



## Success Brief

Intel® Xeon® processor  
5500 series



“Thank to Intel’s new platforms and technologies, Onkosh.com is able to achieve performance levels beyond our expectations, even at high peak times. We are very excited about testing with Intel’s great support the Tylersburg platform with the new Nehalem based processors. It is helping us take advantage of the features of this platform, and continuously improve our search services”.

Hanan Abdel Meguid  
CEO - LINK Development.

# Intel® Xeon® processor 5500 series boosts performance of unique Arabic search engine Onkosh.com

**Company** Onkosh.com, a product by Orascom Telecom, is the leading search engine for the Arabic web. It understands Arabic content far better than any other search engine, and utilizes advanced Natural Language Processing (NLP) techniques to ensure that you receive the best results for your search query.

With focus on Arabic and regional related content, Onkosh.com offers an interesting array of specialized search features including Arabic web, news, blogs, images, forums and file search in addition to a variety of other features.

Onkosh.com also has an exciting patent-pending feature called Bel-3araby, which allows users to search for Arabic content using smart transliteration of alphanumeric Latin characters, such as using the popular replacements of “3” and “7” as an example. Onkosh users can also use a virtual keyboard, which makes typing in Arabic something everyone can do.

**Challenge** There tends to be confusion between the percentage of Arabic web content and the usage the Arabic language on the web. Arabic is classified as one the “Top Ten Languages on the Web” and has a high growth rate, based on internet penetration.

LINK Development identified the need of having a fast and efficient Arabic based search engine that is targeted towards the Arab world, and that is how Onkosh.com came to exist.

Search engines in general require a lot of processing power, and with the exciting roadmap of Onkosh.com, performance is crucial. Therefore taking complete advantage of today’s server architectures and technologies is essential to ensure that Onkosh’s performance scales even beyond just proportionally to the hardware available.

Onkosh.com is currently based on a major server farm with tens of servers. The number of servers is expected to triple by 2010. Most of the servers hosting Onkosh.com are Quad Core Intel Xeon servers.

Since Intel and LINK Development have similar goals of providing unique and high-performing services in the Middle East that exploit the full capabilities of today’s server architectures, Intel and LINK Development started collaborating on running Onkosh.com on Intel’s next generation Tylersburg platform based on the new Intel® Xeon® processor 5500 series.

**Results** Just by adopting the Tylersburg platform, Onkosh.com already witnessed an increase of around 20% in performance. This performance increase was possible due to the new processor micro-architecture with Intel Turbo Boost, better bandwidth memory through Intel’s QuickPath Interconnect, Hyperthreading Technology, faster I/O acceleration, and faster DDR3 memory.

Nevertheless, the road does not end here. Intel and LINK Development will continue to work together in order to ensure that Onkosh.com is tuned and scales better using the Tylersburg platform and even on Intel’s upcoming platforms.

Comparing today to last year, Onkosh.com is now able to grow about 300% in terms of the ability to crawl and parse new Arabic content automatically discovered on the World Wide Web. With our focused quest of ensuring scalability, especially with the exponential increase in Arabic Web content, the Tylersburg platform will help Onkosh.com stay ahead of the game.

Additionally, Onkosh.com currently handles about 1500 queries per second. This is expected to quadruple within a year to around 6000 queries per second for both direct queries on Onkosh.com, and queries made through major portals/partners powered by Onkosh.com search like masrawy.com, yallakora.com, and mobilinil.com.

Planting Intel’s latest processor micro-architecture within the Onkosh.com server farm will not only contribute to a stable and solid transition, but will guarantee a robust foundation for the potential growth as well.

