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

**NBD-PWD-2016/M0539**

**Source: NBD-PWG**

**Status: Draft**

**Title: Web chat from Meeting of June 28, 2016**

**Chat Log D:\\_wo\1DMG\2015\\_BigDataWG\Docs\ChatLog 2016\_06\_28 15\_04.rtf**

**Tim Zimmerlin (to Everyone)**: 1:08 PM: Everyone has a big data problem!

**Tim Zimmerlin (to Everyone)**: 1:08 PM: The important things are big data solutions!

**Tim Zimmerlin (to Everyone)**: 1:09 PM: What is part of big data solutions?

**Ann Racuya-Robbins (to Everyone)**: 1:09 PM: What is meant by scalability?

**Tim Zimmerlin (to Everyone)**: 1:10 PM: Ann, counts of servers, storage devices; speeds of networks and CPUs and memory and storage.

**Tim Zimmerlin (to Everyone)**: 1:17 PM: concurrent, parallel, distributed overlap and describe scalability.

**Mark Underwood (to Everyone)**: 1:17 PM: See http://www.journals.elsevier.com/journal-of-parallel-and-distributed-computing/call-for-papers/scalable-systems-for-big-data-management-and-analytics/

**Mark Underwood (to Everyone)**: 1:18 PM: Scalability has been adopted in the academic community as a subspecialty - I think we mean this - and parallelism is a subset, no?

**Tim Zimmerlin (to Everyone)**: 1:22 PM: US Federal funding agencies distinguish HPC from HTC. Big data is more likely in HTC, but it could involve HPC.

**Tim Zimmerlin (to Everyone)**: 1:22 PM: Chameleon and CloudLab are R&E HTC clusters.

**Tim Zimmerlin (to Everyone)**: 1:25 PM: Comet and Wrangler are hybrid HPC / HTC.

**Russell Reinsch (to Organizer(s) Only)**: 1:26 PM: Minutes / Notes: distribution is more about connectivity. Local is faster, potentially more relaiable.

**Tim Zimmerlin (to Everyone)**: 1:27 PM: I recommend Nancy use and then reference formal textbooks for these definitions.

**Tim Zimmerlin (to Everyone)**: 1:27 PM: Distributed includes all possible failure modes and recovery methods.

**Tim Zimmerlin (to Everyone)**: 1:28 PM: Parallel usually ignores failure modes and simply stops on the 1st error.

**Tim Zimmerlin (to Everyone)**: 1:28 PM: Concurrent usually ignores HW and deals with SW only.

**Russell Reinsch (to Organizer(s) Only)**: 1:32 PM: v WORDS DEALING WITH SOLUTION APPROACHES; solution techniques. Variety and veractiy come from.. shorthand. Useful + give simple handle. Imprecise.

**Tim Zimmerlin (to Everyone)**: 1:33 PM: Volume, velocity, and variety are precise technical concepts; the other V words have no practical definition for big data.

**Russell Reinsch (to Organizer(s) Only)**: 1:33 PM: Expresses concept, we need to add more description to understand the concepts. Technical elaboration.

**Russell Reinsch (to Organizer(s) Only)**: 1:34 PM: Data intensive newer than compute intensive.

**Russell Reinsch (to Organizer(s) Only)**: 1:36 PM: IoT a source, diff data characteristic, not tech used for analysis of data, such as cloud, HPC, embedded computing.

**Russell Reinsch (to Organizer(s) Only)**: 1:37 PM: IoT also invloves location of processing.

**Russell Reinsch (to Organizer(s) Only)**: 1:41 PM: = distributed system...

**Lee Anne Davies (to Everyone)**: 1:44 PM: Blockchain could be included. Is it considered a new type of "database" for big data?

**Russell Reinsch (to Organizer(s) Only)**: 1:48 PM: Big [data] problems vs. V problems.

**David W. Boyd (to Everyone)**: 1:48 PM: The answer is 42

**Tim Zimmerlin (to Everyone)**: 1:49 PM: Dave, is that Hex, Octal, or Decimal?

**William Miller (to Everyone)**: 1:55 PM: blickchain relates to transactions and telates to redults of product or service value .

