Q2 Which Industry do you represent - check one:

Answered: 34   Skipped: 0
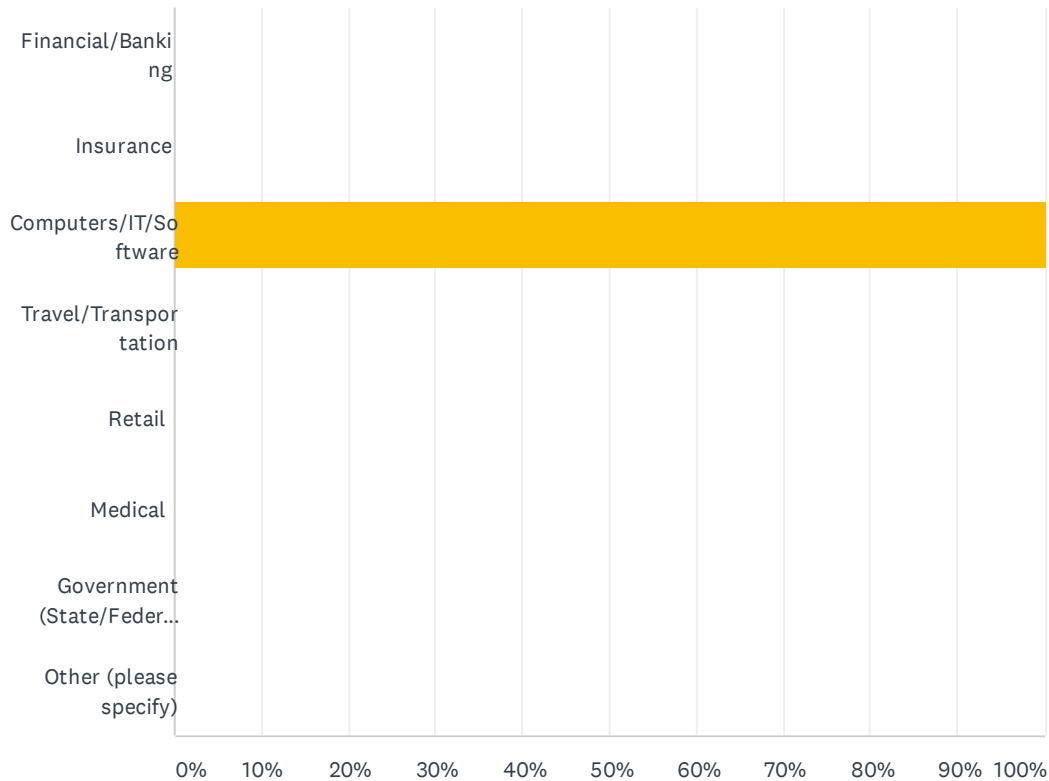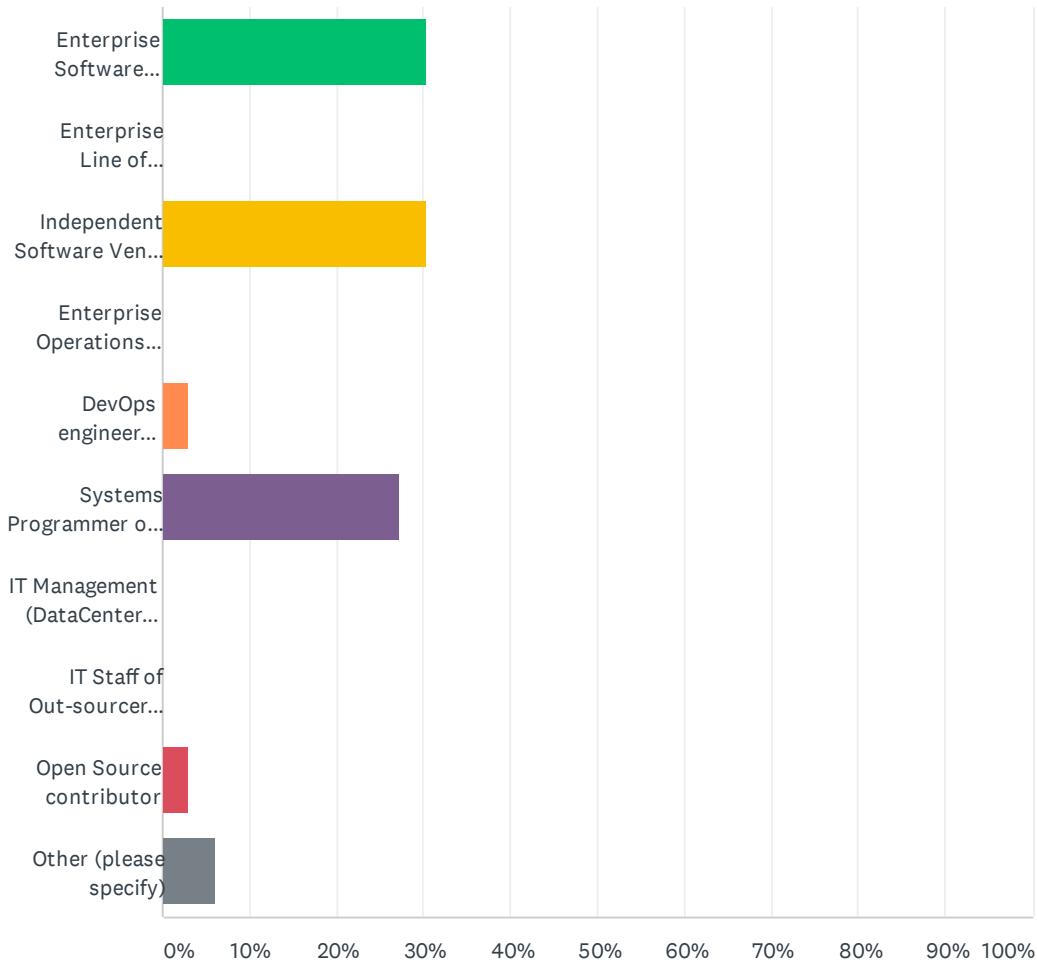

ANSWER CHOICES	RESPONSES	
Financial/Banking	0.00%	0
Insurance	0.00%	0
Computers/IT/Software	100.00%	34
Travel/Transportation	0.00%	0
Retail	0.00%	0
Medical	0.00%	0
Government (State/Federal/City)	0.00%	0
Other (please specify)	0.00%	0
TOTAL		34

Q3 What is your role? (select one)

Answered: 33   Skipped: 1

Feedback on Zowe Development Directions for 2H 2020

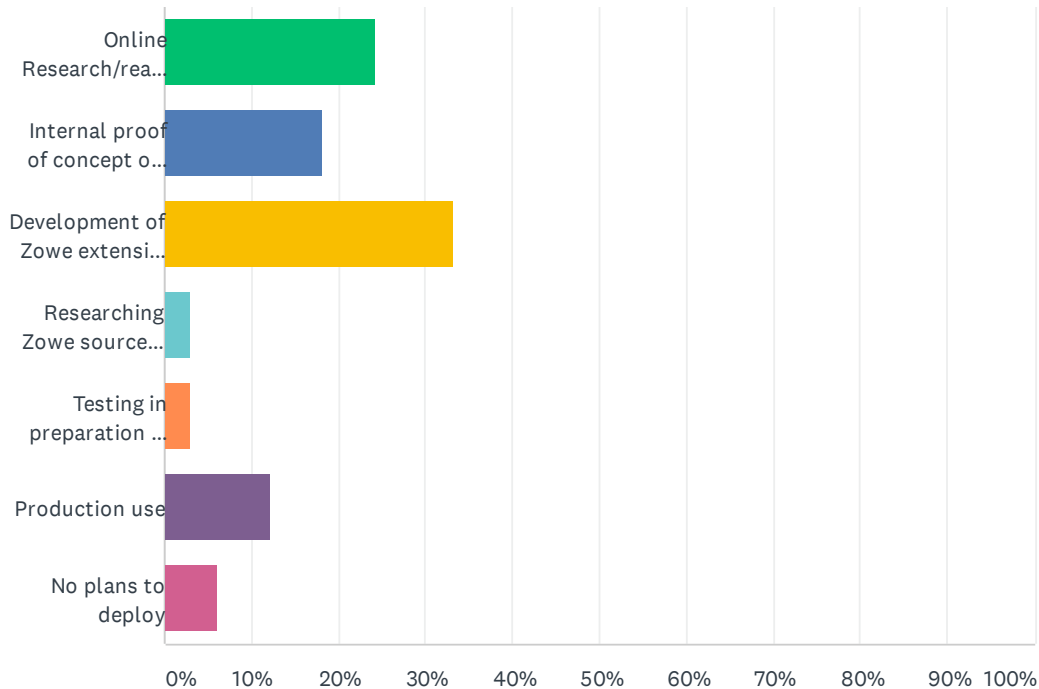| ANSWER CHOICES	RESPONSES	
Enterprise Software Developer	30.30%	10
Enterprise Line of Business Manger responsible for products and applications	0.00%	0
Independent Software Vendor including (Broadcom, IBM, Rocket, etc. Employee) building software products for sale	30.30%	10
Enterprise Operations staff running IT systems	0.00%	0
DevOps engineer dealing with build/test pipelines	3.03%	1
Systems Programmer of operating systems and hardware environments	27.27%	9
IT Management (DataCenter Manager, Technical team manager, Development management, etc.)	0.00%	0
IT Staff of Out-sourcer (managing other firms IT environments)	0.00%	0
Open Source contributor	3.03%	1
Other (please specify)	6.06%	2
TOTAL		33

Q4 What stage of deploying Zowe are you?

Answered: 33   Skipped: 1

# Feedback on Zowe Development Directions for 2H 2020

ANSWER CHOICES	RESPONSES	
Online Research/reading	24.24%	8
Internal proof of concept or pilot	18.18%	6
Development of Zowe extensions (REST APIs, plug-ins or web apps)	33.33%	11
Researching Zowe source code for possible use or contribution	3.03%	1
Testing in preparation for production use	3.03%	1
Production use	12.12%	4
No plans to deploy	6.06%	2
TOTAL		33

Q5 What Zowe Components are you using today, plan to use or don't think you will ever use?

