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

**NBD-PWD-2016/M0575**

**Source: NBD-PWG**

**Status: Draft**

**Title: Web chat from Meeting of Nov. 1, 2016**

**Chat Log D:\\_wo\1DMG\2015\\_BigDataWG\Docs\ChatLog 2016\_11\_01 15\_13.rtf**

**Russ Reinsch (to Everyone)**: 1:01 PM: Having trouble getting my volume to go up

**Russ Reinsch (to Everyone)**: 1:01 PM: There we go

**Tim Zimmerlin (to Everyone)**: 1:36 PM: Mark, very interesting work product here. Kudos. Likes include new topics, expansive bibliography.

**Tim Zimmerlin (to Everyone)**: 1:37 PM: I suggest the 3 or more levels be dropped in favor of another perspective...

**Geoffrey Fox (to Everyone)**: 1:38 PM: Does serverless Computing/Cloud 3.0 have special security challenges?

**Tim Zimmerlin (to Everyone)**: 1:38 PM: ...focus SnP on what is at risk, including what endgames and outcomes must be avoided, mitigated, and recovered from...

**Tim Zimmerlin (to Everyone)**: 1:39 PM: ...metrics that insurance companies can embrace within their business models.

**Russ Reinsch (to Everyone)**: 1:49 PM: Meeting notes / minutes: Mark priority: levels.xlsx

**Russ Reinsch (to Everyone)**: 1:54 PM: Point me to this xlsx

**Russ Reinsch (to Everyone)**: 2:18 PM: Tim: modernization: middle road; run concurrent systems.

**Mark Underwood (to Everyone)**: 2:19 PM: Geoffrey - RE Serverless computing security. Hmm. begs questions about whether a shift in atomicity infrastructure creates new challenges. There are new opps to enhance through higher granularity, but that probably creates potential breaches that could be harder to detect or mitigate. Not sure all this has been fully studied in the current framework, but in many ways it is a return to past work in distributed computing assurance: just lower latency, higher volume. True, most of the discussion is overly optimistic (more audit, smaller code units easier to test, verify, reuse, quarantine). Which means it hasn't been fully thought through. You pose a complex question.

**Tim Zimmerlin (to Everyone)**: 2:21 PM: Mark, you could answer by identifying the attack surfaces...

**Tim Zimmerlin (to Everyone)**: 2:22 PM: ...hypervisor types 1&2...OS...paravirtualization buffers...containers...ssh...

**Russ Reinsch (to Everyone)**: 2:22 PM: Ali: explore options, orgs pickup portions of standards, not adopting 100% of a standard.

**Russ Reinsch (to Everyone)**: 2:23 PM: Include all of the concepts... [Karimi]

**Mark Underwood (to Everyone)**: 2:23 PM: Tim, agree. What I wonder is whether the micro nature of the microservice / infrastructure as code ends up being a net greater challenge (manageability, broader attack surface) than before.

**Mark Underwood (to Everyone)**: 2:25 PM: Typical of the optimism is iron.io "ron.io solutions deliver API-driven workload management, while allowing enterprises the flexibility and control to determine where they will deploy job processing and to use their existing security processes."

**Tim Zimmerlin (to Everyone)**: 2:26 PM: Mark, experts have published security assessments of all this. E.g., containers cannot be considered as security barrers/objects. Some are pushes "ecotainers" as new secure container security perimeters. I do NOT know...

**Mark Underwood (to Everyone)**: 2:27 PM: Hadn't seen that - thx for the search term

**Tim Zimmerlin (to Everyone)**: 2:27 PM: ...AFAIK, x86 hardware rings and memory protections are the real world foundation.

**Mark Underwood (to Everyone)**: 2:33 PM: Funding is flowing into the space. . . https://www.aquasec.com/

**Geoffrey Fox (to Everyone)**: 2:34 PM: I need to leave. Sorry Geoffrey

**Russ Reinsch (to Everyone)**: 2:39 PM: Tim: focus on storage part of adoption.

**Tim Zimmerlin (to Everyone)**: 2:40 PM: Russell, for example, if a org gets its BD storage good enough, they will experiment iteratively until successful.

**Russ Reinsch (to Everyone)**: 2:43 PM: Wo: mandate for 7: pathway to address standards gaps. The 16 areas on version 1. Revisit the rules / criteria for:

**Russ Reinsch (to Everyone)**: 2:44 PM: Facilitate interfaces between RA components,

**Russ Reinsch (to Everyone)**: 2:44 PM: Handling, etc.

**Gregor (laszewski@gmail.com) (to Everyone)**: 3:02 PM: I have to go, Wo you can report progress to group based on what i e-mailed