

Tuesday, August 20, 2013

Oracle VM for SPARC 3.1

Oracle VM for SPARC 3.1 has been announced. You will find the documentation here. There is a multitude of new features in this release. Honglin Su writes about the news in the blog article "Announcing Oracle VM Server for SPARC 3.1 Release" and Jeff Savit writes about it as well.

In my personal opinion the extensions to IOV and the massive speed increase when using fully virtualised networking are the most interesting changes in this release.

With the speed increases with virtualised networking you can bandwidths between two logical domains in the range of 16 Gbps as explained by Raghuram Kothakota. On the path domain to external networks the throughput approaches wire-speed at 9 Gbps.

However the real nice trick is described in a blog article Raghuram wrote later on: "Live migration of a Guest with an SR-IOV VF using dynamic SR-IOV feature!". This is a really clever way to live migrate a domain and using SRIOV. This method is leveraging IPMP. Nothing hinders you to have one SRIOV-virtualized interface and a fully virtualised interface in one IPMP group. When you set the the fully virtualised interface in standby mode, the SRIOV virtualized one is the interface that carries your load. When you want to live migrate, you just remove the SRIOV interface, IPMP now switches to the fully virtualised interface, you migrate the domain, and add the SRIOV interface again to the new system and it's put into the IPMP group again.

Posted by Joerg Moellenkamp in English, Oracle, Solaris at 20:17