Answered: 30   Skipped: 4

Feedback on Zowe Development Directions for 2H 2020

Legend: ■ Are using today   ■ Plan to use in the future   ■ Do not plan to use
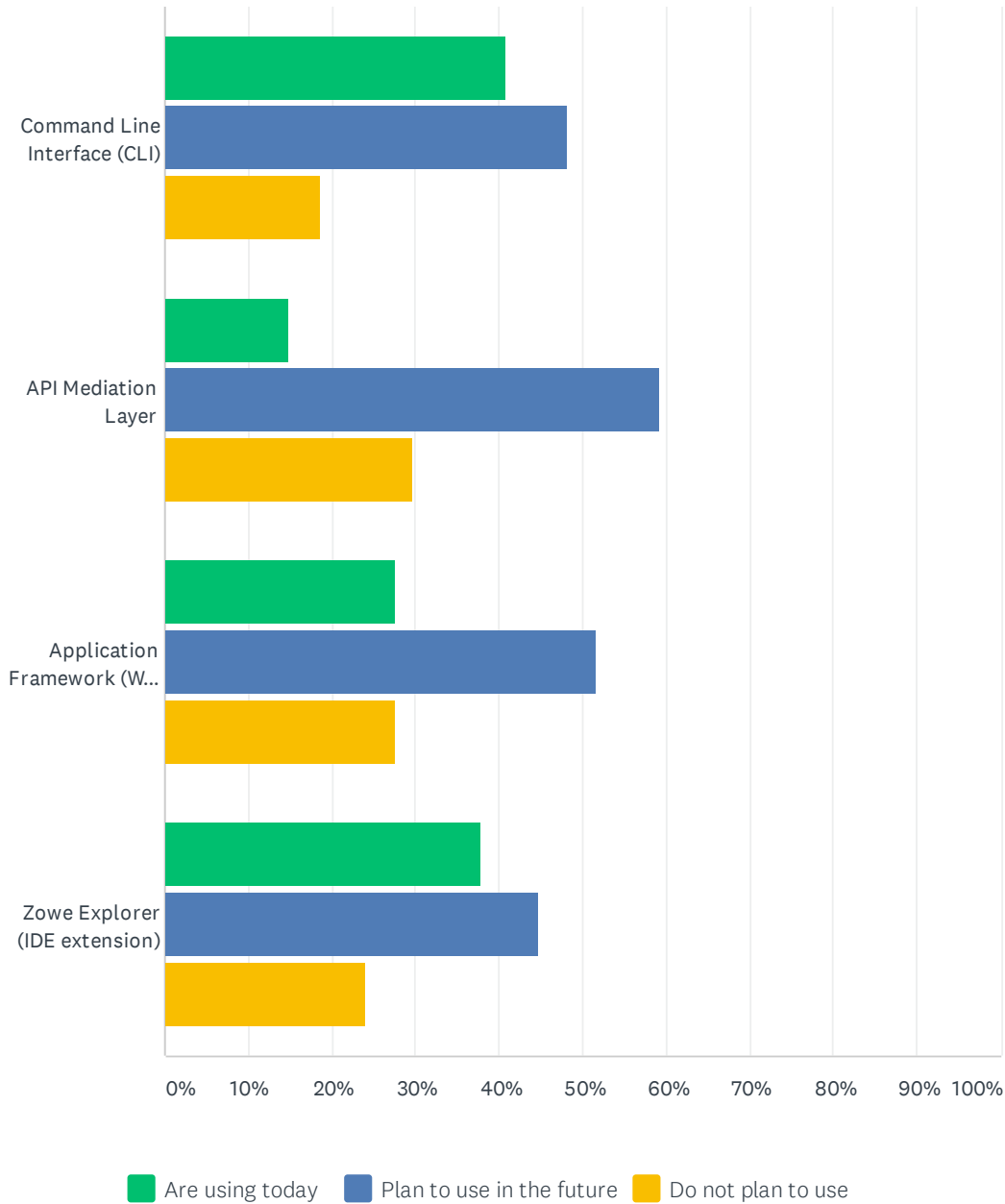
	ARE USING TODAY	PLAN TO USE IN THE FUTURE	DO NOT PLAN TO USE	TOTAL RESPONDENTS
Command Line Interface (CLI)	40.74% 11	48.15% 13	18.52% 5	27
API Mediation Layer	14.81% 4	59.26% 16	29.63% 8	27
Application Framework (Web UI)	27.59% 8	51.72% 15	27.59% 8	29
Zowe Explorer (IDE extension)	37.93% 11	44.83% 13	24.14% 7	29

Q6 What challenges have you had with installing and configuring Zowe?

Answered: 28   Skipped: 6

Feedback on Zowe Development Directions for 2H 2020
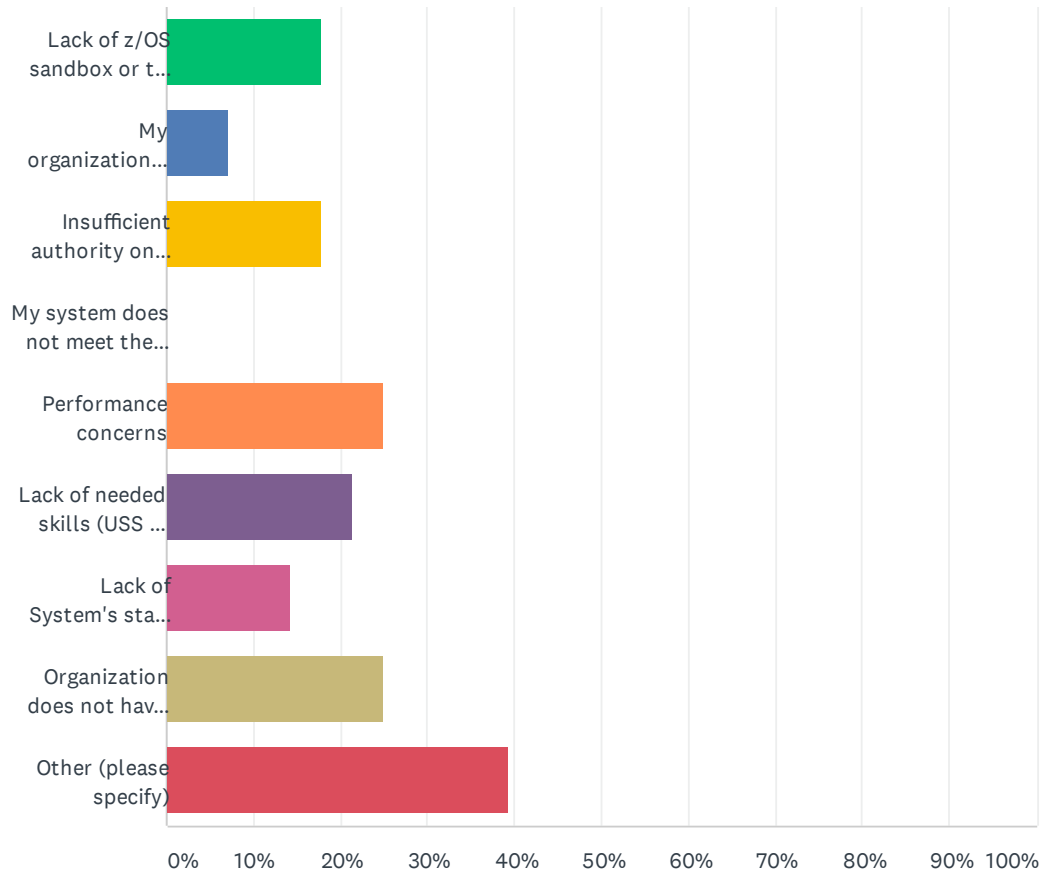
ANSWER CHOICES	RESPONSES	
Lack of z/OS sandbox or test environment	17.86%	5
My organization security concerns of open source	7.14%	2
Insufficient authority on system to install and configure Zowe (waiting on others)	17.86%	5
My system does not meet the pre-reqs for Zowe	0.00%	0
Performance concerns	25.00%	7
Lack of needed skills (USS on z/OS, Node on z/OS, SMP/E, etc.)	21.43%	6
Lack of System's staff able to work on install/configure of Zowe	14.29%	4
Organization does not have time	25.00%	7
Other (please specify)	39.29%	11
Total Respondents: 28		

Q7 Zowe API ML is considering adding support for client certificates, do you have an existing infrastructure that requires client certificates (x.509) for authentication?

Answered: 24   Skipped: 10
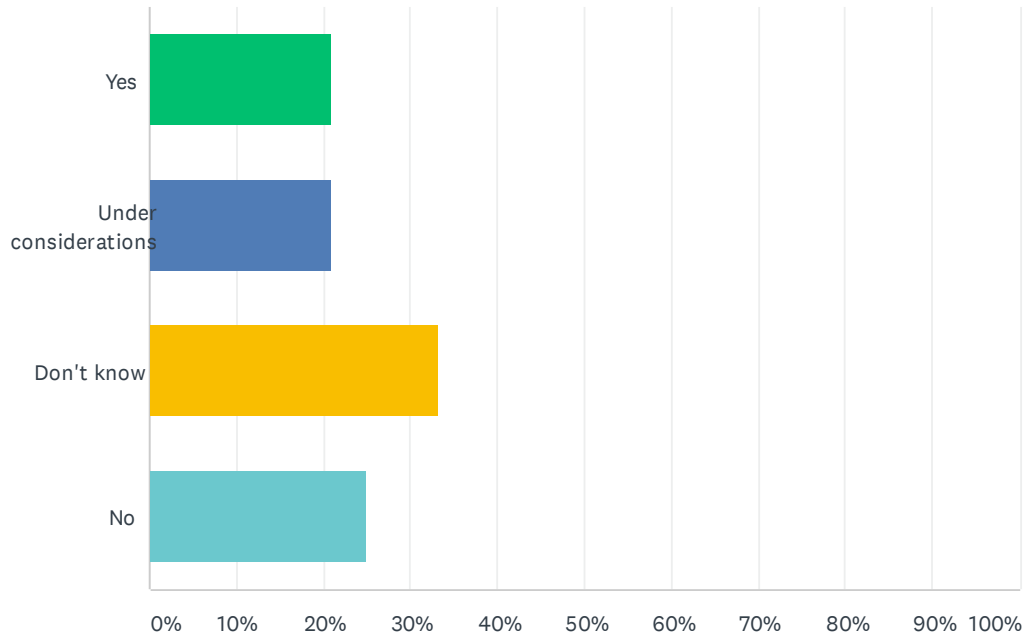
ANSWER CHOICES	RESPONSES	
Yes	20.83%	5
Under considerations	20.83%	5
Don't know	33.33%	8
No	25.00%	6
TOTAL		24

Q8 What are the most common ways for you to use the client certificate (x.509) as an authentication method?

Answered: 21   Skipped: 13
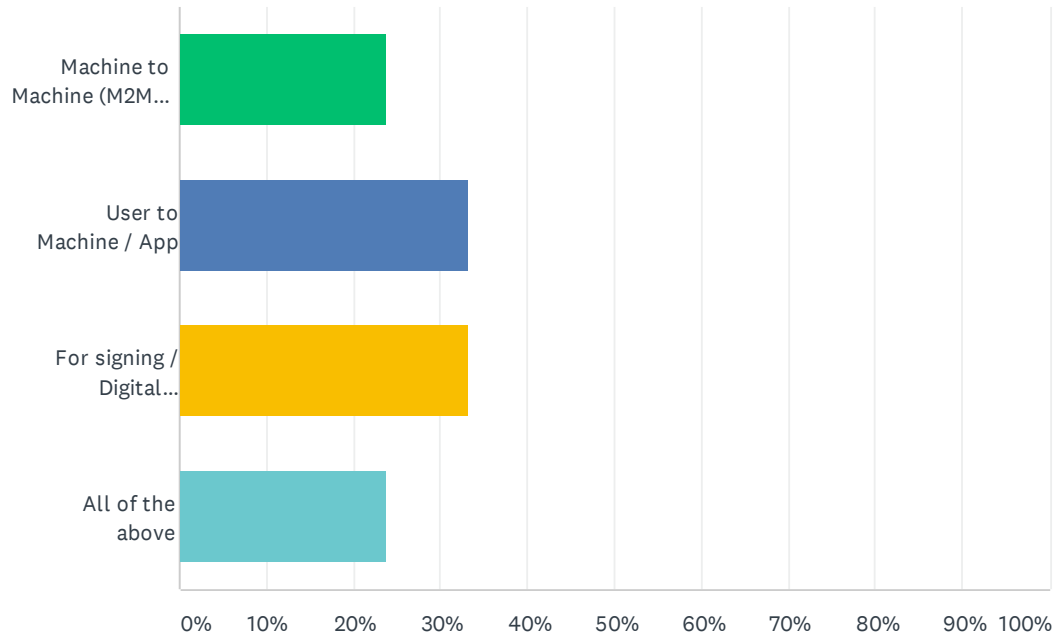
ANSWER CHOICES	RESPONSES	
Machine to Machine (M2M) / App to App	23.81%	5
User to Machine / App	33.33%	7
For signing / Digital Signature	33.33%	7
All of the above	23.81%	5
Total Respondents: 21		

Q9 Which type of Certificate Authority (CA) do you use to generate client certificates (x.509)?

