Sprint 2 Plan

Product: NVMe over Fabric

Team: NVMe

Completion Date: 2/12/16

Revision Number: 1.0

Revision Date: 1/23/16

GOAL

By the end of Sprint 2 we want the kernel up and running, the kernel working with all packages fully functional, and Accelio and nbdX server tasks to be started.

TASK LISTING

1. As a developer, I need to create a full system backup of the physical server so that I can restore to a safe point in the event something happens.
    a. Task 1: Research backup solutions (3 ideal hours)
    b. Task 2: Implement solutions (3 ideal hours)
    c. Task 3: Test solutions (4 ideal hours)

    User Story Total: 10 ideal hours
2. As a developer, I need an upgraded kernel so that I have compatibility with nbdX.

a. Task 1: Research how to upgrade kernel on servers (3 ideal hours)
b. Task 2: Build the kernel (2 ideal hours)
c. Task 3: Install the kernel (1 ideal hour)
d. Task 5: Create a backup of the kernel (2 ideal hours)
e. Task 6: Create stress test scripts for the kernel, test on CentOS VMs (2 ideal hours)
f. Task 4: Test the kernel (2 ideal hour)
g. Task 7: Discover what software needs to be built against the new kernel (3 ideal hours)
h. Task 8: Rebuild necessary packages (1 ideal hours)

User Story Total: 16 ideal hours

3. As a developer, I need to install the Mellanox drivers so that the Mellanox cards are functioning.
    a. Task 1: Download the Mellanox drivers (1 ideal hour)
    b. Task 2: Decompress the Mellanox drivers (1 ideal hour)
    c. Task 3: Run install script on the Mellanox drivers (1 ideal hour)

    User Story Total: 3 ideal hours
4. As a developer, I need to test Accelio API calls across the two HPE physical servers so that I can build the virtual nbdX server and ensure that the software stack is working.
    a. Task 1: Install Accelio API (1 ideal hour)
    b. Task 2: Create and run a program to perform API calls (5 ideal hours)

    User Story Total: 6 ideal hours

5. As a developer, I need to build the virtual nbdX server so that I can do performance benchmarking.
    a. Task 1: Follow step-by-step guide on Mellanox website to setup the nbdX server (4 ideal hours)

    User Story Total: 4 ideal hours
6. As a developer, I need to understand the Accelio API so that I can familiarize ourselves with the tools necessary for nbdX setup. (5 SP - May need to be expanded)
    a. Task 1: Read online documentation (3 ideal hours)

    User Story Total: 3 ideal hours
7. As a developer, I need to understand the nbdX server technology so that I can better understand the higher layers of the technology stack that I am utilizing.
    a. Task 1: Read online documentation regarding the technology and uses of the nbdX server (2 ideal hours)
    b. Task 2: Read online documentation regarding installing the nbdX server (2 ideal hours)

    User Story Total: 4 ideal hours
8. As a developer, I need to understand the RoCE protocol so that I can better understand the lower layers of the technology stack that I am utilizing.
    a. Task 1: Read about the RoCE protocol specification (2 ideal hours)

    User Story Total: 2 ideal hours
9. As a developer, I need to configure a RoCE topology for the servers so that the devices can communicate using RoCE.

a. Task 1: Email correspondence with Sam to figure out what is required for this topology (2 ideal hours)
b. Task 2: Physically configure the necessary topology (4 ideal hours)
c. Task 3: Configure the topology on the software side (2 ideal hours)

User Story Total: 8 ideal hours

10. As a user of the system, I must be able to read online documentation of NVMe over Fabric so that I can build and run the project.
    a. Task 1: Create research and planning documentation relating to our important tools and procedures, and publish on GitHub (6 ideal hours)
    b. Task 2: Create implementation documentation that describes the steps required to implement our tools and procedures, and publish on GitHub (8 ideal hours)

    User Story Total: 14 ideal hours

TEAM ROLES

John: Scrum master, developer, and initial liaison for Lynne and the IT coordinator
Alice: Developer and Initial liaison for the sponsor and professor
Coy: Developer
Jayden: Developer
Eric: Developer
Kevin: IT coordinator and developer

