GTRI: Analysis of Alternatives

Milestone 1: IT 4983 – Group 1

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Agenda

1. Project Summary
2. Assessment of Milestone 1
3. Project Progression and Problems
4. Future Project Plans

Project Summary

- The progress of the project is ahead of schedule according to our project plan. We have already begun testing our software and have almost finished fully testing one of the three chosen pieces of software.
- We have also, reached out to Mr. Inman and are just awaiting his email letting us know he has gathered the tools (laptops, switch, and router) needed for us to continue testing.
- If we keep on our pace, we should have the entire project plan discussed completed before Milestone 2.

Milestone 1 Assessment

- Completion of all parts of Milestone 1:
  - Research on at least 10 software deployment tools: **Done**
  - Choose Three software researched to test: **Done**
  - Contact Kirk Inman to get the equipment for the testing phase ready: **Done**

Research at Least Ten Software Deployment Tools

We researched these 10 tools:

Ivanti, SmartDeploy, FOG, Microsoft Deployment Toolkit With WDS, Windows Azure, Microsoft Systems Center, Kace, Symantec Ghost Solution Suite, Microsoft Endpoint Manager, & Workspace ONE.

We Graded them given the requirements given to us; Mr. Pinkston gave a grade 1-10 for every requirement and we used that to score our researched software.

Chris: Total hours researching – 2 hours 45 minutes

Ivanti = 86/86 (N/A excluded) - 100%

Can't Find: #6 - Support multiple users & #14 – Deploy to 25 systems simultaneously

SmartDeploy = 66/83 (N/A excluded) - 79.5%

Can't Find: #6 – Support multiple users, #7 – configure setting to meet security requirements, & #10 Ability to encrypt hard drive

Sam: Total time Researching: 30 minutes

Microsoft Deployment Toolkit & WDS: 103 points =

In conjunction with WDS, MDT should be able to fill al the requirements

- Booting certain versions of mac could we possible with wds*

FOG = 103 points

https://fogproject.org/

Jonathan: Approximately 2.5 hours

Windows Azure = 93/95 points – 97.8%

- Unable to find if you can simultaneously deploy to 25 systems.

Microsoft Systems Center 96/103 = 93.2%

- Not sure if it can deploy within a 2-hour duration. It all depends on what is being deployed.

Gurpreet: Total hours researching – 4 hours

Kace = 88/103 - 85%

(Does not support Windows 11 & RHEL 8 and doesn't have ability to encrypt hard drive)

Symantec Ghost Solution Suite = 61/88-- 69%

(Limited support to deploy Ubuntu, does not deploy Apple OSX, cannot configure settings on workstations, does not have ability to encrypt hard drive or run custom scripts, no information for how long it takes to deploy or how many systems can be deployed at a time was found)

Erick: *Total Hours Researching: 3 Hours 30 Minutes*

Microsoft Endpoint Manager = 88/88 - 100%

- Does not currently support Ubuntu Deployment, will be supported in Early 2022 (**#4**)
- Could not find information on how long it takes to deploy (**#12**) and simultaneously deployment information **(#13)**

Workspace ONE = 85/88 - 96.5%

- Does not support Windows 19 Server Deployment
- Could not find information on how long it takes to deploy (**#12**) and simultaneously deployment information **(#13)**

Research at Least Ten Software Deployment Tools – Part 2

I have added this slide to display the graph I created of all the requirements from GTRI with all their attached grade values from 1-10.

We then used these values to help us score the software we researched.

We then used the software's values as part of the decision in what the top 3 choices would be.

Highest Score Possible = 103 Points

Research Input:

List of Requirements	Grading (point system)
Able to play Windows 10 & Windows 11	10/10 = absolute must; 10 points
Able to deploy Windows Server 19	3/10 = nice to have; 3 points
Able to deploy RHEL 7 & 8	10/10 = absolute must; 10 points
Able to deploy Ubuntu	5/10 = highly desirable not necessary; 5 points
Able to deploy Apple OSX	2/10 = nice to have; 2 points
Able to support multiple users, multiple IT staff can deploy systems	9/10 = must; 9 points
Configure settings on workstations to meet security requirements	6/10; 6 points
Able to support various models	10/10 = absolute must; 10 points
Ability to apply updates	8/10 = necessary; 8 points
Ability to encrypt hard drive	5/10 = highly desirable not necessary; 5 points
Ability to join a central management system, centralized authentication, talking about centralized management, think ansible, ex: active directory, landscape, satellite	6/10; 6 points
Ability to run custom scripts	9/10 = must; 9 points
Solution should be able to deploy to a laptop or desktop in two hours	7/10; 7 points
Solution should be able to deploy to 25 systems simultaneously	8/10 = necessary; 8 points
Has good 3rd party reviews	5/10 = highly desirable not necessary; 5 points