Answered: 21   Skipped: 13
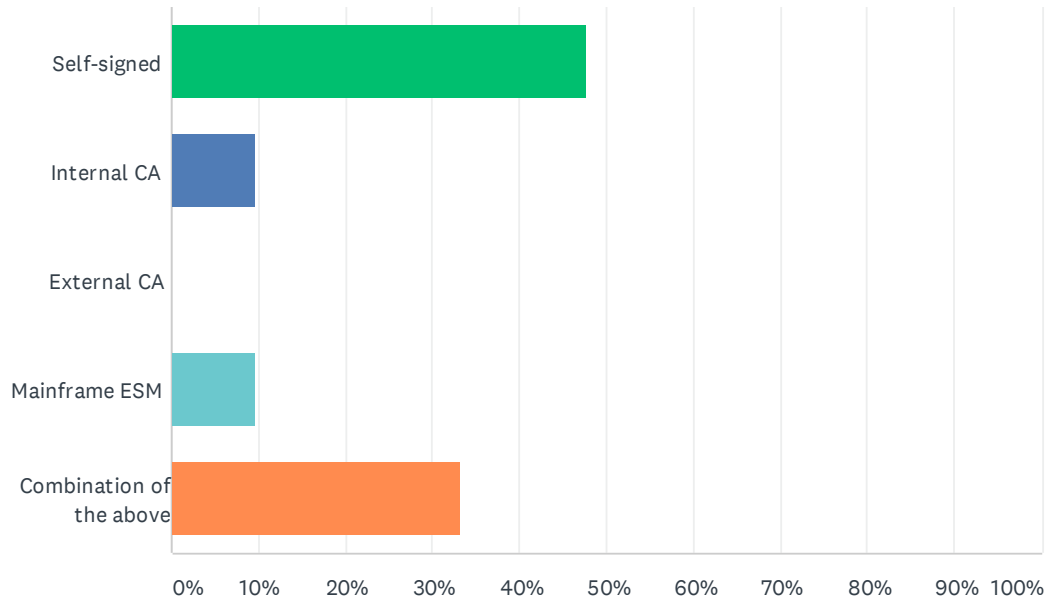
ANSWER CHOICES	RESPONSES	
Self-signed	47.62%	10
Internal CA	9.52%	2
External CA	0.00%	0
Mainframe ESM	9.52%	2
Combination of the above	33.33%	7
TOTAL		21

Q10 Do you want Zowe API Mediation Layer to help manage the client certificate lifecycle? (Ability to control the update when the certificate expires)

Answered: 23   Skipped: 11
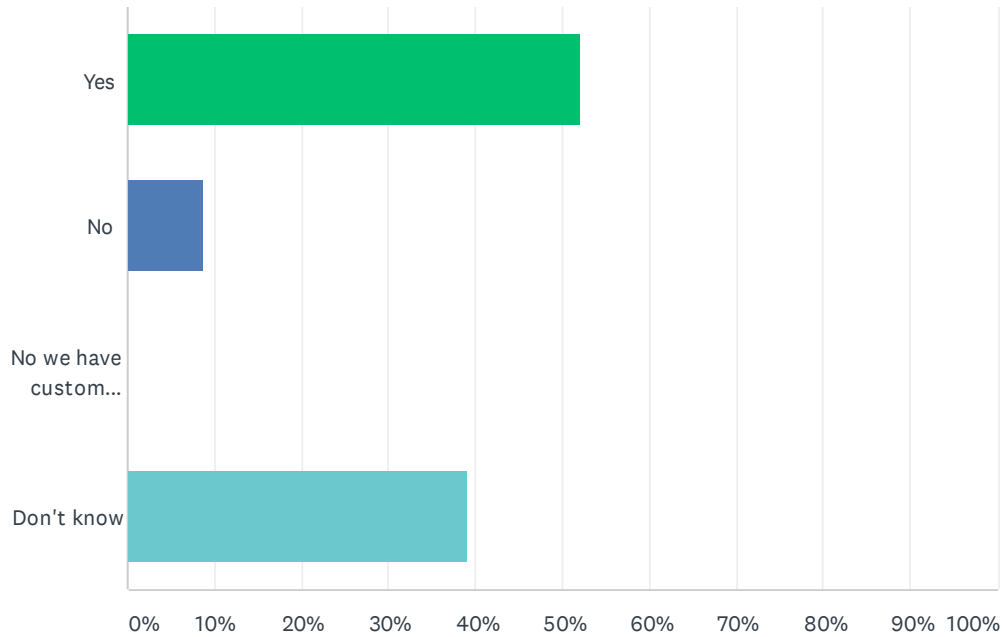
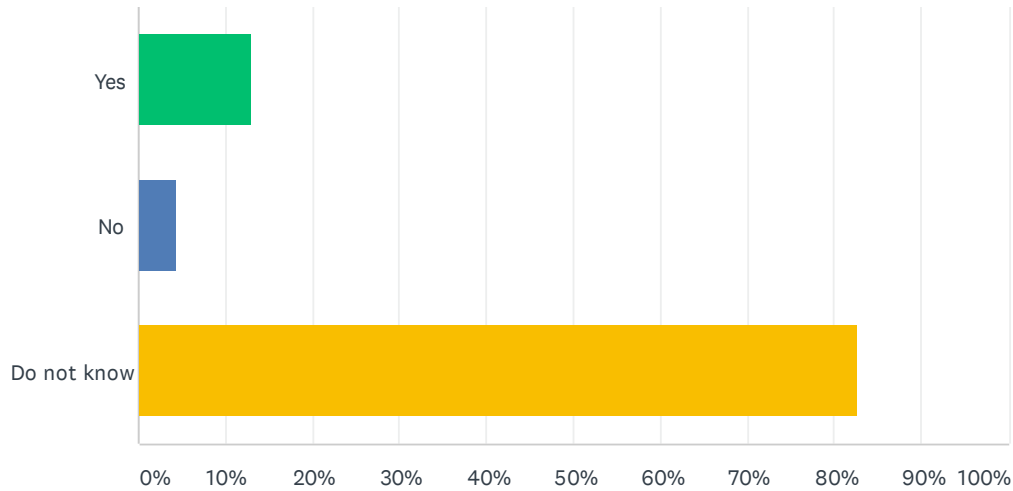| ANSWER CHOICES	RESPONSES	
Yes	52.17%	12
No	8.70%	2
No we have custom implementation	0.00%	0
Don't know	39.13%	9
TOTAL		23

Q11 What types of "workstation tools" / "client applications" at your site you see benefiting from being able to authenticate to the Zowe API ecosystem via API Mediation Layer using client certificates (x.509) ?

Answered: 14   Skipped: 20

Q12 Do you plan to use Zowe Command Line Interface (CLI) with client certificates (x.509)
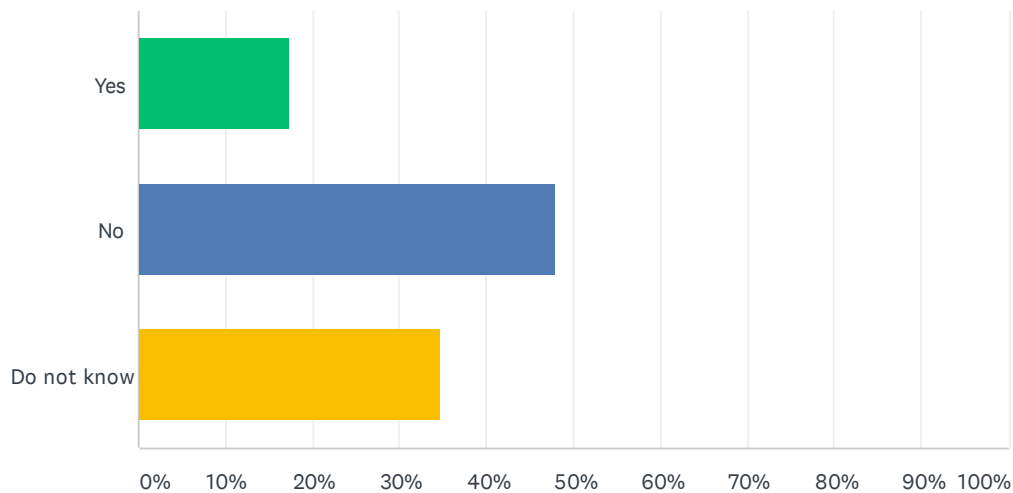
Answered: 23   Skipped: 11

ANSWER CHOICES	RESPONSES	
Yes	13.04%	3
No	4.35%	1
Do not know	82.61%	19
TOTAL		23

Q13 Do you use z/OSMF with client certificates (x.509) ?

Answered: 23   Skipped: 11

ANSWER CHOICES	RESPONSES	
Yes	17.39%	4
No	47.83%	11
Do not know	34.78%	8
TOTAL		23

Q14 IF Zowe API Mediation Layer would support client certificates (x.509) as an authentication method, would you prefer a single client certificate to be used to access all the Zowe z/OS Services APIs?
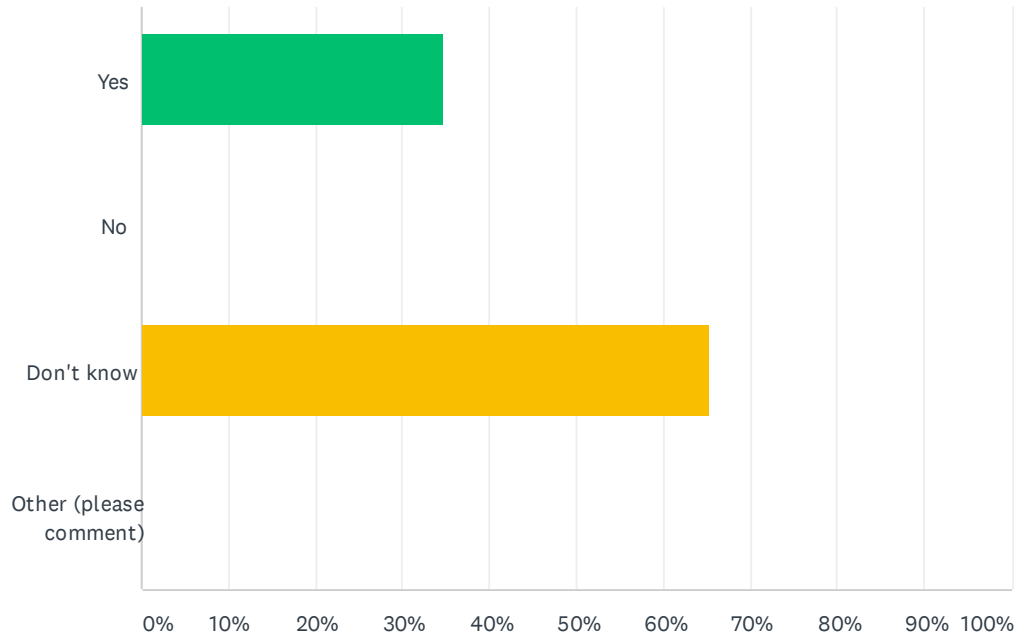
Answered: 23   Skipped: 11
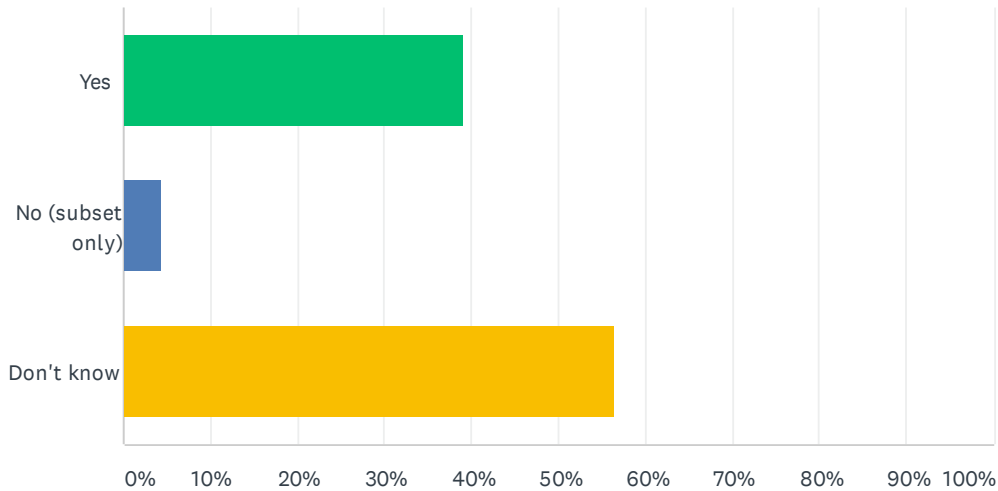
ANSWER CHOICES	RESPONSES	
Yes	39.13%	9
No (subset only)	4.35%	1
Don't know	56.52%	13
TOTAL		23

