



N-series thin clients for Citrix HDX Partner FAQ



N-series launch at Citrix Synergy 2012 (San Francisco)

1. What did NComputing announce?

- NComputing demonstrated new thin clients resulting from our strategic collaboration with Citrix on the advancements from the Citrix HDX Ready System-on-Chip (SoC) program. This complements the announcement of the program at Synergy Barcelona in October 2011.
- Developed in close collaboration with Citrix, the new N-series thin clients for Citrix HDX, powered by NComputing's Numo™ 3 SoC technology, will have an immediate impact on the desktop virtualization market through the creation of new high performance, highly efficient thin clients at radically lower price points than current alternatives.

2. What does the N-series mean to the desktop virtualization market?

- The Citrix HDX Ready System-on-Chip (SoC) initiative and the new NComputing N-series thin clients represent a sea-change for desktop virtualization. NComputing will be able to accelerate the Citrix vision of "HDX everywhere" through purpose-built, high performance, ultra-low energy and low-cost-per-user end points powered by our Numo SoC technology. For the NComputing OEM ecosystem, our reference designs will provide the foundation for entirely new product categories of HDX Ready devices and market opportunities.

3. Why is NComputing partnering with Citrix?

- Citrix and NComputing have a common vision to drive mainstream adoption of virtual desktops—for everyone—and share a goal to eliminate the barriers of cost and complexity that have delayed adoption of desktop virtualization to date.
- NComputing is a member of the Citrix Ready and HDX Ready SoC partner programs. The Citrix Ready program enables full compatibility with Citrix virtualization infrastructure products. The Citrix HDX Ready SoC program enables an amazingly rich user experience for virtual computing solutions. NComputing's Numo 3 SoC for HDX technology completely redefines the market by setting a new level of performance at an industry-leading price point. By bringing these two market-leading technologies together, enterprise customers will be able to significantly lower the initial acquisition and ongoing costs of virtual computing solutions.

4. What is the best place to get more info?

- <http://www.ncomputing.com/HDX>

Details of the N-series product line

5. What are the N-series products?

- The N-series thin clients for Citrix HDX is a new product family of thin clients based on the next-generation NComputing Numo 3 SoC, which is purpose built to support Citrix XenApp, XenDesktop and VDI-in-a-Box, and optimized for HDX. There are two models in the N-series product line and three products: the N400, the N500, and the N500w.

6. What is the N400?

- NComputing's entry-level HDX Ready device, the N400 is the thin client of choice for task workers and those workers with light to average multimedia needs. The N400 combines the proven horsepower of the 3rd-generation Numo™ 3 SoC with the deep understanding of desktop virtualization to deliver an HD 720p video-capable device with hardware acceleration and the features needed for most task-oriented enterprise applications.



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Partner FAQ

7. What is the N500?

- The workhorse of the NComputing portfolio, the N500 provides the full multimedia capabilities demanded by knowledge workers and users in other demanding media rich application environments. The N500 incorporates full client-side rendering for the most efficient delivery of multimedia content up to full HD at 1080p, as well as options for dual display and wireless connectivity with the N500w (not available with the N400). Also powered by the Numo™ 3 SoC, the N500 sets the new standard for price/performance in the thin client market with its rich set of features and capabilities.



8. What is the value of these new N-series products?

- For organizations looking to broaden their commitment to Citrix XenDesktop, XenApp, or VDI-in-a-Box, the new NComputing N-series thin clients for Citrix HDX deliver 100% of the HDX experience at a fraction of the cost of PCs or other thin clients. NComputing's next-generation HDX-ready thin clients are powered by its Numo™ 3 System-on-Chip, which delivers a high performance client supporting HD video sessions using less than 5 watts of power. With full manageability, support, and at a low cost, enterprise organizations can now cost-effectively extend their Citrix deployments to more users, allowing them to gain fuller access to the many benefits of desktop virtualization.

9. Are the N-series HDX Ready thin clients "cloud ready"?

- Yes, the N-series supports the HDX protocol and takes advantage of its unique ability to work with the low bandwidth and high latency of a typical cloud environment.