Three Software Chosen to Test

We chose these three pieces of software through two methods:

1. Score
2. Hand-on Experience

Both MDT w/WDS and FOG had a 103/103 score. While Ivanti had an 86/86 because there were two things we could not find if it could do or not through research.

Hand-on Experience was why MDT w/WDS was chosen because Sam Foster works with this software for his job, so he knows it can complete all requirements for GTRI.

Selection Process:

1. Microsoft Deployment Toolkit & WDS
2. Ivanti
3. FOG

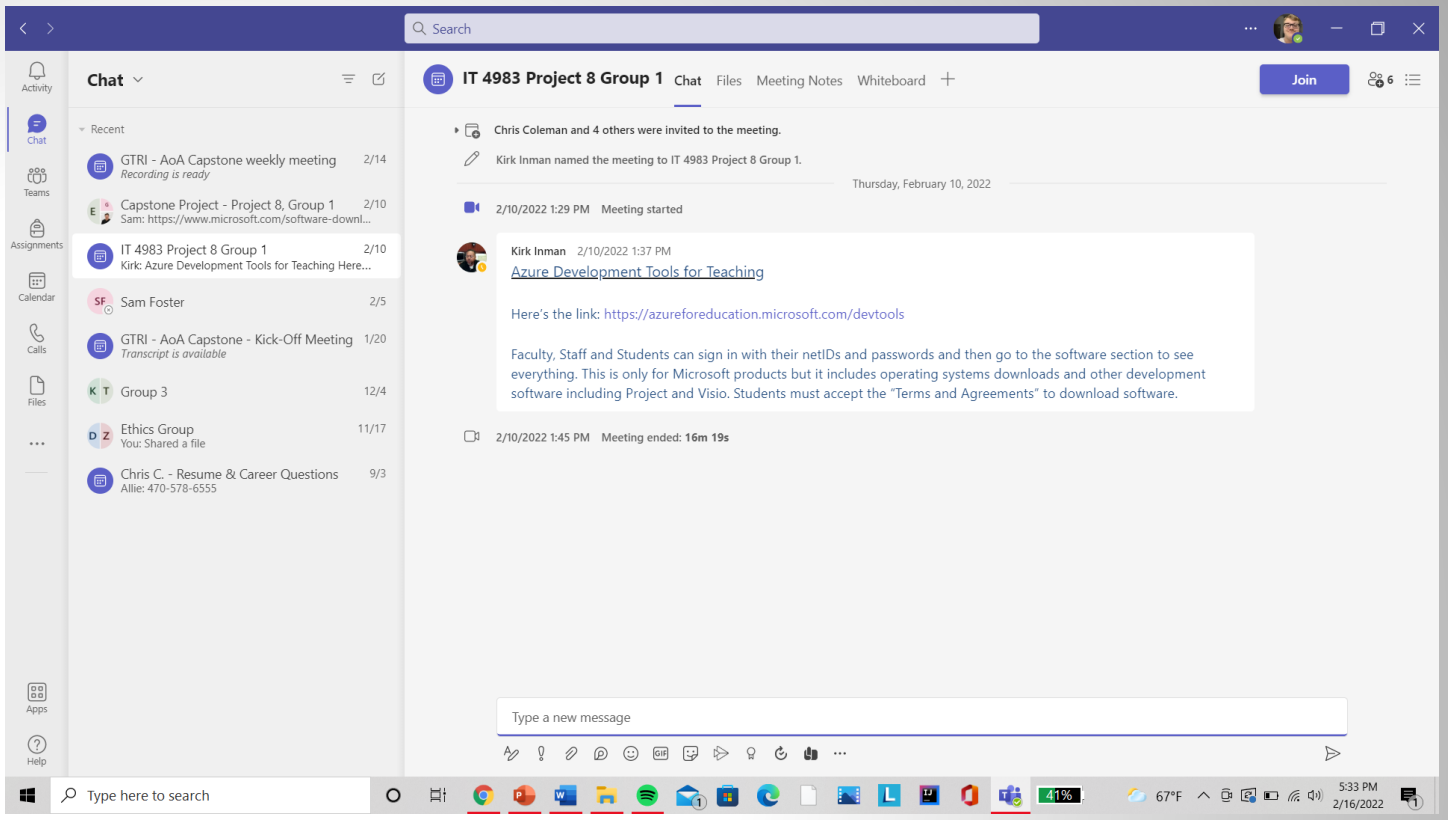
Contact Kirk Inman for the testing phase