Q15 Do you see the benefit in enabling Zowe API Mediation Layer to accept client certificates (x.509) as another authentication mechanism in general?
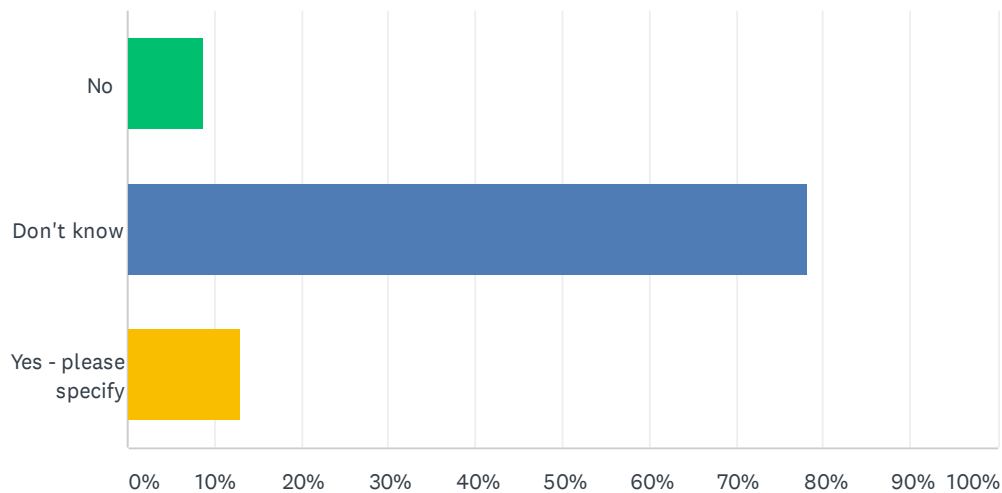
Answered: 23   Skipped: 11

ANSWER CHOICES	RESPONSES	
Yes	34.78%	8
No	0.00%	0
Don't know	65.22%	15
Other (please comment)	0.00%	0
TOTAL		23

Q16 Is there any other authentication mechanism that you are missing in Zowe API Mediation Layer other than client certificates (x.509)?
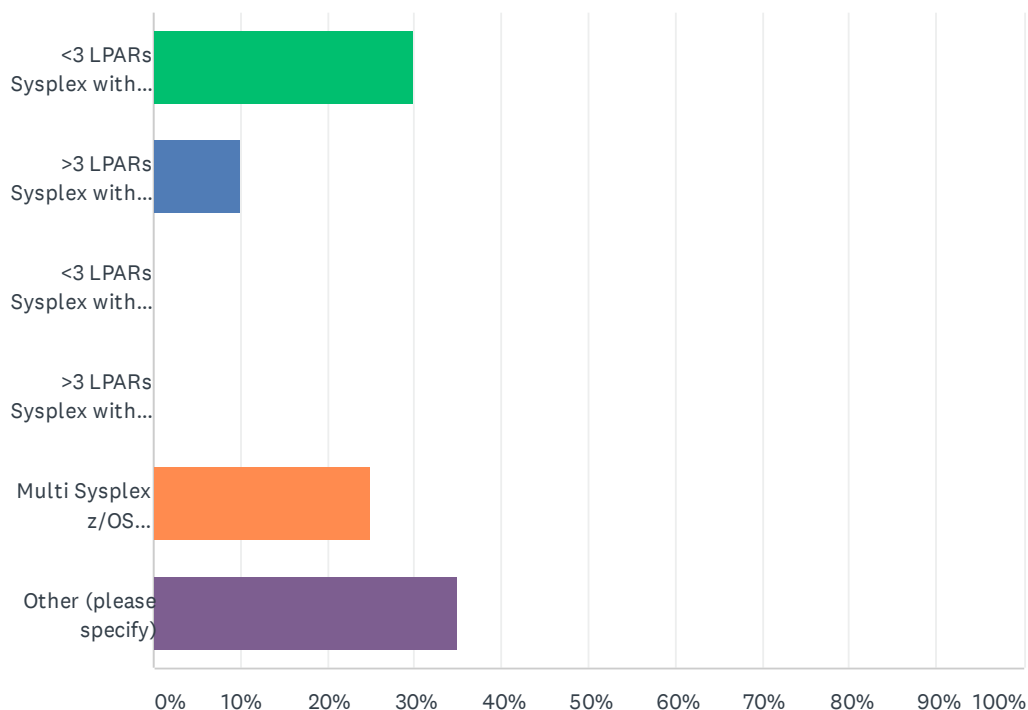
Answered: 23   Skipped: 11

ANSWER CHOICES	RESPONSES	
No	8.70%	2
Don't know	78.26%	18
Yes - please specify	13.04%	3
TOTAL		23

Q17 For Zowe High Availability testing purposes, what is the most common z/OS production environment set up in which you would deploy Zowe API ML?

Answered: 20   Skipped: 14

ANSWER CHOICES	RESPONSES	
<3 LPARs Sysplex with shared Enterprise Security Manager (ESM) security domain	30.00%	6
>3 LPARs Sysplex with shared security domain (ESM) across	10.00%	2
<3 LPARs Sysplex with different security domain (ESM) per LPAR	0.00%	0
>3 LPARs Sysplex with different security domain (ESM) per LPAR	0.00%	0
Multi Sysplex z/OS environment with variety of security domains (ESM)	25.00%	5
Other (please specify)	35.00%	7
TOTAL		20

Q18 As a Zowe Explorer user, please select the security best practices that you (or your organization) would be interested in.

Answered: 18   Skipped: 16
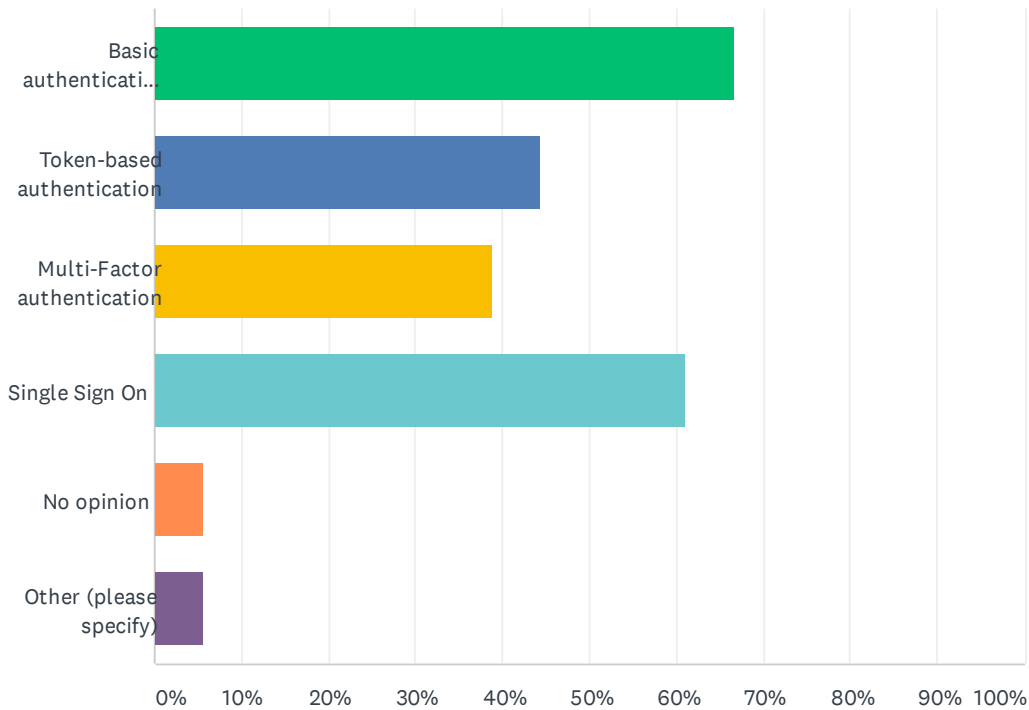
ANSWER CHOICES	RESPONSES	
Basic authentication (username and password)	66.67%	12
Token-based authentication	44.44%	8
Multi-Factor authentication	38.89%	7
Single Sign On	61.11%	11
No opinion	5.56%	1
Other (please specify)	5.56%	1
Total Respondents: 18		

Q19 The Zowe Explorer today does not have a clearly documented way to extend its capabilities and does not have a conformance program (published criteria, badge, etc.) Do you see the need for Zowe Explorer being extensible and a documented conformance program?
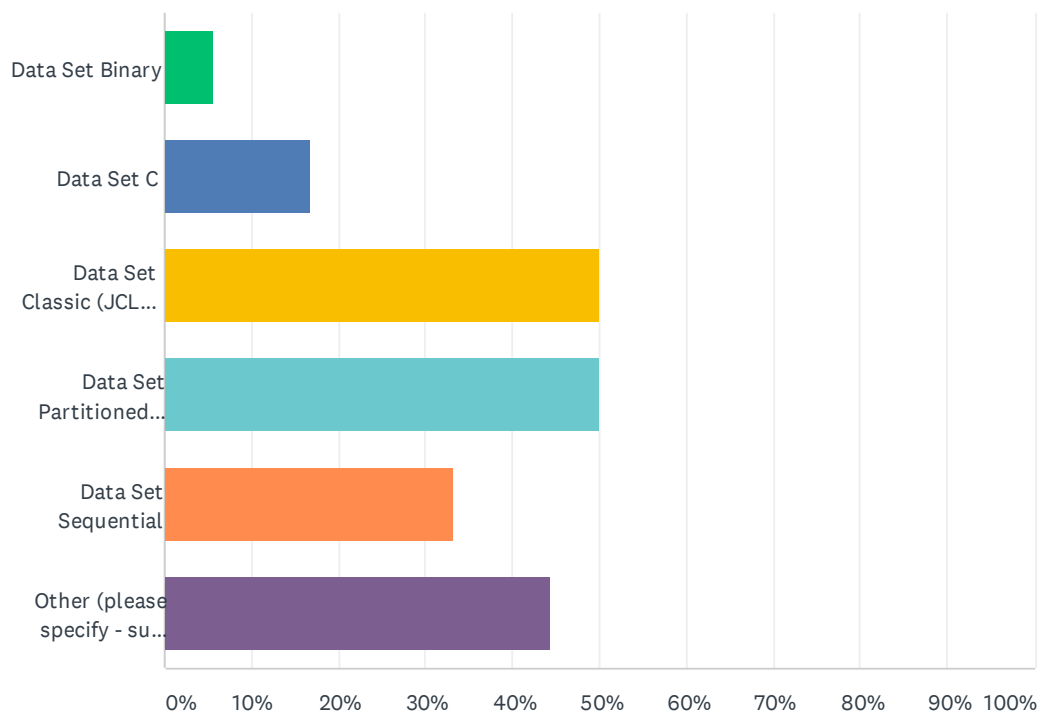
Answered: 18   Skipped: 16
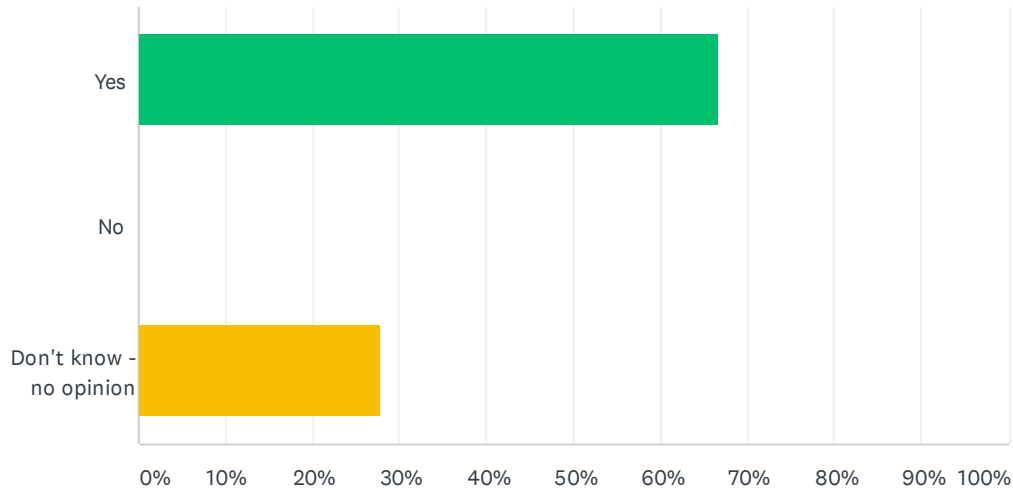
ANSWER CHOICES	RESPONSES	
Yes	66.67%	12
No	0.00%	0
Don't know - no opinion	27.78%	5
TOTAL		18

