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

**NBD-PWD-2015/M0496**

**Source: NBD-PWG**

**Status: Draft**

**Title: Web chat from Meeting of Feb. 2, 2016**

**Chat Log D:\\_wo\1DMG\2015\\_BigDataWG\Docs\ChatLog 2016\_02\_02 15\_07.rtf**

**Russell Reinsch (to Organizer(s) Only)**: 1:08 PM: Record keeping for myself: path for version 2.

**Russell Reinsch (to Organizer(s) Only)**: 1:11 PM: Vol 1 & 2: goto analytics lifecycle vs. data lifecycle. ck 1.a.iv. b. patterns was removed as not ready.

**Russell Reinsch (to Organizer(s) Only)**: 1:14 PM: tc-69 looks at data provider / crisp. [b. iii]

**Russell Reinsch (to Organizer(s) Only)**: 1:17 PM: d. mgmt: needs an outline.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:17 PM: Sorry we're late.....we'll be quiet and chat via the Chat window....nice to hear the sounds of your voices......Pw

**Russell Reinsch (to Organizer(s) Only)**: 1:18 PM: March 20 is a deadline for workshop focus areas.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:21 PM: Also, when the vendors include various meta-data tags for generating advertising revenue by re-selling to others....with or without the end user's knowledge and/or understanding and/or an opt-in or opt-out option......at this point in time....

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:21 PM: Personal info. equals dollars....

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:22 PM: (aka: a nice revenue stream).....

**Russell Reinsch (to Organizer(s) Only)**: 1:26 PM: UC Berkely dwarfs = \_\_\_ giants = Geoffryes ogres

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:28 PM: Oh, Geoffrey's mike is set to Mutae.....

**Russell Reinsch (to Organizer(s) Only)**: 1:29 PM: Leverage other taxonomies, especially data area. Problem [data] characteristic drives choice of arch, analysis.

**Russell Reinsch (to Organizer(s) Only)**: 1:31 PM: Survey of taxonomies, formalize ours [RA and data / analytics]

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:33 PM: At this point in time Big Data continues to be an evolving technology and will remain so for quite some time......(aka: it isn't a static technology and the regulators continue playing catch-up, once again.....)

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:34 PM: Which represents our personal and professional opinion in this regard....(aka: Regulating Big Data....)

**Tim Zimmerlin (to Everyone)**: 1:35 PM: Some taxons consist exclusively of dichotomies (e.g., either x or y or z). Other taxons are admixtures of aggregations together with dichotomies.

**Russell Reinsch (to Organizer(s) Only)**: 1:37 PM: Data type families > taxonomy. Looking to classify in order to... but what purpose to us.

**Tim Zimmerlin (to Everyone)**: 1:37 PM: Common usage of taxomomies includes 1st class objects plus their 2nd class component objects (e.g., fingers) plus properties (e.g., volume, velocity, …).

**Bob Marcus (to Everyone)**: 1:38 PM: A User's Guide to using PWG outputs (e.g. Taxonomy, RA) would add value to readers and reduce confusion on use

**Russell Reinsch (to Everyone)**: 1:39 PM: Agree with Bob here. Table of contents type thing

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:39 PM: Yes, but data use to be considered a benign art....now it is looked upon as data that can be weaponized.....(aka: modified w/o detection...) which leads to a new interpretation/definition surrounding the various types of data and/or characteristics......

**Ann Racuya-Robbins (to Everyone)**: 1:39 PM: That is a good point Nancy.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:40 PM: & we agree with Bob, too....

**Russell Reinsch (to Organizer(s) Only)**: 1:43 PM: Dave: taxon of analytic method could be useful. Was supposed to be useful for ID patterns. > common vocabulary. Find taxon of app patterns.

**Tim Zimmerlin (to Everyone)**: 1:43 PM: Dave, UCB Dwarfs, DOE Giants, Geoffrey's Ogres. I think the Ogres are good enough.

**Russell Reinsch (to Organizer(s) Only)**: 1:44 PM: DOE giants

**NANCY GRADY (to Everyone)**: 1:45 PM: https://www.mindmeister.com/322462463

**Tim Zimmerlin (to Everyone)**: 1:45 PM: Dave, the memory wall, communications wall, and power wall are the defining battles for the next generation HPC/HTC.

