check Point scores strongly on vision for a number of reasons, including a good road map, a newly released mobile client, extensive partner programs, generous product scalability and a broad set of on-demand security tools. However, these on-demand security tools do not contribute to execution because their main market are the companies that compete with Check Point in the SSL VPN market.

Check Point does not charge for a temporary license count increase for emergency or disaster access. However, its method is unusual. Clients are advised to install a free 30-day evaluation license on their production server, which gives them a temporary, free, unlimited user license increase. In an emergency, installation of the evaluation license may be an extra step of complexity, in part because Check Point does not emphasize this use of the license.

Cisco Systems

Cisco Systems continues to hold a visionary rating through 3Q06. Gartner client feedback indicates that buyers are still more likely to select other vendors. Cisco’s growth in this market has accelerated, but the influence of its SSL VPN products is still limited, compared with its size and global presence as a leading networking company. Cisco’s road map and vision are excellent, however, and they earn the company a visionary status owing to attractive pricing and scalability, easy entry for existing Cisco customers, and extensive endpoint security features offered at no extra charge. Pricing has increased slightly with the introduction of the ASA platforms, but it is justified by the increase in product performance. Cisco is beginning to be perceived as a competitive player by other vendors, and it was cited as a threat by one-third of peer vendors. Gartner clients are beginning to recognize Cisco SSL VPNs and are considering them as in-place upgrades to existing Cisco infrastructure. Over time, Cisco should be able to capture the entry market within its customer base, but the evidence in 2006 shows Cisco cannot yet compete with the companies ranked as leaders. Cisco needs to be seen on more shortlists, and it should use competitive pricing and its global reputation to develop a strategy to unseat incumbent vendors.

Citrix Systems

Citrix Systems has successfully integrated its acquisition of Net6 and NetScaler with Citrix Secure Gateway into the Citrix Access Gateway range of platforms that start with a low-cost branch-office gateway and extend to carrier-class products capable of competing with those from Array, F5 and Nortel. Feature for feature, Citrix has prepared well and earns a leader ranking, with application server and raw performance expertise to satisfy all occasions, as well as the longest industry experience with remote application publishing. Gartner revenue studies place Citrix second after Juniper for revenue from SSL products, and its share of concurrent user seats earns a second place overall.

However, at this point, there is a disconnect between sales and competitive mind share that holds execution at an entry-level recognition of a leader ranking. Citrix must take steps to increase its competitive visibility and to emphasize the advantages of its application delivery strengths compared with those of Microsoft following the acquisition of Whale Technologies. Citrix products are not appearing in client RFP competitions in a way that characterizes it as a significant competitive threat to other vendors. Gartner clients infrequently cite Citrix as a choice on their RFP list and often first learn of Citrix Access Gateway products by talking to Gartner analysts. Citrix SSL products are still not readily considered by end-user buyers as a complete VPN solution unto themselves. Furthermore, Citrix is considered only as a mild competitive threat by its peer group. In fact, remote access to Citrix Presentation Server is a convenient sales driver for other SSL vendors. Given the extensive sales channels available for Citrix, its SSL VPN mind share should be huge, able to match that of large companies, such as Juniper.

F5

F5 is tied with Juniper for being cited by a majority of vendors surveyed as the most-competitive threat to their business. That reputation has carried through to a borderline leadership ranking owing to good sales and growth through 2005 and 2006. F5 offers very competitive pricing, with an attractive portfolio of management products, including a visual policy editor, high-performance gateways, deep-traffic inspection and end-user security features. F5’s presence in related businesses (including SSL acceleration and load balancing) provides a stable base of operations and opportunities for complementary solution selling. F5 sales for SSL served through its BIG-IP gateway for the business-to-consumer market are not relevant to enterprise user remote access and are not counted toward market share in this report. F5’s vision ranking is proportional to the breadth of features at all levels of the its product line. F5’s execution ranking crossed the execution line by considering concurrent seat sales together with competitive visibility, as well as strong earnings in the SSL market. Execution was reduced by the fact that Array was able to account for more seat sales in this market, even though it has mind share challenges.

Juniper Networks

Juniper Networks holds a leading position by maintaining, year after year, a balance of highly effective sales, marketing and support, features, and road maps. Juniper is on more than 80% of preliminary and final shortlists presented by Gartner clients. Juniper ties with F5 in being regarded by its peers as the most-competitive threat. Juniper’s share of three-year cumulative seats deployed topped 1.2 million, more than three times the average of companies surveyed for this report. Juniper continues to invest well in messaging, timely features, and future wants and needs, not only for end-user buyers, but also in preparation for a serious foray...
into carrier services. Gartner credits continuing leadership in SSL VPN to the fact that Juniper, as with NetScreen before it, has fostered the original Neoteris team that developed the SSL VPN product and has gone further to embrace the fundamentals of the SSL VPN to transform other Juniper product lines than any other incumbent networking vendor. Juniper maintains high market growth without a need to cut prices, which remain at the high end of the range reported to Gartner based on published rates and discounts. Buyers respond to the company’s strength, brand, global presence, and good local sales and support experiences. However, Gartner client feedback does not indicate that the rest of Juniper’s products contribute to the success of selling the SSL VPN products.