Q20 When creating data sets through Zowe Explorer, what types do you use more often? Use `Other` to describe details for a custom template you'd like to add.

Answered: 18   Skipped: 16

ANSWER CHOICES	RESPONSES	
Data Set Binary	5.56%	1
Data Set C	16.67%	3
Data Set Classic (JCL, Cobol, ASM kind of files)	50.00%	9
Data Set Partitioned (PDS)	50.00%	9
Data Set Sequential	33.33%	6
Other (please specify - such as Partitioned Data Set Extended (PDS/E) - describe allocation details if possible:)	44.44%	8
Total Respondents: 18		

Q21 As a WebUI (Application Framework or Virtual Desktop) user, which is more important for 2H 2020 deliverable:
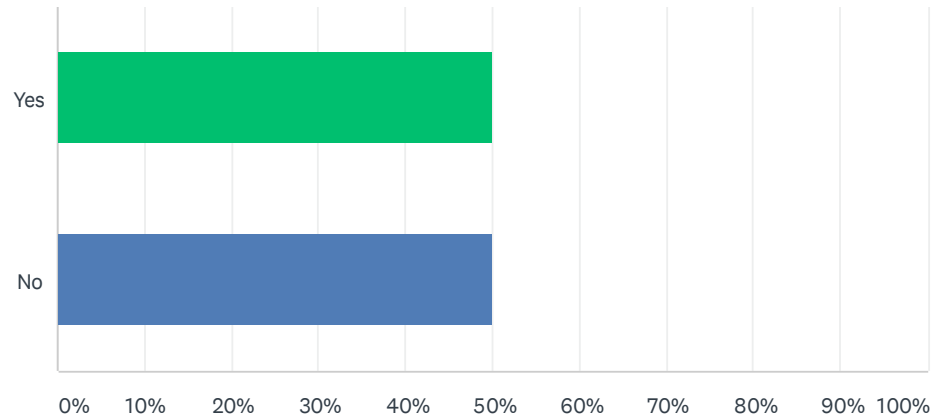
Answered: 19   Skipped: 15
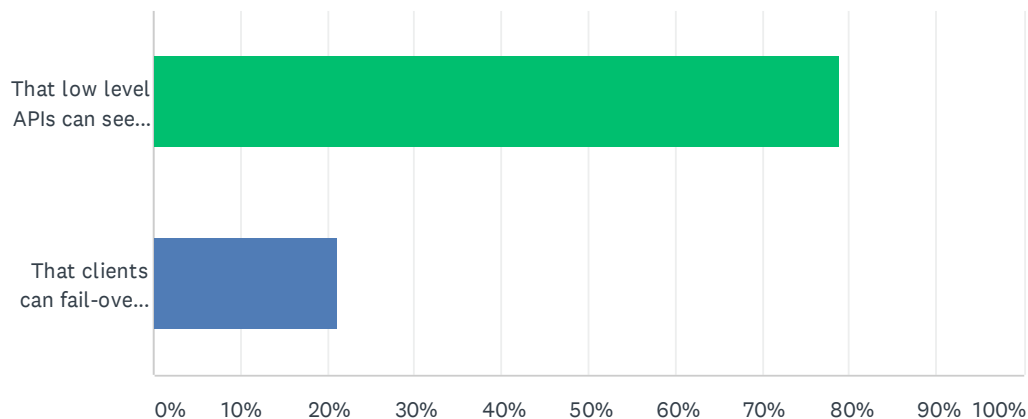
ANSWER CHOICES	RESPONSES	
That low level APIs can see data from multiple LPARs in a sysplex as opposed to just the "current" LPAR?	78.95%	15
That clients can fail-over between redundant copies of the server for fault tolerance	21.05%	4
TOTAL		19

Q22 As a WebUI (Application Framework or Virtual Desktop) user, would you object to a dependency on Db2 for achieving high availability of stored data? (Appropriate Db2 license would be responsibility of the user of Zowe.)

Answered: 18   Skipped: 16

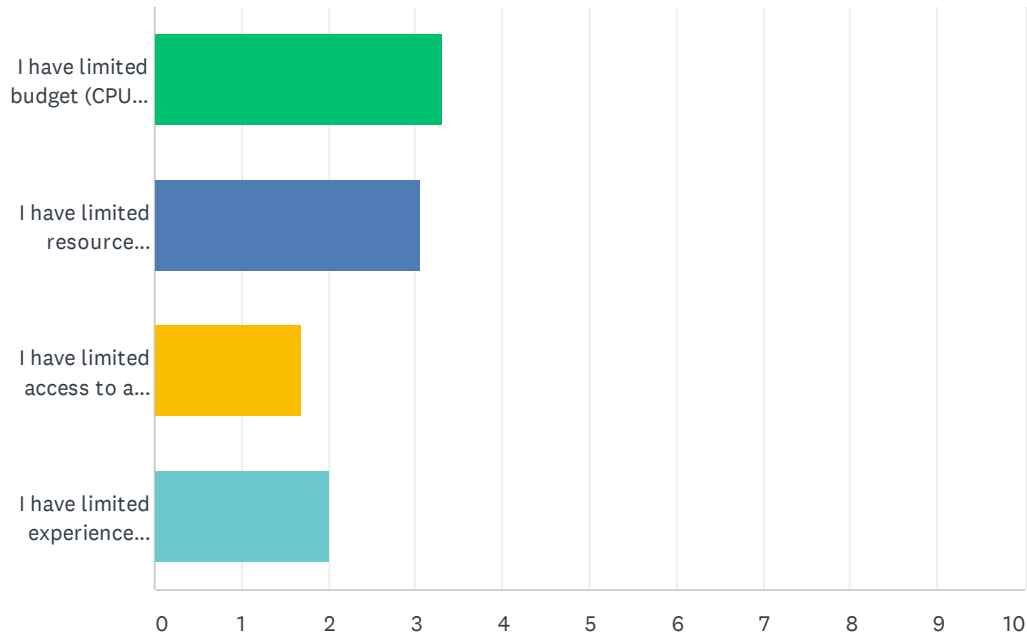| ANSWER CHOICES	RESPONSES	
Yes	50.00%	9
No	50.00%	9
TOTAL		18

Q23 What other cross-LPAR, persistent data store technology on z/OS would you consider acceptable?

Answered: 12   Skipped: 22

Q24 As a WebUI (Application Framework or Virtual Desktop) user, rank the following reasons for running server components on off z/OS by priority (1 is most important):

Answered: 17   Skipped: 17

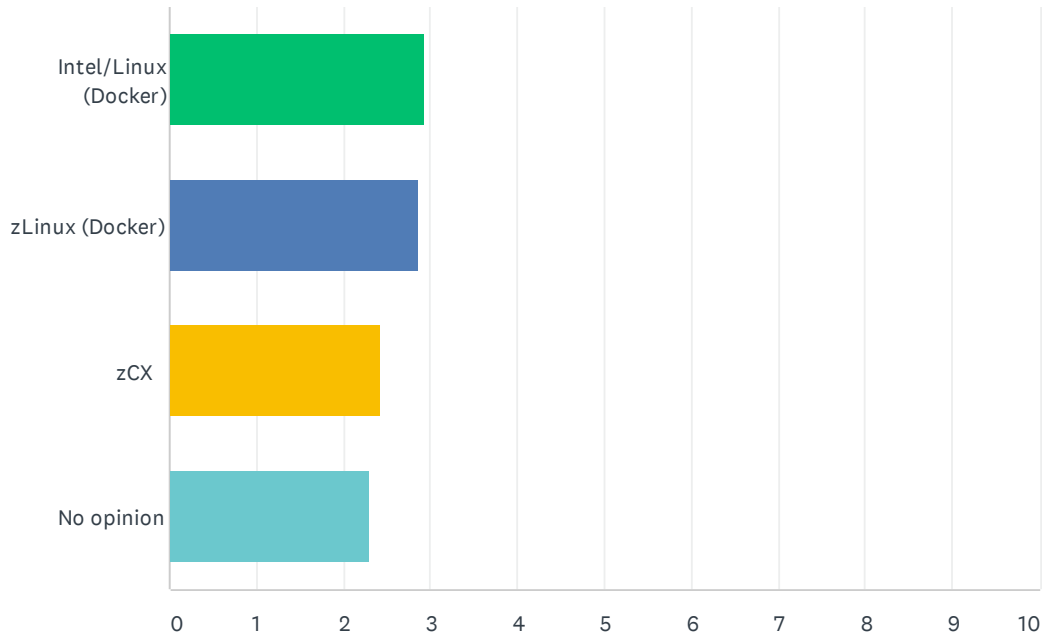|	1	2	3	4	TOTAL	SCORE
I have limited budget (CPU usage cost)	62.50% 10	18.75% 3	6.25% 1	12.50% 2	16	3.31
I have limited resource capacity	23.53% 4	58.82% 10	17.65% 3	0.00% 0	17	3.06
I have limited access to a mainframe	6.25% 1	6.25% 1	37.50% 6	50.00% 8	16	1.69
I have limited experience using z/OS and or USS	12.50% 2	12.50% 2	37.50% 6	37.50% 6	16	2.00

Q25 As a WebUI (Application Framework or Virtual Desktop) user, rank the following non-z/OS platforms for running server components (1 is most important):

Answered: 16   Skipped: 18

	1	2	3	4	TOTAL	SCORE
Intel/Linux (Docker)	42.86% 6	21.43% 3	21.43% 3	14.29% 2	14	2.93
zLinux (Docker)	21.43% 3	50.00% 7	21.43% 3	7.14% 1	14	2.86
zCX	14.29% 2	21.43% 3	57.14% 8	7.14% 1	14	2.43
No opinion	38.46% 5	7.69% 1	0.00% 0	53.85% 7	13	2.31