**Ann Racuya-Robbins (to Everyone)**: 1:45 PM: Have we defined patterns?

**Tim Zimmerlin (to Everyone)**: 1:45 PM: Ann, no concensus yet.

**Ann Racuya-Robbins (to Everyone)**: 1:46 PM: Before we build on a concept we should have a definition

**Tim Zimmerlin (to Everyone)**: 1:46 PM: Thx Ann, for voluneering...

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:47 PM: Under 'Data Provider actors:' shouldn't we include the bad actors as well......and define/describe them up the wazzu.....? We think we should....as in State Sponsored Financial Fraud, Organized Crime Companies and Entities, et al.....

**Bob Marcus (to Everyone)**: 1:48 PM: Who is the intended user of the Mind Map? How will they use it?

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:48 PM: Just a topic for another day.....

**Tim Zimmerlin (to Everyone)**: 1:49 PM: Wo, I recall we had a hierarchy rooted in one perspective, with actors (aka rolls), and so on one level down for a few levels total.

**Tim Zimmerlin (to Everyone)**: 1:49 PM: error, roles, not rolls...

**Tim Zimmerlin (to Everyone)**: 1:50 PM: Bob, mindmaps are for us, not published.

**Russell Reinsch (to Organizer(s) Only)**: 1:50 PM: So far only datasets and storing; not streaming and analytics.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:51 PM: Dear Tim: We're sure you meant 'Cheese Danish' and why aren't Mind Maps not for public consumption....? Just curious.....Pw

**David Boyd (to Everyone)**: 1:51 PM: Ann to answer your question I think we have a definition of patterns that is aligned to design patterns: eg. In software engineering, a design pattern is a general reusable solution to a commonly occurring problem within a given context in software design.

**Tim Zimmerlin (to Everyone)**: 1:53 PM: Pw, sausage making would turn off the public, and getting NIST approval would be tedious.

**Russell Reinsch (to Organizer(s) Only)**: 1:53 PM: Patterns are an abstraction of process flow; between application and framework. Distill out of use cases.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:54 PM: Dear Tim: That makes sense.....we'll sit down....

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:55 PM: But isn't their an audience somewhere that would appreciate the knowledge within our WG's Mind Map....?

**Russell Reinsch (to Organizer(s) Only)**: 1:55 PM: Q on definition of Orchestrator. Q on where he gets his authority.

**David Boyd (to Everyone)**: 1:55 PM: Concur with Nancy on Ann's question. Orchestrator is one of the least defined roles in the RA. But also very important.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:55 PM: Tim: Ok, now we'll sit down....

**Tim Zimmerlin (to Everyone)**: 1:55 PM: Pw, you have the link so go forth...

**David Boyd (to Everyone)**: 1:55 PM: IN many cases, the Orchestrator role should encompass all stakeholders of the system.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:55 PM: Tim: Ok....Thanks.....

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:56 PM: Dear Tim: Just call me Johnny Appleseed....

**Tim Zimmerlin (to Everyone)**: 1:57 PM: I view "orchestrator" as many actors and processes: identity provider, identity manager, trust manager, operations center, auditors, HW resource leasing, realtime OS functions, and so on.

**Bob Marcus (to Everyone)**: 1:57 PM: Mapping Use Cases to the Reference Architecture is necessary to help understanding of the differnt roles (e.g. System Orchestrator)

**Russell Reinsch (to Organizer(s) Only)**: 1:58 PM: Orch role also encompasses business processes across multiple projects.

**Cavan (to Everyone)**: 1:58 PM: I thought the orchestrator was a software component.. for orchestrating resources for parallel processing, load balancing, restarts etc. ... learning something new

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 1:58 PM: Governance Requirements and Monitoring....could read.....Governance, Risk & Compliance Requirements and Monitoring....without too much trouble....perhaps....?

**Tim Zimmerlin (to Everyone)**: 1:59 PM: Cavan, human actors are included; obvously, realtime OS functions are included in orchestration roles.

**Cavan (to Everyone)**: 2:00 PM: terminology was confusing, np

**Geoffrey Fox (to Everyone)**: 2:04 PM: will do 2e)

**Tim Zimmerlin (to Everyone)**: 2:05 PM: I am working on governance, provenance, and curation for time being.

**Ann Racuya-Robbins (to Everyone)**: 2:07 PM: I am still working on governance as well

**Cavan (to Everyone)**: 2:07 PM: I would like to work on privacy, which has a provenance element

**Tim Zimmerlin (to Everyone)**: 2:07 PM: I am resisting working on privacy, but privacy continues to dog discussions.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:07 PM: Dear Tim: We'd be happy to review your efforts if you like....regarding Governance, Provenance and Data Curation.......?