We had a Microsoft Teams meeting with Mr. Kirk Inman on February 10, 2022, at 1:30-1:46. Throughout this meeting we discussed:

1. What are we supposed to do for the project?
2. What equipment we need to complete the testing?
3. And where we will test?

The answers are:

1. Test deployment tools for the requirements given to us for GTRI.
2. Laptops, Switch, and Router
3. Room J-170 Atrium Building, Kennesaw State University Marietta Campus



Please note – if you have not already touched base with Kirk Inman regarding your team needs for this project, please do so **ASAP**.

To my knowledge, only 1 team (Team 2 – Chris Coleman, et al) has completed everything with Kirk.

Project Experiences -

1. How is the Project Proceeding?

It is proceeding much faster than anticipated. If we could get the testing equipment this week, we could finish by Spring Break.

2. How much work has gone into the project?

It is less work than anticipated. Before the project we were told 400 to 500 hours which is way overexaggerated for this project. Currently I think we may have all together put in 20 or less hours.

3. Challenges?

The only challenges we have had so far are with KSU. KSU has been super-slow in getting our testing equipment that we asked for. It has been a week since talking with Mr. Inman and all we have is the room to test in.

Project Experiences -

3. Challenges (Continued)?

As stated on the previous slide, if KSU continues in being slow in their acquisition of the testing tools we will proceed without them and test with our own private tools. Sam Foster has already started testing Microsoft Deployment Toolkit with WDS and has completed 80% of the testing on this tool.

4. Risks?

The only risk to our project is KSU, and how slow the acquisition process is.

5. Mitigation of Risks?

To mitigate the risk of KSU to the Capstone Project we will test using our equipment and not the equipment assigned to us from KSU.