Q26 As a WebUI (Application Framework or Virtual Desktop) user, when it comes to install and configuration, rank these platforms by your comfort level (1 is most comfortable)?
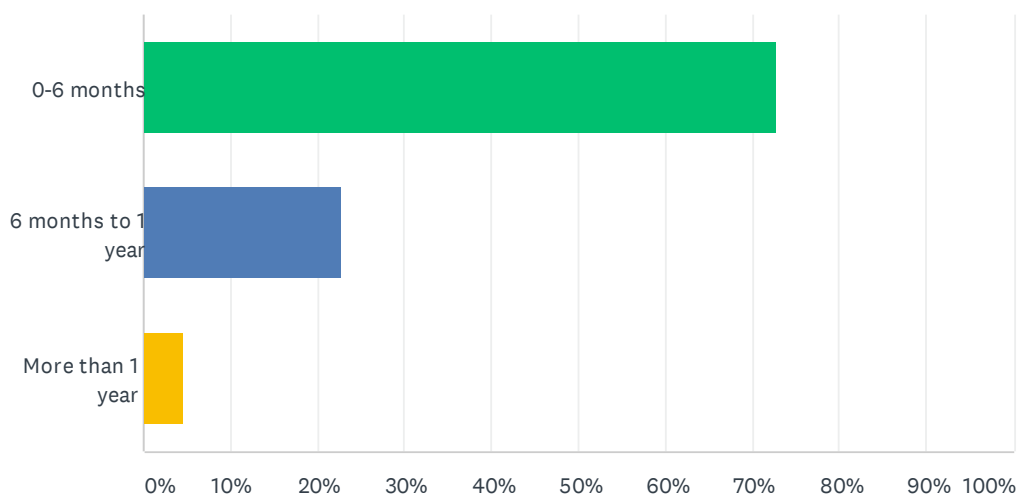
Answered: 16   Skipped: 18
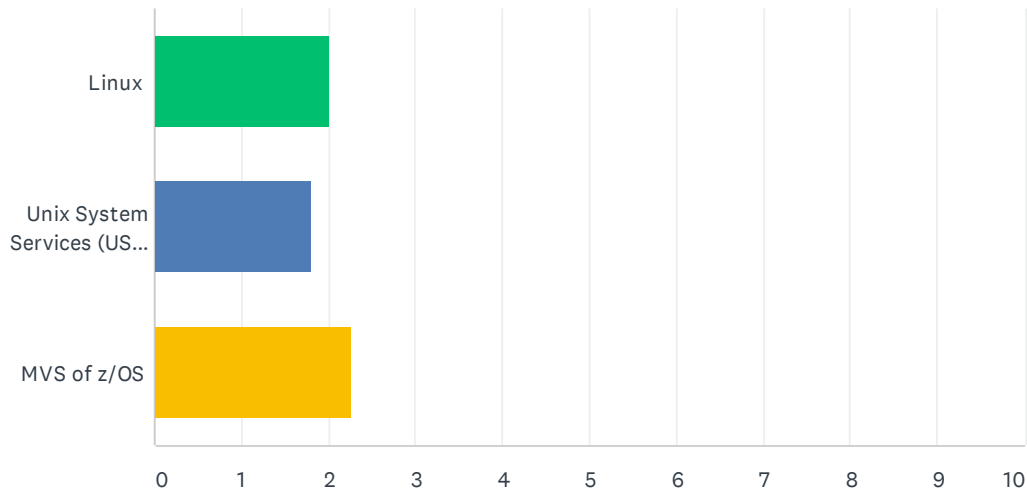
	1	2	3	TOTAL	SCORE
Linux	33.33% 5	33.33% 5	33.33% 5	15	2.00
Unix System Services (USS) of z/OS	6.67% 1	66.67% 10	26.67% 4	15	1.80
MVS of z/OS	62.50% 10	0.00% 0	37.50% 6	16	2.25

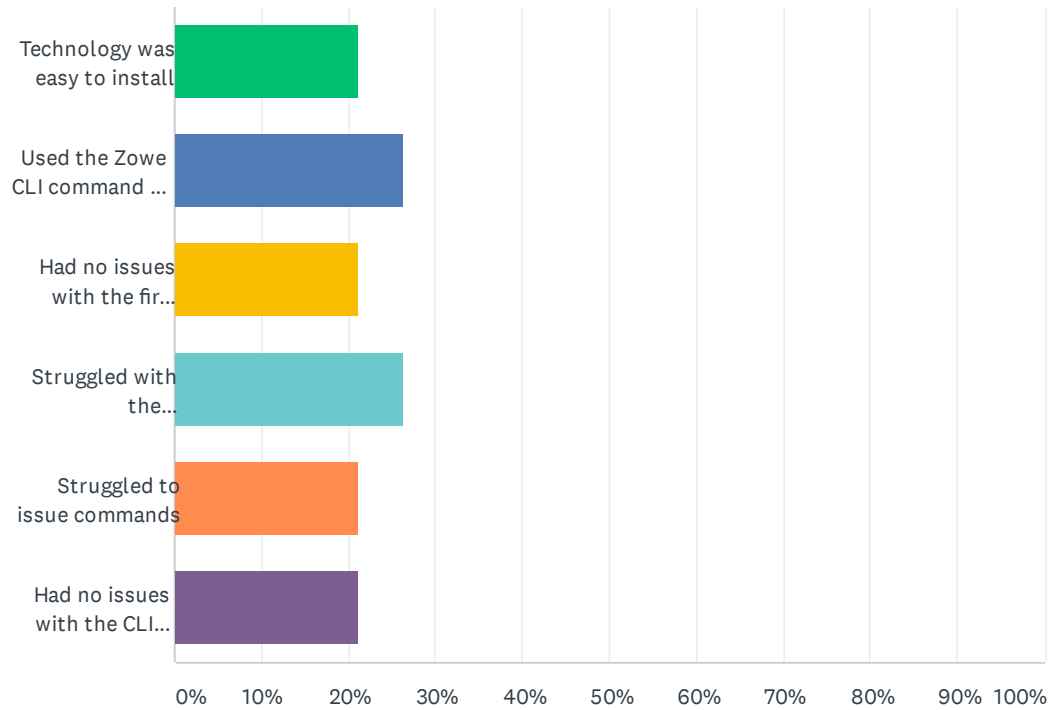## Q27 How much experience do you have with the Zowe CLI?

Answered: 22   Skipped: 12

ANSWER CHOICES	RESPONSES	
0-6 months	72.73%	16
6 months to 1 year	22.73%	5
More than 1 year	4.55%	1
TOTAL		22

Q28 Please describe your on-boarding experience using the Zowe CLI interactively [check all that apply]

Answered: 19   Skipped: 15

## Feedback on Zowe Development Directions for 2H 2020

ANSWER CHOICES	RESPONSES	
Technology was easy to install	21.05%	4
Used the Zowe CLI command web help	26.32%	5
Had no issues with the first command	21.05%	4
Struggled with the installation	26.32%	5
Struggled to issue commands	21.05%	4
Had no issues with the CLI but had to wait for z/OS components	21.05%	4
Total Respondents: 19		

Q29 Which OS are you running Zowe CLI commands on? [check all that apply]

Answered: 20   Skipped: 14
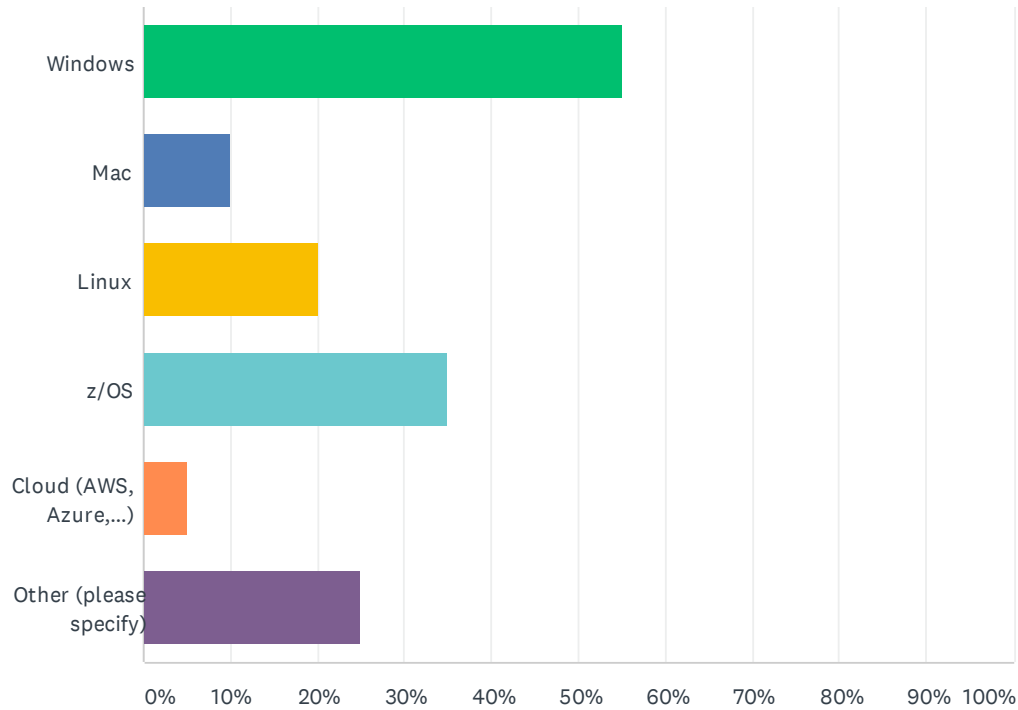
ANSWER CHOICES	RESPONSES	
Windows	55.00%	11
Mac	10.00%	2
Linux	20.00%	4
z/OS	35.00%	7
Cloud (AWS, Azure,...)	5.00%	1
Other (please specify)	25.00%	5
Total Respondents: 20		

Q30 What are you primarily leveraging the Zowe CLI for? [check all that apply]
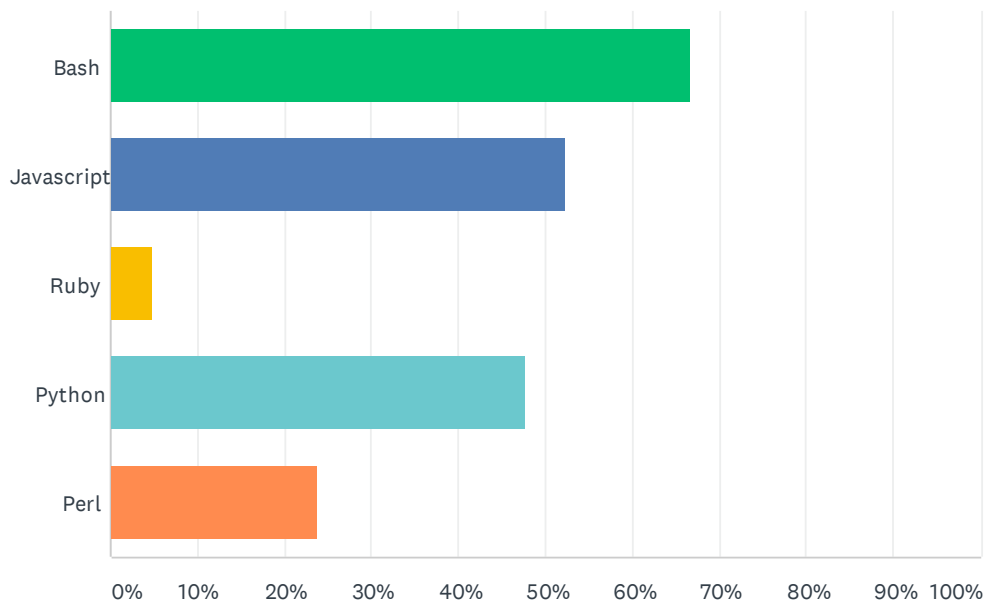
Answered: 18   Skipped: 16