**Tim Zimmerlin (to Everyone)**: 2:07 PM: Pw, yes.

**Tim Zimmerlin (to Everyone)**: 2:08 PM: You're welcome.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:08 PM: Dear Tim: Thanks, will do....just send them along.....pwc.pwcarey@gmail.com.....and we'll turn our comments around in a timely fashion.....Thanks, too....

**Russell Reinsch (to Organizer(s) Only)**: 2:10 PM: Need to tell peole what we are doing with the use cases / why we need them.

**Russell Reinsch (to Organizer(s) Only)**: 2:12 PM: to mobilize a community.

**Ann Racuya-Robbins (to Everyone)**: 2:12 PM: That is an interesting comment Geoffrey. What do mean by community?

**Mehrotra, Piyush (ARC-TN) (to Everyone)**: 2:13 PM: Looks like nobody can hear me. I will try and call in again

**Russell Reinsch (to Organizer(s) Only)**: 2:13 PM: NASA and DOE mobilized their key people to return the use cases.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:14 PM: Mehrota: Are you using Skype...? If so, they just sent us an upgrade...that doesn't take long to install....Pw

**Mehrotra, Piyush (ARC-TN) (to Everyone)**: 2:14 PM: I was calling in the number directly.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:15 PM: Mehrotra: Try via Skype and see what happens....

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:15 PM: Via the GoToMeeting browser....

**Russell Reinsch (to Everyone)**: 2:16 PM: What are we trying to get from the new use cases that we didnt get from the 51

**Russell Reinsch (to Everyone)**: 2:17 PM: What is meant by benchmarks in 3. e. ?

**Tim Zimmerlin (to Everyone)**: 2:17 PM: Russell, surprisingly, those 51 use cases are seriously dated today. Technology marches on, speeds on.

**Tim Zimmerlin (to Everyone)**: 2:18 PM: Today, there are use cases that did not exist in 2013.

**Russell Reinsch (to Everyone)**: 2:18 PM: Example: =

**Tim Zimmerlin (to Everyone)**: 2:18 PM: Today, IoT is a family of new use cases.

**Tim Zimmerlin (to Everyone)**: 2:19 PM: Mark, wearable tech...

**Tim Zimmerlin (to Everyone)**: 2:19 PM: Mark, precision medicine, the new cancer moonshot, EarthCube and satellite based EOS.

**Tim Zimmerlin (to Everyone)**: 2:20 PM: Mark, new public education, MOOCs, smart education tools.

**Tim Zimmerlin (to Everyone)**: 2:21 PM: Mark, I want you to be successful. The current situation is stuck.

**Mehrotra, Piyush (ARC-TN) (to Everyone)**: 2:21 PM: Tried to connect audio through GotoMeetign but doesn't work either

**Tim Zimmerlin (to Everyone)**: 2:22 PM: Mehrotra, pls look at your Audio controls on panel. Should be Mic & Speakers.

**Russell Reinsch (to Everyone)**: 2:22 PM: Ive been meaning to go thru the 51 cases and test them against my RA mapper

**Mehrotra, Piyush (ARC-TN) (to Everyone)**: 2:23 PM: As I said in my email to a sthe co-chairs - we decide to interview people to get fill out our use case template rather than have them fill out the template.

**Tim Zimmerlin (to Everyone)**: 2:23 PM: Mehrotra, then open abreviated menu to right of microphone icon AND select HW input device.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:23 PM: Mehrotra: We opened the GoToMeeting link....then we dialed into the call using Skype....it worked on our WinXP SP-3 old creaky system...

**Russell Reinsch (to Everyone)**: 2:23 PM: 1 + the interview idea

**Cavan (to Everyone)**: 2:23 PM: I also have questions about IT security separate from privacy issues

**Cavan (to Everyone)**: 2:24 PM: when looking at big data

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:24 PM: & Good Luck, too.....

**Tim Zimmerlin (to Everyone)**: 2:25 PM: Bob, you are suggesting the Ogress, Dwarfs, Giants here.

**Russell Reinsch (to Organizer(s) Only)**: 2:25 PM: Start with simple / generic use cases.

**Tim Zimmerlin (to Everyone)**: 2:25 PM: Bob, the vertical application domains are distinct concerns or sets of unified concerns.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:27 PM: Dear Sir: Not at this time.....but thanks for asking....