Microsoft

Microsoft’s acquisition of Whale Communications was a strategic move to advance all secure remote-access plans for Windows platforms, and a belated admission that certain SSL-based access and endpoint security features were missing in ISA Server. Whale had gone further than other vendors in developing special optimizations for high-value applications within and outside of the Windows platform. Whale also had more leveraged partner relationships in security and premium ISV markets than any other company surveyed in 2005 and was expanding those relationships at the time of acquisition. Because Whale was based on the Windows OS, porting efforts have moved quickly, and Microsoft has already announced security and functionality enhancements to its secure access platform, which includes both ISA Server and the Intelligent Application Gateway (IAG). At the same time, Microsoft has committed to continue selling and upgrading the incumbent Whale platform, and Whale users will have support and migration options through Microsoft for future versions. The new gateway interfaces to Microsoft’s IAG are well-planned and will be transparently integrated with all the major Microsoft applications and portals, including SharePoint. Microsoft will exit the hardware business and is lining up distribution partners to host the gateways on third-party appliances. The resulting products will be priced and scaled for easy entry by small businesses, as well as cost-effective solutions for midsize to large businesses. For 2006, Microsoft’s execution ranking remains at visionary in recognition of its continuing Whale’s existing business without interruption, and without sufficient time in market to consider the effects of the new products and new channel penetration. Microsoft targets small to large enterprises with ISA Server 2006 for application publishing and the IAG for full policy-based SSL VPN access. Carrier-class products were not a priority for Whale and will need time to develop. Microsoft needs to challenge the incumbent leaders in midsize to very large enterprise contracts and should furnish competitive market share data.

Nortel

Nortel’s performance in 2005 and to date in 2006 earns it a high niche rating. This placement acknowledges Nortel’s sales growth and a good base, but it also realistically compares the company with Array, Citrix and F5, which all sell products ranging from small-office through carrier-class offerings. Nortel’s SSL endpoint security features, value-added application support, interoperability, and partnerships with companies in related application and security markets are satisfactory but not industry-leading. Surprisingly, no other vendor in the survey group considers Nortel a competitive threat. Gartner clients who use Nortel products for other purposes are not reporting that they are predisposed to expand into SSL VPN. Nevertheless, Nortel’s gateways are well-designed and good performers, and the company’s list prices are very competitive. Nortel also continues to invest in improvements for IPsec remote access, which may benefit users who are not ready to switch to SSL. Prospective buyers should investigate Portal Guard, a tool to rapidly convert Web sites to SSL portals. In 2007, Nortel needs to project a compelling enterprise sales story. It could acquire or build a broader set endpoint security solution – as did Cisco, Check Point, F5 or PortWise – or better capitalize on partners – as do Juniper, Aventail, F5 and Whale Communications. Nortel also could pursue endorsements from business application independent software vendors (ISVs) and put more effort into small mobile device platforms.

PortWise

PortWise earns a visionary ranking as a company with richly featured mobile-oriented products proved in mobile applications that are still rarely known in North America and generating less than a $1 million revenue in North America. North American clients are interested in the products but want more validation of market presence and track record. PortWise retains a place in the ranking because it is the only vendor in the survey that owns its strong authentication technology, it has the most-complete platform for small mobile devices, and it has the most experience of any vendor in the SSL VPN market for serving applications on small mobile devices. The gateway is available in Linux and Windows Server versions. PortWise reports an impressive number of concurrent user seats (earning a fourth place overall among vendors reporting in the survey) for a small company selling mainly outside North America. The company needs to put more effort into selling SSL VPN in combination with its authentication products that have sold millions of seats. PortWise also needs to adopt aggressive marketing and sales tactics that showcase its mobile expertise and will help maintain and increase sales growth. Improved presence in North America will be required for the company’s 2007 placement in the Magic Quadrant. It should use case studies to gain attention in North American markets. PortWise could also pursue appliance markets because these products have proved to sell well.

Vendors Added or Dropped

We review and adjust our inclusion criteria for Magic Quadrants and MarketScopes as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant or MarketScope may change over time. A vendor appearing in a Magic Quadrant or MarketScope one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. This may be a reflection of a change in the market and, therefore, changed evaluation criteria, or a change of focus by a vendor.
Evaluation Criteria Definitions

**Ability to Execute**
*Product/Service:* Core goods and services offered by the vendor that compete in/serve the defined market. This includes current product/service capabilities, quality, feature sets, skills, and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

**Overall Viability (Business Unit, Financial, Strategy, Organization):** Viability includes an assessment of the overall organization’s financial health, the financial and practical success of the business unit, and the likelihood of the individual business unit to continue investing in the product, to continue offering the product and to advance the state of the art within the organization’s portfolio of products.

**Sales Execution/Pricing:** The vendor’s capabilities in all pre-sales activities and the structure that supports them. This includes deal management, pricing and negotiation, pre-sales support and the overall effectiveness of the sales channel.

**Market Responsiveness and Track Record:** Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor’s history of responsiveness.

**Marketing Execution:** The clarity, quality, creativity and efficacy of programs designed to deliver the organization’s message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This “mind share” can be driven by a combination of publicity, promotional, thought leadership, word-of-mouth and sales activities.

**Customer Experience:** Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

**Operations:** The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

**Completeness of Vision**
*Market Understanding:* Ability of the vendor to understand buyers’ wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen and understand buyers’ wants and needs, and can shape or enhance those with their added vision.

*Marketing Strategy:* A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the Web site, advertising, customer programs and positioning statements.

*Sales Strategy:* The strategy for selling product that uses the appropriate network of direct and indirect sales, marketing, service and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

*Offering (Product) Strategy:* The vendor’s approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature set as they map to current and future requirements.

*Business Model:* The soundness and logic of the vendor’s underlying business proposition.

*Vertical/Industry Strategy:* The vendor’s strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including verticals.

*Innovation:* Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

*Geographic Strategy:* The vendor’s strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the “home” or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.