Forecasts for the Project

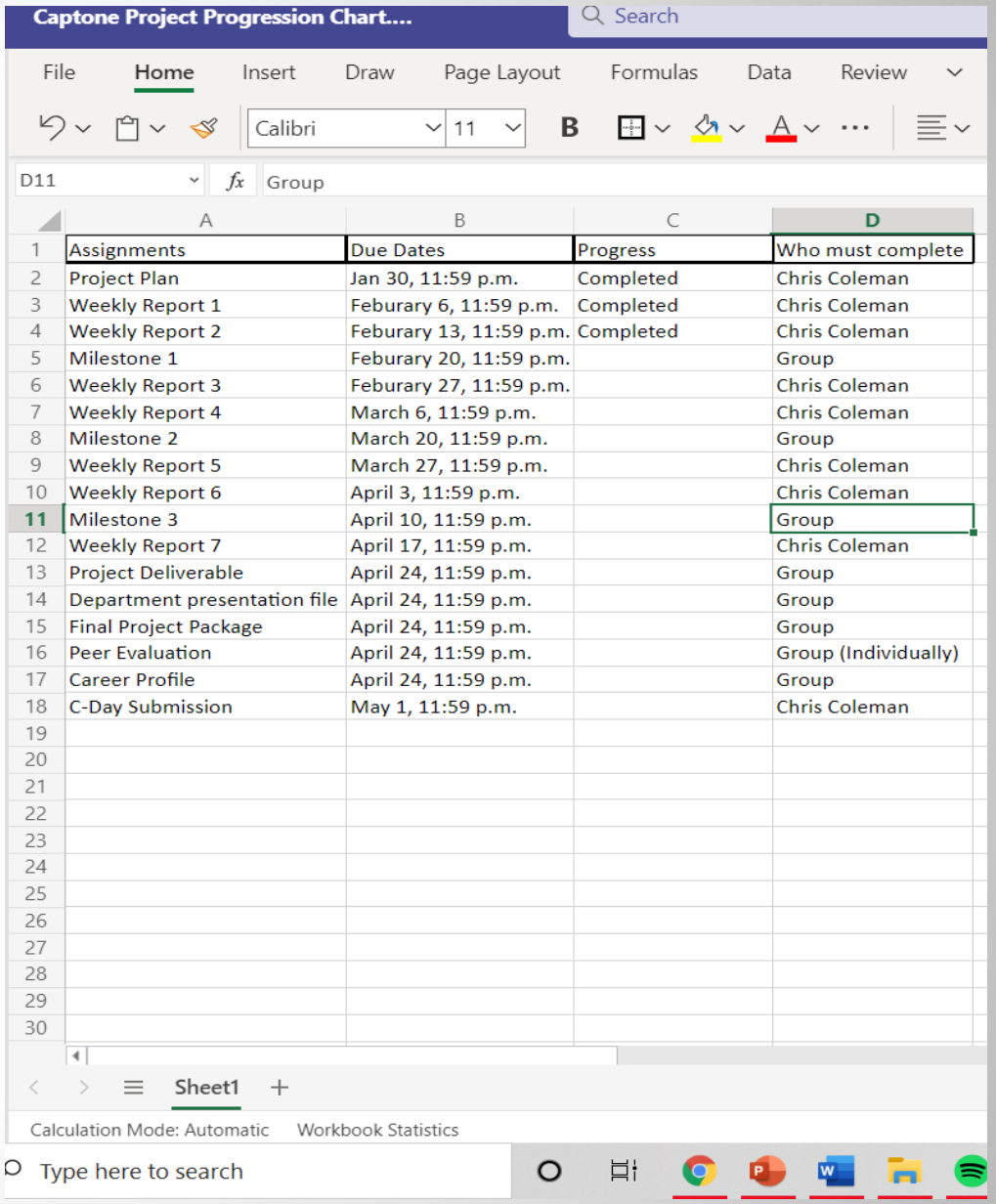
1. Testing needs to be completed
2. Final documentation of research, testing, scope, etc.
3. Website must be created
4. Final Video Presentation discussing Project must be created
5. Last just turn in all weekly reports, milestone's, & other class required documents as they come open to be submitted.

Updated Excel Chart (Gnatt Chart)

As a group we decided to use an Excel spreadsheet to keep track of dates, since it is much easier to comprehend and use.

As you can see as tasks are completed, we change the progress column for that assignment/tasks.

The column “Who must complete” is open to change depending on the assignment.



	A	B	C	D
1	Assignments	Due Dates	Progress	Who must complete
2	Project Plan	Jan 30, 11:59 p.m.	Completed	Chris Coleman
3	Weekly Report 1	Feburary 6, 11:59 p.m.	Completed	Chris Coleman
4	Weekly Report 2	Feburary 13, 11:59 p.m.	Completed	Chris Coleman
5	Milestone 1	Feburary 20, 11:59 p.m.		Group
6	Weekly Report 3	Feburary 27, 11:59 p.m.		Chris Coleman
7	Weekly Report 4	March 6, 11:59 p.m.		Chris Coleman
8	Milestone 2	March 20, 11:59 p.m.		Group
9	Weekly Report 5	March 27, 11:59 p.m.		Chris Coleman
10	Weekly Report 6	April 3, 11:59 p.m.		Chris Coleman
11	Milestone 3	April 10, 11:59 p.m.		Group
12	Weekly Report 7	April 17, 11:59 p.m.		Chris Coleman
13	Project Deliverable	April 24, 11:59 p.m.		Group
14	Department presentation file	April 24, 11:59 p.m.		Group
15	Final Project Package	April 24, 11:59 p.m.		Group
16	Peer Evaluation	April 24, 11:59 p.m.		Group (Individually)
17	Career Profile	April 24, 11:59 p.m.		Group
18	C-Day Submission	May 1, 11:59 p.m.		Chris Coleman

Next Phase of Project

- The next phase of the project is the Testing Phase.
- With Sam almost finished with the testing of the first tool the testing phase should not take that long. If everyone in the group stays dedicated and committed to finishing this project within the advanced timeline set by Chris Coleman at the beginning of the project.
- After this phase it will just be the Documentation Phase in all forms, video and written.