**Mehrotra, Piyush (ARC-TN) (to Everyone)**: 2:29 PM: link to our Use case report that Wo was talking about: http://www.nas.nasa.gov/assets/pdf/papers/NAS\_Technical\_Report\_NAS-2014-02.pdf

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:31 PM: Item No. 4. Should include extensive inclusion of the industry specific/appropriate Regulatory Agencies, standards, laws, requirements and protocols......(aka: a one-stop shop for bringing everyone in-line with what are the current regulatory requirements for Governance, Risk & Compliance...GRC, via COBIT5 and COSO for a start....Pw

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:32 PM: Whick are changing and being modified even as we speak....

**Russell Reinsch (to Organizer(s) Only)**: 2:32 PM: 2 taxons in vol 4: operational and conceptual.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:33 PM: Oops....Whick means Whwack...but should be Which.....

**Cavan (Private)**: 2:33 PM: did you want me to talk about privacy today?

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:37 PM: But the IoT is a security swiss cheese primed for disaster....real ones, too.....

**David Boyd (to Everyone)**: 2:39 PM: Hear Hear Mark!!!!!!

**Russell Reinsch (to Organizer(s) Only)**: 2:39 PM: Mark's CV-1: streaming and analysis heavy cases [2]. Also need to look more closely at the application level.

**Tim Zimmerlin (to Everyone)**: 2:40 PM: Mark, you might contact US govenment funded programs including XSEDE, DOE INCITE, NSF EarthCube.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:41 PM: Who, what, where, why, when and how....is driving the IoT initiative.....would be nice to know.....?

**Tim Zimmerlin (to Everyone)**: 2:42 PM: Big programs could get you in contact with their better project managers.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:42 PM: And are they looking out for Pws best interests....?

**Russell Reinsch (to Organizer(s) Only)**: 2:46 PM: The points from Cavan are not germain to the topic of the agenda

**Tim Zimmerlin (to Everyone)**: 2:47 PM: Cavan is informally presenting a use case here: privacy concerns, mechanism, and reputational security for guests.

**Russell Reinsch (to Everyone)**: 2:47 PM: Could we stick to the agenda

**Russell Reinsch (to Organizer(s) Only)**: 2:51 PM: 6: refine RA. conceptual but looking for more detailed RA. taxon of activities and functional components.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:52 PM: Dear Russell: Isn't this tied to the agenda topic...? Help me out here.....Pw

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:53 PM: Dear Russell: Ok, thanks....Pw

**Russell Reinsch (to Everyone)**: 2:54 PM: I would like to spend more time on Vol 6. Could we perhaps block out some priority time for more from Dave next week please.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:55 PM: Dear Russell: Sounds like a good idea to me....as Dave has a lot of useful info/knowledge to share....Pw

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 2:57 PM: Dear Russell: Ok, we'll cut back on our noise....Pw

**David Boyd (to Everyone)**: 2:58 PM: Russell, I really like what you have set for Vol 7. It aligns with many of my concerns.

**Tim Zimmerlin (to Everyone)**: 2:59 PM: Dave, your gut reaction is correct. Geoffrey is working on SPIDAL. PARLab and Aspire work on SEJITS. Others work on VOLK and other SW interfaces between high order SW languages and special HW architectures. This is the Gordian knot.

**Tim Zimmerlin (to Everyone)**: 3:00 PM: Intel Corp also works on this with reference compilers for the community using Knight's Corner.

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 3:00 PM: Dear Tim: Glad we're recording all this within our Chat Log for today's meeting....&...we'll review Knight's Corner, too.....

**David Boyd (to Everyone)**: 3:01 PM: Yeah I wish it was that easy.

**David Boyd (to Everyone)**: 3:01 PM: Not enough people. Time is my bigger constraint.

**David Boyd (to Everyone)**: 3:01 PM: Russell, you should see about getting involved in the ISO effort through INCITS.

**Russell Reinsch (to Everyone)**: 3:02 PM: Dave - I think I need 'access' or some entry for membership

**Russell Reinsch (to Organizer(s) Only)**: 3:04 PM: Version 2 is always the most difficult

**Russell Reinsch (to Organizer(s) Only)**: 3:05 PM: Focus on the art of the possible

**Pw Carey, Compliance Partners, LLC (to Everyone)**: 3:06 PM: Dear Sir: Another good meeting.....take care....Pw