INITIAL TASK ASSIGNMENT

John: 2, 3, 6, 7, 8, 10

Alice: 2, 4, 5, 6, 7, 8, 9, 10

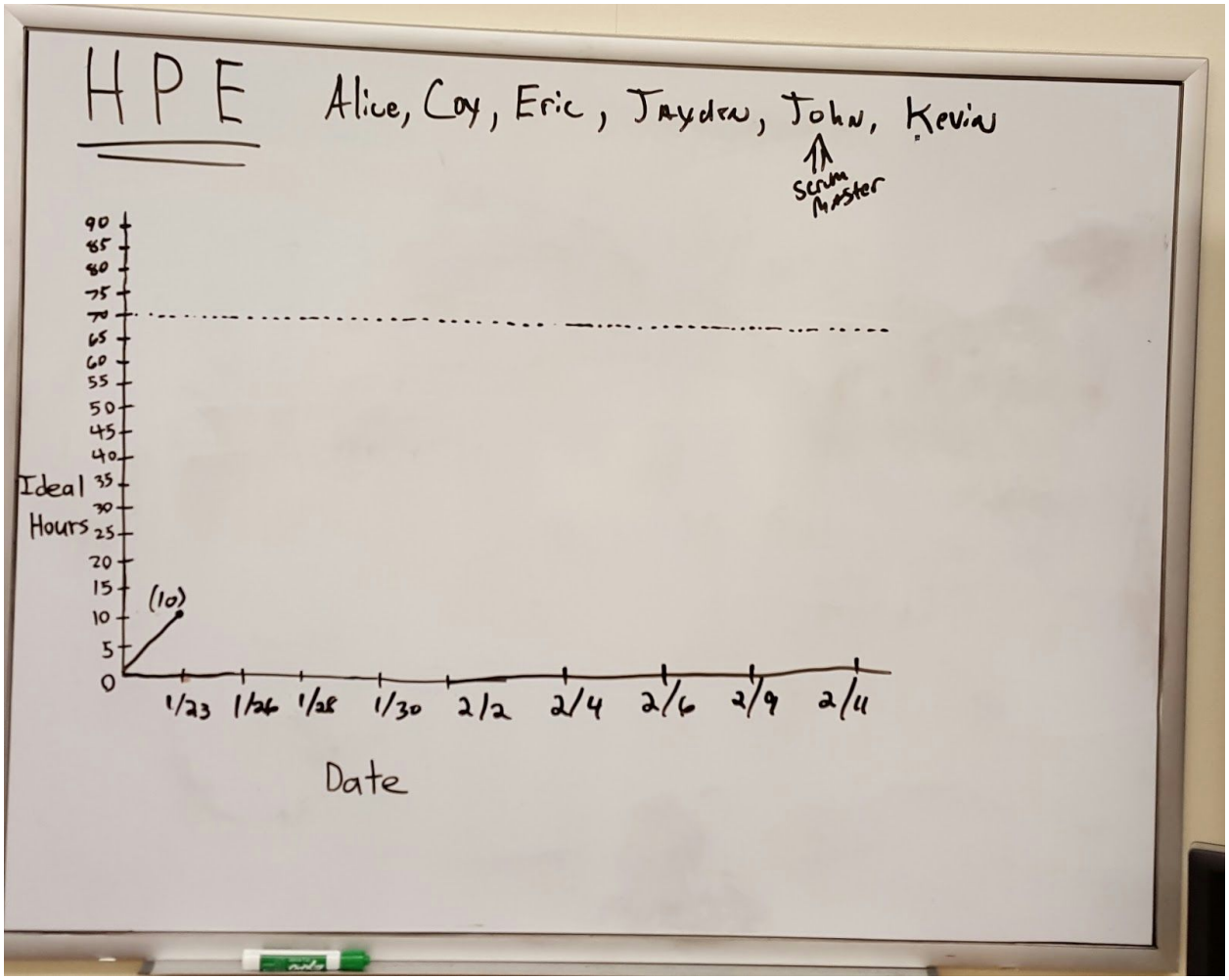
Coy: 1, 2e, 2f, 4, 6, 7, 8, 9, 10

Jayden: 1, 2e, 2f, 6, 7, 8, 9, 10

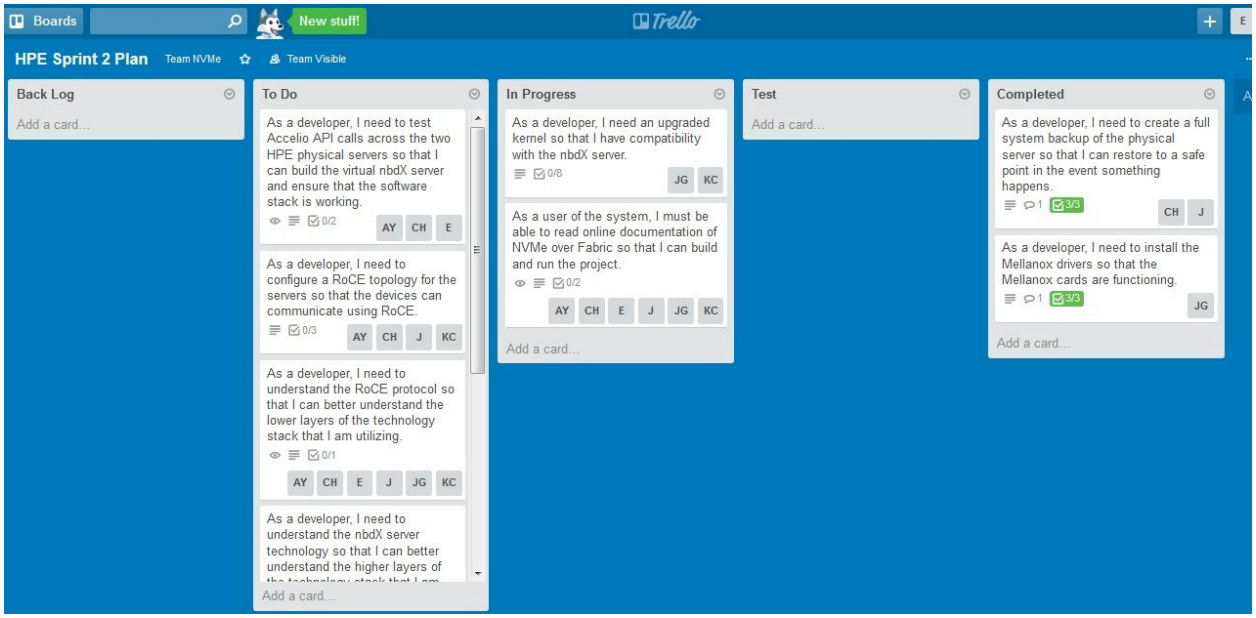
Eric: 2e, 2f, 4, 6, 7, 8, 10

Kevin: 2, 5, 6, 7, 8, 9, 10

INITIAL BURNUP CHART



INITIAL SCRUM BOARD



SCRUM TIMES

Tuesdays at 6:30 PM.

Thursdays at 7:00 PM with the TA, Daniel.

Saturdays at noon.