

Product Brief

EMC Symmetrix VMAXe: A Missing Piece of the Storage Jigsaw

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Abstract: Acknowledging that there are many types of storage users with changing business needs, EMC has formally launched its new Symmetrix VMAXe, which offers enterprise class functionality in a smaller and simpler package than its “big brother,” VMAX. EMC is well aware that this piece of the storage jigsaw might have some overlap to its existing portfolio, but there’s a big enough market space for this to make business sense while also being likely to make a significant number of new—as well as existing—EMC users (and EMC’s channel!) very happy.

A New Family Member

Here’s the news: EMC just announced a product that it has already been selling quietly for a couple of months, and which went “GA” last month. The Symmetrix VMAXe slots into EMC’s portfolio between the top of the VNX/CLARiiON line and the entry-level Symmetrix VMAX. “Slots into” is something of a relative term for a couple of reasons:

- In an IT world that is sometimes blinded by the need for space-shuttle-docking accuracy when it comes to product positioning, VMAXe is a bit more like a rather large weightlifter getting into the family photo: there’s a valuable space to fill, but he still bumps shoulders somewhat as he gets settled. Almost inevitably, the other family members will need to adjust their seating a little bit as the new addition arrives; this will be a large part of the industry discussion, which is a shame because, to extend the pun, it could detract from both the big picture as well as what the new family member brings to the table.
- The term suggests an exact genetic fit halfway between the existing others. But, as with children, blending genes can result in thoroughly unique individuals. Indeed, much of what you need to know about VMAXe can be gleaned from its name: the “VMAX” part tells you that this is drawn from high end Symmetrix stock (as indeed it is) whereas the “e” part tells you that this is a far more pre-configured and designed-to-be-straightforward system (in much the same way that the VNXe compares to the VNX elsewhere in EMC’s portfolio). While VMAXe is surrounded by a la carte storage (the VNX and VMAX offerings) it is itself more of a table d’hôte offering. But gourmands worldwide will tell you that while that can mean less choice, less complexity, and perhaps even some missing flavors or amuse-bouche elements, it can also represent an opportunity for fine dining and great value.

Putting the analogies aside, the essence of VMAXe is clear: a sizeable market space has been identified that EMC could not fully address and it is not going to leave the space for anyone else to claim uncontested. VMAXe is an exercise in new engineering and packaging (both in the physical nature of this new system and in the financial nature of bundled software) to address those users that have grown to need far higher capacities and broader capabilities than they ever thought likely, while still wanting a simple buying and using experience. It’s not so long ago that such users barely existed—you were either a big shop with big iron or you were mid-market. But those distinctions, powered by the democratization and massive growth of IT, have blurred and so have user needs. In this respect, VMAXe can be seen to be about serving new markets, particularly markets outside the United States.

What is Symmetrix VMAXe?

Without getting into datasheet-level detail, it’s important to briefly cover what this new product actually is. First, it is a new product. While it uses some aspects of the full-blown VMAX such as the Virtual Matrix Architecture (which shares CPU, drives, and memory across controllers), it is a physically smaller product that resides in a 19” rack and only needs single-phase power (it is therefore clearly not a stripped down VMAX, nor can it be upgraded to one). It scales well, up

to 960¹ SSD, FC, or SATA drives, but not as high as the VMAX. Architecturally, it is a multi-controller, scale-out system that runs on up to four new engines, each of which has 96 GB of cache. In terms of software, there is a flat bundled license fee per terabyte that includes a core Engenuity pack, together with the FAST-VP storage tiering suite and a host of popular migration, replication (local and remote, EMC and other), management, and recovery tools.² It ships pre-loaded and pre-configured, so it should normally install in just a few hours and can then start serving up its 100% virtually-provisioned volumes within minutes (Virtual Provisioning is EMC's version of Thin Provisioning).

Where Does VMAXe Fit?

Much as any sensible person will tell you that a little portfolio overlap beats a coverage gap every time, there's always a sense that vendors must accurately differentiate between their own products almost as much as from the competition. Yet where VMAXe fits is to some extent going to be user-driven; it is hard to imagine EMC losing too much sleep on marginal decisions as long as buyers stay loyal to—or convert to—some EMC product. Likewise, BMW would far rather you struggle to decide between a 3, 5, and 7 Series than see you head off to Audi or Mercedes! Clearly, the target user is one with burgeoning demands, but constrained resources; a data center that needs enterprise RAS with no downtime and good ability to meet even unpredictable service levels, but also easy scalability and an attractive cost.³ While not everything needs ESCON, there are plenty of mission-critical workloads that need bulletproof, top-of-the-line storage—and VMAXe can serve these application needs that more traditional midrange systems don't quite reach ... and do so pretty nimbly. EMC is eager, sensibly, to try to avoid a new specific tier name and instead focus on the mix of product attributes as reflective of, and meeting, a mix of user needs. Such needs may include markets that are less traditional for EMC; so for instance, VMAXe, with its rapid deployment capabilities, can fit well outside of main corporate data centers, including departmental and remote deployments. While many of EMC's current customers will therefore no doubt enjoy this new enterprise storage offering, VMAXe will also likely extend the company's reach into new environments and wider global markets.