Feedback on Zowe Development Directions for 2H 2020
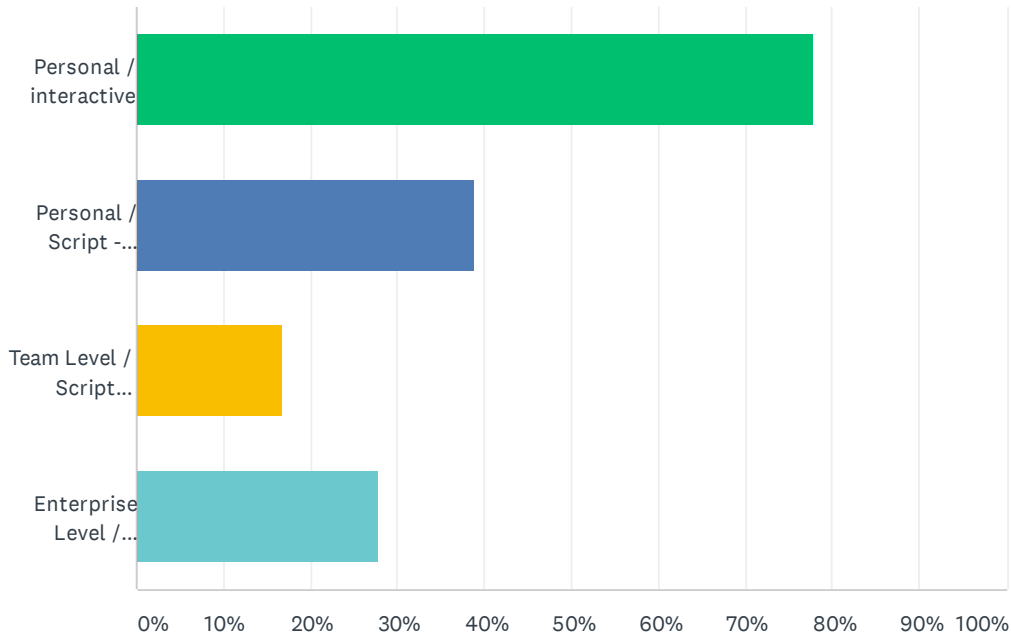
ANSWER CHOICES	RESPONSES	
Personal / interactive	77.78%	14
Personal / Script - automation	38.89%	7
Team Level / Script -automation	16.67%	3
Enterprise Level / Script-automation	27.78%	5
Total Respondents: 18		

Q31 What scripting languages have you used?

Answered: 21   Skipped: 13

ANSWER CHOICES	RESPONSES	
Bash	66.67%	14
Javascript	52.38%	11
Ruby	4.76%	1
Python	47.62%	10
Perl	23.81%	5
Total Respondents: 21		

Q32 What roadblocks or issues have you encountered in rolling out Zowe CLI across your organization.
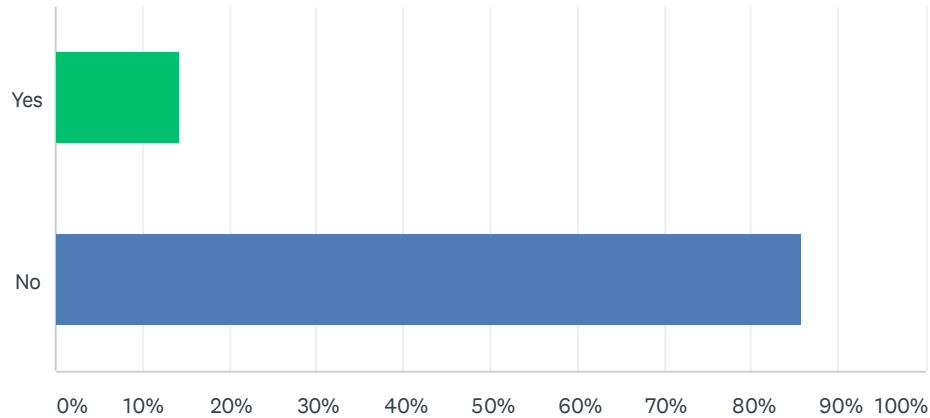
Answered: 18   Skipped: 16
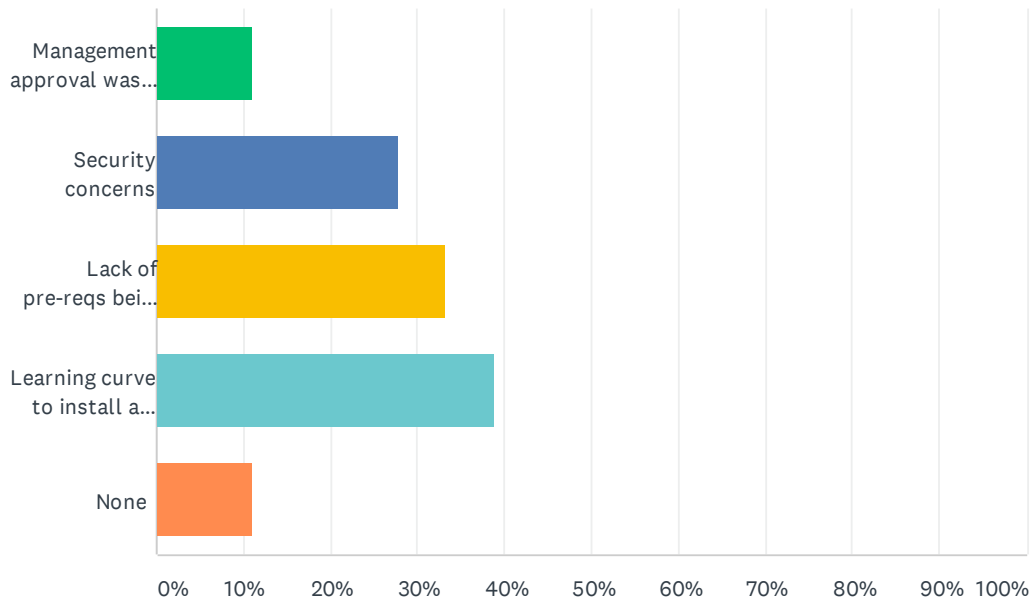
ANSWER CHOICES	RESPONSES	
Management approval was a hurdle	11.11%	2
Security concerns	27.78%	5
Lack of pre-reqs being in place (i.e, z/OSMF configured for example)	33.33%	6
Learning curve to install and configure the CLI plus plug-ins	38.89%	7
None	11.11%	2
Total Respondents: 18		

Q33 Have you leveraged any Zowe CLI plug-ins?

Answered: 21   Skipped: 13

ANSWER CHOICES	RESPONSES	
Yes	14.29%	3
No	85.71%	18
TOTAL		21

Q34 Are you considering or have you tried leveraging any test frameworks, automated pipelines or task runners in conjunction with Zowe CLI?
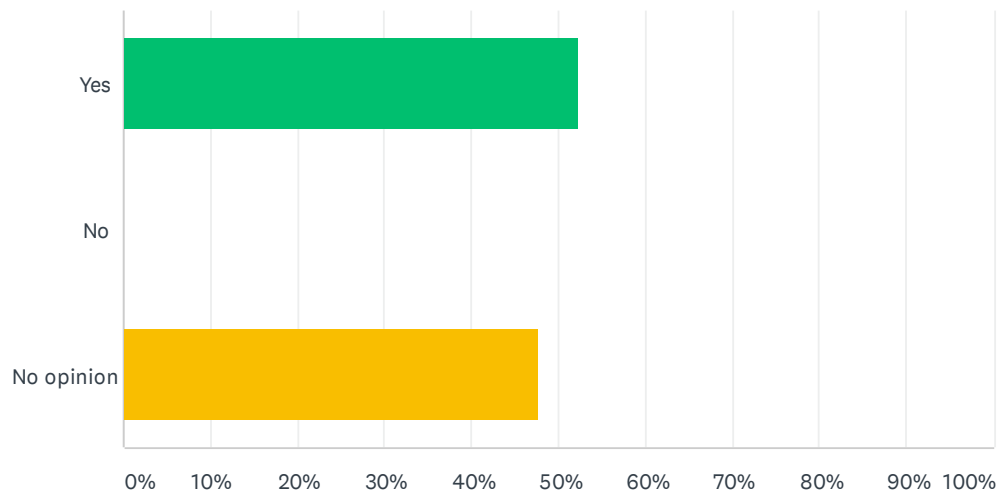
Answered: 21   Skipped: 13
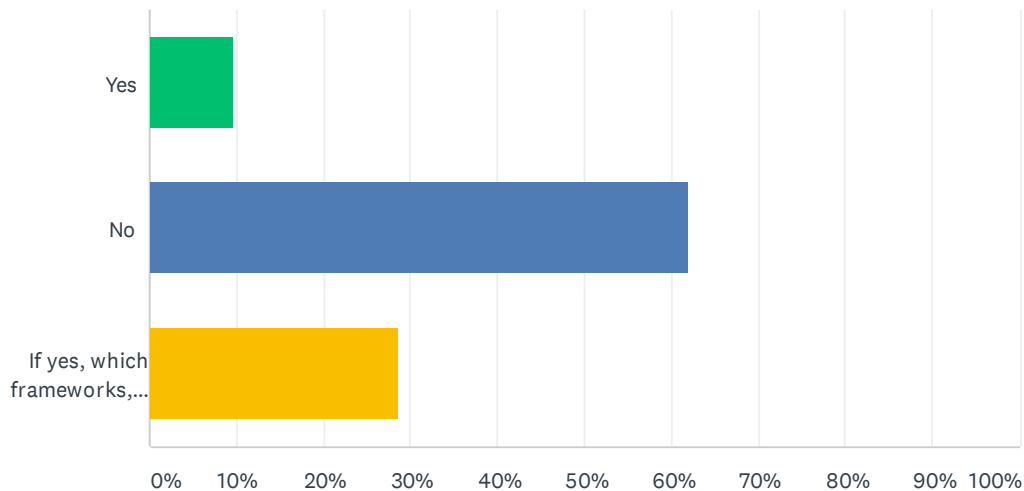
ANSWER CHOICES	RESPONSES	
Yes	9.52%	2
No	61.90%	13
If yes, which frameworks, pipeline tools, or task runners?	28.57%	6
TOTAL		21

Q35 Would you prefer to specify all default command options in a single profile?
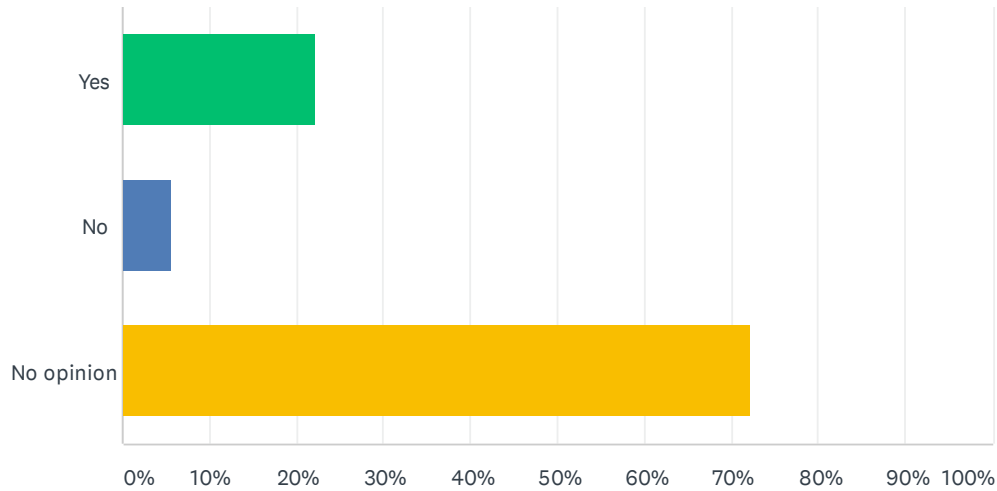
Answered: 21   Skipped: 13

ANSWER CHOICES	RESPONSES	
Yes	52.38%	11
No	0.00%	0
No opinion	47.62%	10
TOTAL		21