**William Miller (to Everyone)**: 1:57 PM: there currently vulnerabilities in blockchain

**Mark Underwood (to Everyone)**: 1:59 PM: I have been studying this design pattern from AWS - http://bigdatastandards.com/wp-content/uploads/2016/06/AWS-RealTimeOLTP\_Image\_2.png -

**Russell Reinsch (to Organizer(s) Only)**: 1:59 PM: Multiple taxonomies, oriented on different facets.

**Mark Underwood (to Everyone)**: 1:59 PM: Interesting in that the terminal spoke is to Apache Zeppelin

**Russell Reinsch (to Organizer(s) Only)**: 2:00 PM: Comparative.

**Russell Reinsch (to Everyone)**: 2:01 PM: Ive discovered a handful of taxonomies that orient on different facets or approach from differnt views. Still looking at

**Russell Reinsch (to Everyone)**: 2:01 PM: collecting or organizing them so that

**Russell Reinsch (to Everyone)**: 2:02 PM: they dont seem to random

**Russell Reinsch (to Everyone)**: 2:03 PM: \*too random

**Russell Reinsch (to Everyone)**: 2:03 PM: I have to step out for a minute.

**Mark Underwood (to Everyone)**: 2:12 PM: Title http://csrc.nist.gov/groups/SMA/fisma/framework.html

**Mark Underwood (to Everyone)**: 2:14 PM: Wanted to ask Frank about ISO 26262 as applied to indirectedly related IT standards work

**Russell Reinsch (to Everyone)**: 2:16 PM: I am interested

**Russell Reinsch (to Everyone)**: 2:16 PM: Willing to help coordinate

**Mark Underwood (to Everyone)**: 2:17 PM: Dave - Indeed, ditto for collaboration needed for the management area

**William Miller (to Everyone)**: 2:25 PM: mark i would like to get your thoughts on blockchain

**William Miller (to Everyone)**: 2:26 PM: let me know if i may have me this week

**Mark Underwood (to Everyone)**: 2:35 PM: William - sure, drop me a line mark.underwood@kryptonbrothers.com

**Tim Zimmerlin (to Everyone)**: 2:38 PM: IoT = Smart Cities, Smart Vehicles, Drones, CCTV Surveillance, Smart Homes, Smart Factories, personal health devices, Smart Lightbulbs, etc.

**Tim Zimmerlin (to Everyone)**: 2:38 PM: IoT might use virtual reality and augmented reality.

**Ann Racuya-Robbins (to Everyone)**: 2:39 PM: I agree with you Bob

**Tim Zimmerlin (to Everyone)**: 2:39 PM: IoT could use SNMP for Internet messages.

**Tim Zimmerlin (to Everyone)**: 2:41 PM: NIST has several internal groups and internal projects. E.g., CPS, IoT, 5G, Cyber Security, etc.

**Mark Underwood (to Everyone)**: 2:41 PM: Tim - Interesting storyline there about DTMF

**Tim Zimmerlin (to Everyone)**: 2:42 PM: Mark, did you mean DMTF?

**Mark Underwood (to Everyone)**: 2:44 PM: yep

**Bob Marcus (to Everyone)**: 2:47 PM: Smar City Lirary at

**Tim Zimmerlin (to Everyone)**: 2:47 PM: William, please look at SNMP.

**Bob Marcus (to Everyone)**: 2:47 PM: https://pages.nist.gov/smartcitiesarchitecture/library/

**Bob Marcus (to Everyone)**: 2:47 PM: NIST Smart City Library at https://pages.nist.gov/smartcitiesarchitecture/library/

**Russell Reinsch (to Organizer(s) Only)**: 2:50 PM: How any of this stuff fits into end users public interest. Enough inernal discussion.

**Mark Underwood (to Everyone)**: 2:50 PM: There's a whole separate set of groups working on S&P for IoT

**Russell Reinsch (to Everyone)**: 2:50 PM: Time for me to check out. Ciao

**Mark Underwood (to Everyone)**: 2:52 PM: I have a chapter going out in this book

**Mark Underwood (to Everyone)**: 2:52 PM: http://www.wiley.com/WileyCDA/WileyTitle/productCd-1119193869,subjectCd-EE23.html

**Lee Anne Davies (to Everyone)**: 3:02 PM: Bye everyone. Have a wonderful July 4th celebration!