There *are*, however, some clear product distinctions that might help users decide which EMC product to choose; for example, if you are indeed a mainframe shop or are hooked on encryption, hardware compression, or three-phase power, then you would need to look at a VMAX. If a dual controller product is enough for you, then maybe an equally capacious VNX will suffice; of course, if ultimate capacity is crucial, that might also help direct your attention back to a VMAX.

Addressing where VMAXe fits also applies to the route to market. In this regard, it is very significant that EMC will be making this new product broadly available through its channel. After all, EMC's channel for Symmetrix has traditionally been its highly certified, larger-scale partners. It has had to be that way given the myriad options available with VMAX. But now, given the feature mix and target user for VMAXe, even more channel partners will be able to sell this easier, pre-configured product which will probably allow EMC to achieve exactly what it wants in this market: to open up virgin opportunities and gain market share.

Market Analysis

As many vendors seek to reduce the number of different storage products in their portfolio, EMC's announcement of an addition will be met with raised eyebrows in some quarters. However, there is a huge range of user profiles in the market and the VMAXe will no doubt find its place. The ESG research in Figure 1 is not presented for its ranking of the various storage challenges per se, but rather to show how varied the challenges are, how even (with no far and away "leading challenges"), and simultaneously how muddled is the picture with clear differences between mid-range and

¹ The 960 is a general maximum; however, note that in some VMAXe configurations (for certain international markets) EMC is able to support over 1,000 drives.

² An expanded list: Symmetrix Management Package, Symmetrix Migration Suite (Federated Live Migration, Open Migrator, and Open Replicator), TimeFinder (data cloning, but no snap function), PowerPath SE, RecoverPoint Splitter. Options include more advanced versions of RecoverPoint (CDP, CRR, CLR), Open Replicator, and PowerPath, plus Replication Manager and Ionix.

³ Even the cost question is not as straightforward as might be expected because of options and drive mixes, etc.; although as a rule of thumb VMAXe is expected to be around 20% less than VMAX, it is conceivable to have VMAXe priced higher than VMAX or lower than the top end of CLARiiON/VNX.

enterprise respondents.⁴ Put simply, it’s a complex world of competing issues for buyers and the new mix of functions and attributes in the VMAXe is likely to resonate with plenty of them. It would also be churlish to suggest that EMC’s multi-product strategy has not served it well so far!

Figure 1. Organizations Greatest Challenges in Their Storage Environments



Source: Enterprise Strategy Group, 2011.

EMC will also have to weather some attempts to externally categorize and/or give a nickname to the VMAXe. Some commentators will no doubt call it a “cut price VMAX,” a “baby Symm,” EMC’s “Tier 1.5,” or a “Trojan Horse marketing campaign.” While this will make for some fun times in the blogosphere, all of these assertions can be countered pretty easily: VMAXe is a new product with new engineering; semantic accuracy often eludes the storage market (we can’t even agree what tier-0 or thin provisioning are, for instance); and it can’t be upgraded to a VMAX.

Frankly, there’s no getting away from the fact that VMAXe is a product that fits between others in the portfolio, but that does not make it “middling.” Some users will see it as what to them is tier-1 and, indeed aspirational, storage; meantime existing VMAX users might choose to view it as tier-2 storage since it has the tools they know and love, but they don’t really need full VMAX features everywhere. As always in storage, the issue is about fitness for purpose.

The Bigger Truth

Why is EMC producing the Symmetrix VMAXe? Plainly expressed, EMC is a successful storage supplier and capitalist organization: as user needs have shifted and grown, it has seen a market opportunity that it can serve. It’s as simple as that. Will the VMAXe cause some cannibalization? Probably. But will its combination of real enterprise-class capabilities in a simple, bundled, affordable package find a market niche where the business volume outweighs any negative cannibalization impact of the overlap? Almost certainly. The beachheads by other vendors into this space (which can be

⁴ Source: ESG Research Report, [2011 IT Spending Intentions Survey](#), January 2011.

wedges into EMC accounts) prove that this market exists, while EMC's early sales of VMAXe prove that it has developed a suitably competitive offering.

While portfolio overlap will be made an issue by EMC's competitors, the truth is that most of them have the identical approach. EMC's issue with VMAXe isn't overlap per se; if anything, it's the name similarity to VMAX that begs comparison. So, while EMC brought that issue upon itself (and for good reason—the aura and genetic underpinnings of VMAX are great things to have) that is no reason to question the product, its logic, nor its market fit. Indeed, driven by its solid value-proposition and [what will surely be] a motivated channel, VMAXe should allow EMC to go “off base” and create new revenue streams. To maximize the opportunity, it should ensure that it discusses the product in such terms as “extreme capability general purpose enterprise storage,” which, though it may be a mouthful, it is also very relevant to many of its potential target users that might otherwise get distracted or put off by all the talk of big data and cloud. VMAXe is capable of delivering a lot of value to demanding “regular” IT shops and “vanilla” mission-critical workloads.

By combining simple, self-tuning, and cost-effective packaged storage with advanced functions that can ensure enterprise class data integrity, availability and security, EMC's VMAXe is perfect for users that want filet mignon, but on a sirloin budget and with fast food simplicity. While such a meal is always going to have restricted side dishes, many diners don't even consume those. Driven by ever-more competitive business environments and an escalation of IT expectations and volume at the center of many organizations, a growing number of users find themselves in the “dining” quandary just described. And that means there will most likely be plenty of VMAXe takers around the world coming to EMC's table.