Q36 If you are you familiar with the Zowe CLI command option order of precedence, do you see a need to have another level of precedence where you could specify defaults for any command option in a single profile?
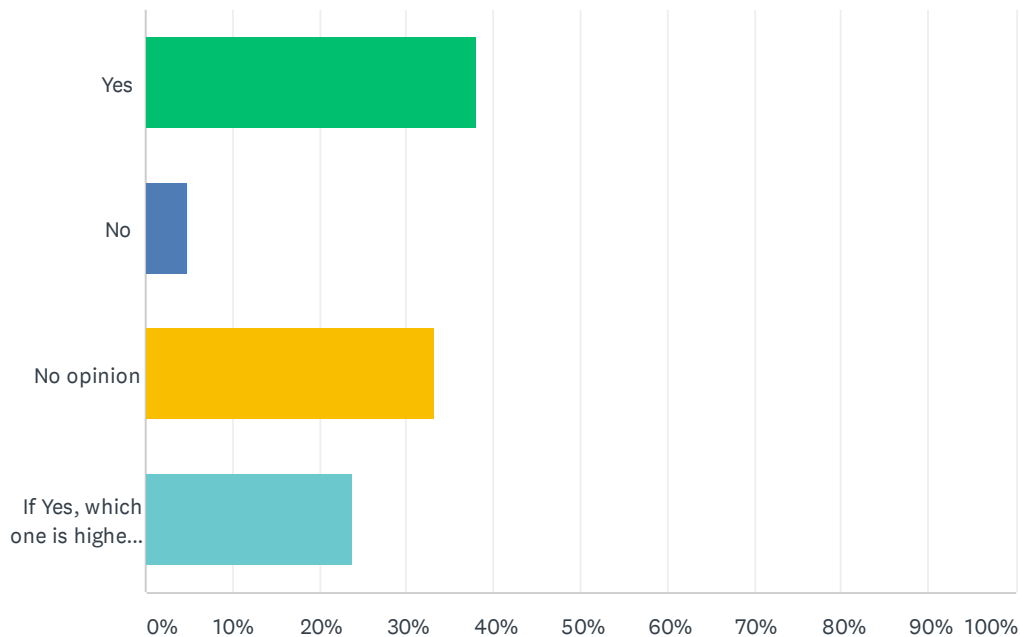
Answered: 18   Skipped: 16

ANSWER CHOICES	RESPONSES	
Yes	22.22%	4
No	5.56%	1
No opinion	72.22%	13
TOTAL		18

Q37 Would you be interested in leveraging Node or Python libraries in scripts for z/OS interaction?
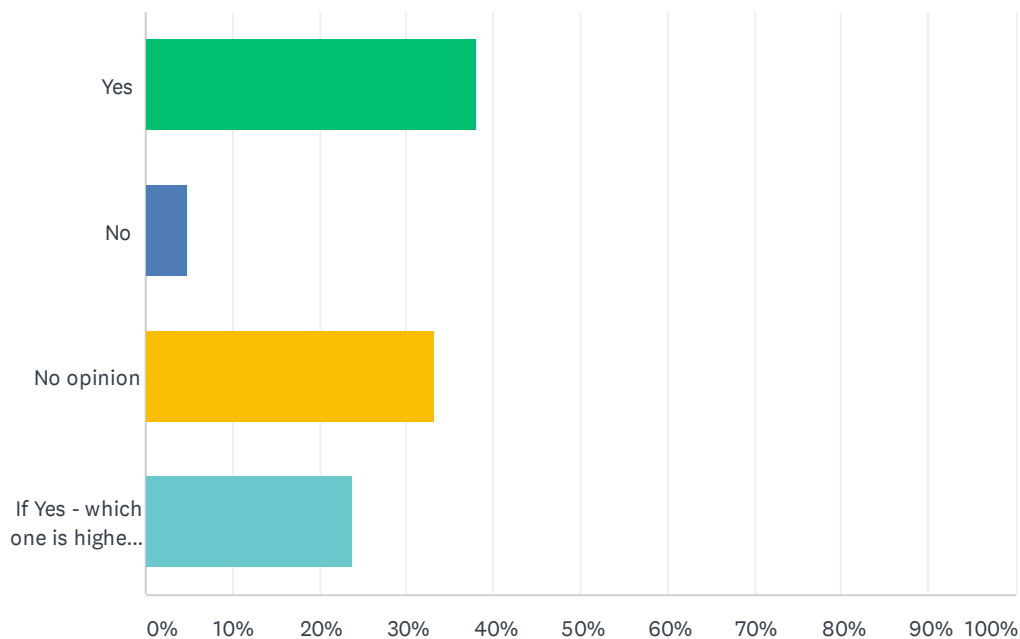
Answered: 21   Skipped: 13

ANSWER CHOICES	RESPONSES	
Yes	38.10%	8
No	4.76%	1
No opinion	33.33%	7
If Yes, which one is higher priority, Node or Python?	23.81%	5
TOTAL		21

Q38 Would you be interested in leveraging Node or Python libraries in applications for z/OS interaction?
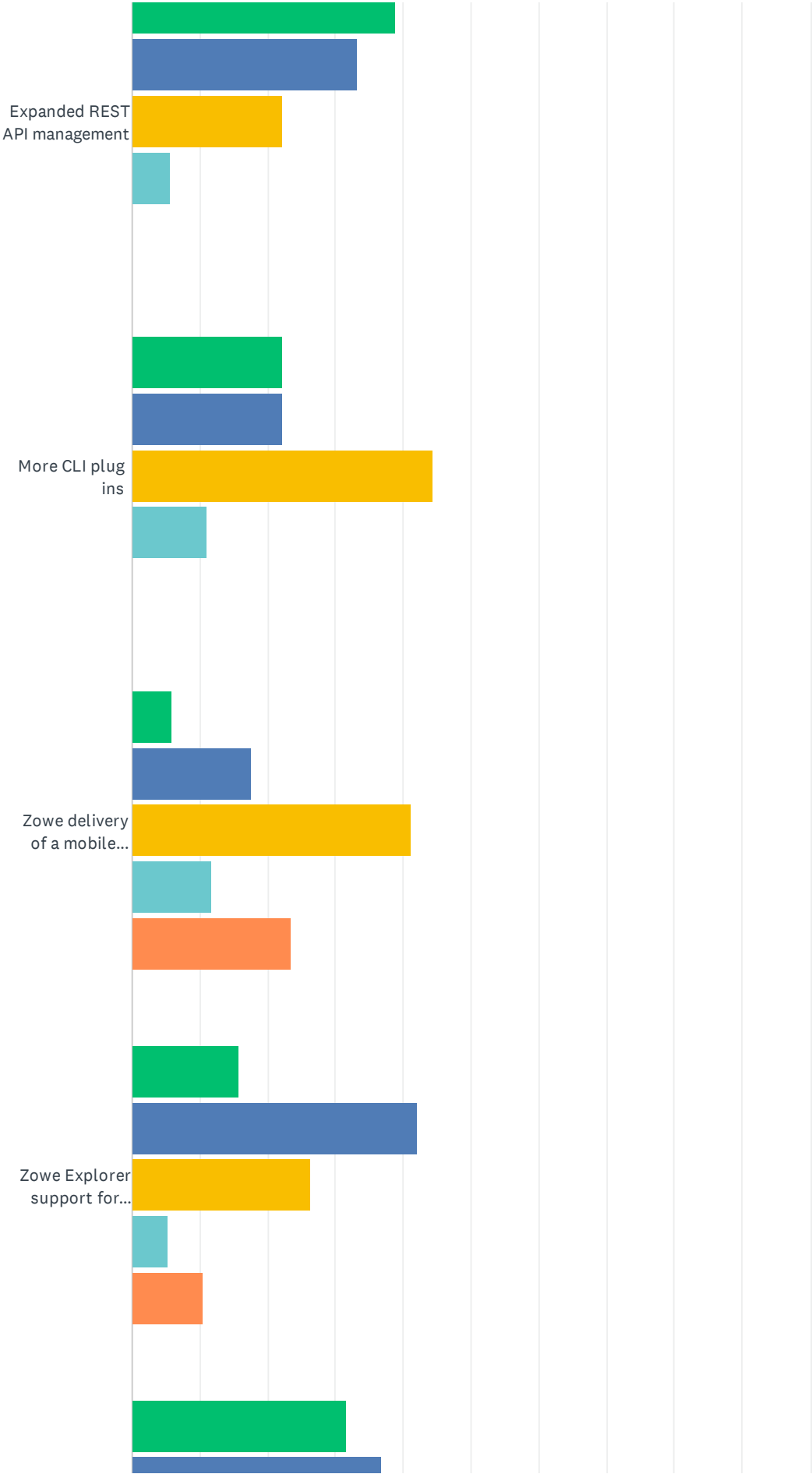
Answered: 21   Skipped: 13

ANSWER CHOICES	RESPONSES	
Yes	38.10%	8
No	4.76%	1
No opinion	33.33%	7
If Yes - which one is higher priority, Node or Python?	23.81%	5
TOTAL		21

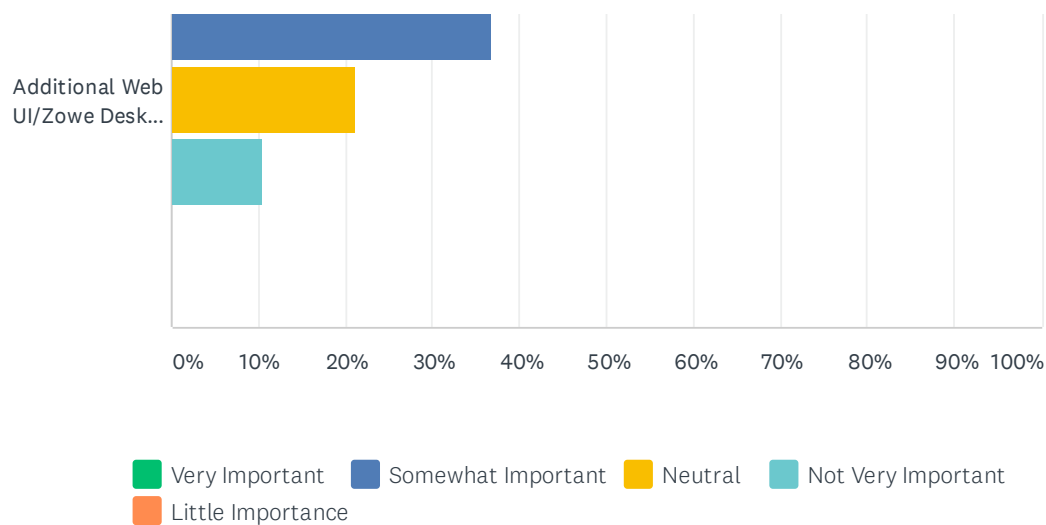## Q39 Please comment in the importance of these possible directions for Zowe

Answered: 19   Skipped: 15

Feedback on Zowe Development Directions for 2H 2020

Expanded REST API management

More CLI plug ins

Zowe delivery of a mobile...

Zowe Explorer support for...

Feedback on Zowe Development Directions for 2H 2020

Legend:
- Very Important
- Somewhat Important
- Neutral
- Not Very Important
- Little Importance

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NEUTRAL	NOT VERY IMPORTANT	LITTLE IMPORTANCE	TOTAL
Expanded REST API management	38.89% 7	33.33% 6	22.22% 4	5.56% 1	0.00% 0	18
More CLI plug ins	22.22% 4	22.22% 4	44.44% 8	11.11% 2	0.00% 0	18
Zowe delivery of a mobile application	5.88% 1	17.65% 3	41.18% 7	11.76% 2	23.53% 4	17
Zowe Explorer support for additional IDEs (other than VS Code)	15.79% 3	42.11% 8	26.32% 5	5.26% 1	10.53% 2	19
Additional Web UI/Zowe Desktop apps	31.58% 6	36.84% 7	21.05% 4	10.53% 2	0.00% 0	19