**NIST Big Data Public Working Group (NBD-PWG)**

**NBD-PWD-2016/M0567**

**Source: NBD-PWG**

**Status: Draft**

**Title: Web chat from Meeting of Oct. 4, 2016**

**Chat Log D:\\_wo\1DMG\2015\\_BigDataWG\Docs\ChatLog 2016\_10\_04 14\_47.rtf**

**Mark Underwood (to Everyone)**: 1:07 PM: Enter DMTF history with SNMP

**Tim Zimmerlin (to Everyone)**: 1:08 PM: ASN.1 syntax and SNMP MIB semantics are the special sauce.

**Tim Zimmerlin (to Everyone)**: 1:09 PM: SNMP MIB global registration keeps all vendors in their own lanes.

**Tim Zimmerlin (to Everyone)**: 1:15 PM: Up to 5 physical servers is easy; above that causes performance bottlenecks. One physical server might have 4 to 22 Xeon cores with 2 threads per core.

**Tim Zimmerlin (to Everyone)**: 1:16 PM: One physical server might have 100 running VMs with type 1 hypervisor.

**Tim Zimmerlin (to Everyone)**: 1:17 PM: In a cloud, up to 1000 VMs is easy to do; above required advanced skills.

**Tim Zimmerlin (to Everyone)**: 1:21 PM: Above 1000 VMs, a complete overhaul of the RefArch is required. Two generations of distributed algorithms exist. 1st generation in Lamport, Valiant, Lynch, etc. from 1970s. 2nd generation is HDFS, Ceph, AWS, Lambda architecture, eventually consistent algo's.

**Tim Zimmerlin (to Everyone)**: 1:25 PM: SDN is a hardware solution. Either your cloud has the right hardware or not. No middle ground with SDN.

**Tim Zimmerlin (to Everyone)**: 1:26 PM: Another approach is already provided by US network vendors, involving application specific management of mainly layer 2 networks.

**Mark Underwood (to Everyone)**: 1:28 PM: Hybrid cloud use cases?

**Tim Zimmerlin (to Everyone)**: 1:28 PM: Another approach is provided by hyperclouds from AWS, Azure, Google Compute Engine.

**Tim Zimmerlin (to Everyone)**: 1:29 PM: ...four pillar, CLOS network switching is non blocking for each independent pillar.

**Tim Zimmerlin (to Everyone)**: 1:29 PM: ...Azure has FPGA supported RDMA (remote direct memory access) also.

**Mark Underwood (to Everyone)**: 1:30 PM: Tim, but reality is that app developers are not part of the work plan.

**Tim Zimmerlin (to Everyone)**: 1:31 PM: Mark, developers have orchestration dashboards and monitoring dashboards. They select the right services and resource quantities.

**Tim Zimmerlin (to Everyone)**: 1:32 PM: ...also developers receive realtime streams to log.

**Mark Underwood (to Everyone)**: 1:33 PM: Tim, so now I'm embedded in one of those enerprises and the event visibility is rather lame

**Mark Underwood (to Everyone)**: 1:33 PM: Vision problem :)

**Tim Zimmerlin (to Everyone)**: 1:34 PM: Mark, Splunk is the solution. I have talked to their execs and peppered them with questions which they already had resolved.

**Mark Underwood (to Everyone)**: 1:36 PM: Funny u should mention that. I'm seeing it here now, but the idea of "event" is unsophisticated. Logs don't get the love they need

**Tim Zimmerlin (to Everyone)**: 1:38 PM: Logs are the most important realtime stream. Lambda architecture focuses exclusively on all logs; Lambda can rollback transactions, reconstruct SQL tables, detect intruders...just from logs.

**Tim Zimmerlin (to Everyone)**: 1:39 PM: ...I emphasize governance, provenance, and curation...logs could be the sole source information.

**Mark Underwood (to Everyone)**: 1:40 PM: +1

**Tim Zimmerlin (to Everyone)**: 1:41 PM: Wo, sounds good enough.

**Mark Underwood (to Everyone)**: 1:49 PM: B-L hi coolness factor

**Mark Underwood (to Everyone)**: 1:58 PM: Yes, we do need to help contributors focus on BIG DATA - they may not have the framework and would need "coaching"

**Mark Underwood (to Everyone)**: 2:02 PM: Understood. All project mgmt constraints apply here.

**Tim Zimmerlin (to Everyone)**: 2:18 PM: Suggestion: Add a change log as a spreadsheet, with who, when, why, what changes, new biblio references governing change, signoffs by chair, editor, change author

**Tim Zimmerlin (to Everyone)**: 2:19 PM: Suggestion: Rely on published references to frame differences or significant discrepancies between current version of a volume and proposed changes.

**Mark Underwood (to Everyone)**: 2:19 PM: Is this public? https://docs.google.com/document/d/1mP3OrI8deYHube-WeB6G7\_mmxrF5VH9HnBJHVK76SWk/edit#heading=h.gjdgxs

**Tim Zimmerlin (to Everyone)**: 2:20 PM: Mark, published by authority like IEEE, ACM, WH, NITRD, ISO, W3C, etc.

**Mark Underwood (to Everyone)**: 2:20 PM: Control-alt-shift-H to see revisions

**Tim Zimmerlin (to Everyone)**: 2:20 PM: ...alternatively, published quotes by experts in any forum.

**Mark Underwood (to Everyone)**: 2:21 PM: That CSCC example has multiple authors and a revision history. That's how we want it to operate

**Tim Zimmerlin (to Everyone)**: 2:21 PM: ...alternatively, published software documents...Apache, etc.

**Tim Zimmerlin (to Everyone)**: 2:22 PM: Mark, what is CSCC?

**Mark Underwood (to Everyone)**: 2:23 PM: Cloud Standards Customer Council

**Tim Zimmerlin (to Everyone)**: 2:23 PM: Mark, got your comment now! CSCC might be good enough...

**Mark Underwood (to Everyone)**: 2:23 PM: Just an example

**Mark Underwood (to Everyone)**: 2:23 PM: brb

**Tim Zimmerlin (to Everyone)**: 2:24 PM: Mark, this is debate style...each speaker states their position.

**Tim Zimmerlin (to Everyone)**: 2:24 PM: ...people stake out their positions...managers watch the discussion.

**Mark Underwood (to Everyone)**: 2:27 PM: Yep, Google Docs adequate to (1) show comments, proposed - changes (2) actual changes to the document in a separate view

**Mark Underwood (to Everyone)**: 2:28 PM: (3) Editor is resp for merging ito draft

**Mark Underwood (to Everyone)**: 2:28 PM: keeping the Word version in synch is a challenge

**Ann Racuya-Robbins (to Everyone)**: 2:28 PM: Laurie and Nancy I am happy to work with you to get the process straightened out.

**Ann Racuya-Robbins (to Everyone)**: 2:33 PM: Sounds good Laurie

**Mark Underwood (to Everyone)**: 2:39 PM: Sharepoint would help with this when we have that resource

**Tim Zimmerlin (to Everyone)**: 2:41 PM: Mark, I have used Sharepoint and it can work well.

**Mark Underwood (to Everyone)**: 2:43 PM: good to know. It's a Microsoft sweet spot for document collaboration like this