10. Is the N-series Citrix HDX Ready?

- Yes, please visit the Citrix website for details:
 N400 - <http://www.citrix.com/ready/partners/ncomputing/products/n400>
 N500 - <http://www.citrix.com/ready/partners/ncomputing/products/n500>
 N500w - <http://www.citrix.com/ready/partners/ncomputing/products/n500w>

11. What Citrix platforms and versions are supported?

- XenApp 6.0 & 6.5
- XenDesktop 5.0, 5.5 & 5.6
- VDI-in-a-Box 5.0

12. What OS support does the N-series offer?

- The N-series is designed to support Citrix XenDesktop, XenApp, and VDI-in-a-Box and supports the current offering for these products' desktop virtualization features.

13. What about management?

- Introduced in conjunction with the N-series thin clients, NComputing's vSpace Management Center provides a highly scalable, flexible and easy to use single tool for thin client management with AD integration for role-based access control. With its web-based console, IT administrators can manage their N-series devices from anywhere and at anytime. vSpace Management Center helps you organize your N-series deployment, whether it's a single site or multiple sites – and makes it easy to perform critical management tasks remotely including firmware updates, configuration changes, device resets and more.

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14. Is dual display supported by the N-series?

- Yes, dual display is available as an optional extra for the N500 in the form of a secondary display adapter that connects to any USB port of the device. Dual display provides a maximum screen resolution of 1920 x 1080 – the same as provided for the primary display.

15. Is Wi-Fi supported by the N-series?

- Yes. Wi-Fi is available as a factory fitted optional extra for the N500w which provides support for 802.11b/g/n networks.

16. Is smart card authentication supported by the N-series?

- Yes, smart card authentication using Imprivata is supported in the initial release of both the N400 and N500. NComputing intends to target expanding this support to other authentication providers.

17. Does the N-series support non-Citrix platforms?

- No, the N-series is optimized for Citrix and HDX by design and does not support any other platforms.

18. When will the product be available?

- The N400 and N500 are available today.

19. How much do the N-series devices cost?

All N-series models come with and Enterprise bundle of 1 device license for vSpace Management Center and the first year of Premium Support (software upgrades, 24x7 technical support and knowledgebase access) included in the one bundled price:

- The N400 list price is \$159 USD
- The N500 list price is \$229 USD
- The N500w adds factory installed WiFi to the N500 and the list price is \$249 USD

Note: the list price for the N500/N500w secondary display adapter is \$60 USD

20. What channels will the N-series be sold through?

- N-series thin clients for Citrix HDX can be obtained globally through select NComputing resellers and distributors who are Citrix authorized.

21. Will all current NComputing resellers be carrying the N-series products?

- No. However, a subset of NComputing resellers that are Citrix authorized will carry the N-series. NComputing will evaluate prospective partners on an individual basis, regionally.

Technical innovation

22. Other SoC-enabled devices exist already, why are these different?

- Our Numo 3 is part of a next-generation, specialized breed of SoC technology initiated at the request of Citrix to drive HDX adoption

23. What is a System on Chip (SoC)?

- A System on Chip (SoC) is an Application Specific Integrated Circuit (ASIC) that is specifically designed to run a specific environment; in this case to provide a full desktop virtualization experience.
- An SoC typically includes CPU's, multiple buses (including memory and I/O buses), connectivity interfaces (like Ethernet and USB), audio and video logic (including CODECs), security, and cryptographic support, and power saving features. With nearly a complete system on a single ASIC, an application can be created that is very low in cost.

24. What are the Numo 3 design specs that support the HDX SoC Ready program?

- Numo3 includes a number of CODECs (code-decoders) that are utilized in the N500 to provide direct hardware support for accelerated video support. This support not only improves the video quality but also helps off-load tasks on the host server that enables greater user density per server and less network bandwidth consumption. The SoC technology implemented in the N-series is a win-win-win implementation as it represents a win for lower cost thin clients, a win for lower server costs and a win for lower infrastructure costs.
- The latest generation of the Numo chip is based on a high performance multi-core, ARM Cortex A9 CPU with a custom multimedia engine that supports a broad array of compression & decompression technologies. With power consumption at less than 2 watts, it provides computation capabilities that are similar and in some scenarios better than modern PCs but a fraction of the cost and power envelope. Further information on Numo 3 can be found at: <http://www.ncomputing.com/products/technologies>.

25. How does support for the Citrix SoC program work?

- The N-series features a newly developed Citrix Receiver that has been optimized to run on SoC based thin clients. Since the Barcelona SoC program announcement the NComputing and Citrix engineering teams have been working in close collaboration to bring this technology to market.