1. **Is there a recording of this we can have? Can we get a copy if the slide deck?**
   a. Yes. Once ready, the recording with the presentation deck will available on both www.ansible.com/f5 and on F5DevCentral. A link to the recording will also be emailed to all the attendees.

2. **Where can you find the previous webinars?**
   a. www.ansible.com/f5

3. **Is there a recommended minimum BIG-IP OS version to leverage the most functionality via API?**
   a. We recommend using TMOS v12.1. All Ansible F5 modules are validated on TMOS versions 12.1 and above

4. **What is the easiest way to identify active members in the cluster to be able to apply the change only on the master for example ?**
   a. Please refer to the knowledge article here:
      https://support.f5.com/csp/article/K10531487

5. **You talked about new modules; currently I observed some deprecated modules (I had deprecated message in Ansible). How can we retrieve last modules versions ?**
   a. The latest version of modules are available in the devel tree of Ansible:
      https://docs.ansible.com/ansible/devel/modules/list_of_network_modules.html#f5
      . For even more recent modules it's best to visit the F5 GitHub page.

6. **What is the easiest way to identify active members in the cluster to be able to apply the change only on the master for example ? As in cluster environment we do not need to push the configuration on both appliances, what is the best way to do proceed in this kind of environment**
   a. Same as question 4) https://support.f5.com/csp/article/K10531487

7. **All examples I was able to find use /Common/ partition. Do you have an example with partition as an argument? Idea is to create separate environments in separate LTM partitions**
   a. You can specify partition name in any of the modules to deploy the object in a different partition. Check example:

https://github.com/F5Networks/f5-ansible/blob/upstream-2.7/library/modules/bigip_virtual_server.py

8. **What is the IDE that the presenter using? I would be interested in the extensions used as well.**

    a. Visual Studio code (https://code.visualstudio.com). No extensions beyond the defaults were within the demo. Git is built in.

9. **Will it not be backward compatible to use bigsuds library? Why completely remove it? Will it not support SOAP calls anymore?**

    a. Functionality of the module will stay the same, the backend code will just not be using the sdk, but rather REST directly.

    b. Goal is to reduce/remove dependencies.

10. **Too much abstraction when using roles**

    a. Yes roles are meant to abstract playbooks and are used when the same task needs to be repeated in different scenarios. A role can be used to perform those repeable tasks.

11. **If you are specifying what to create in the JSON file and making a rest call, it is same as using modules (even modules are idempotent). How is this declarative?**

    a. In the case where you are specifying what needs to be provided in the JSON file, you are giving the entire declaration and not the order or how BIG-IP should configure it. You are giving the end state and the BIG-IP will figure out how to deploy the end state

12. **When using these AS3 templates, will it always create a new partition? Is creating new partitions best practices? Or can you define a specific partition?**

    a. Yes it will create a new partition which will represent the application. Yes you can define the name of the partition

13. **Can u explain the single API request ....example if u are building a VIP - This needs multiple API calls**

    a. If you use AS3(declarative API) you can do this with one API call:
       https://clouddocs.f5.com/products/extensions/f5-appsvcs-extension/latest/

14. **We use Terraform to manage our BIG-IP LTMs today, what advantages might be gained by migrating to F5's Ansible Playbooks?**
    a. It depends on your workflow and if there are some use cases that you cannot achieve. Also, Ansible F5 modules are officially supported by F5.
15. **Is there any documentation on executing Ansible via Jenkins? Our current pipeline is orchestrated by Jenkins for an application/system deploy and would need to be kicked off that way.**
    a. There should be plenty of community documentation online. You can also take a look at Ansible Tower as well.
16. **How would you structure an Ansible playbook that is deploying a single application across multiple BIG-IP LTMs that require different values (such as IPs) on each of the appliances?**
    a. You can have different variable files for different BIG-IP's OR you can also define variables per host using ansible Host Variables: https://docs.ansible.com/ansible/latest/user_guide/intro_inventory.html#host-variables
17. **How does teardown via Ansible work? It's not maintaining state so the logic has to be defined on how to destroy the resources, correct? How does that work if resources are shared across applications?**
    a. With Ansible modules you can maintain teardown (absent) playbooks. When utilizing AS3, you just declare the Service/Virtual Object as empty.
    b. AS3 is atomic it will deploy or tear down objects after checking dependencies. You can declare the Service/Virtual Object as empty.
18. **How does AS3 handle errors in execution?**
    a. If an error is encountered in execution, no changes are committed to the system due to the Atomic nature of AS3.
19. **Do you see customers automating the creation of Ansible playbooks? We essentially have a custom DSL today that feeds existing automation, so I could see similar behavior to generate the necessary Ansible playbooks**

a. Yes this is indeed possible but most enterprise network administrators still require or expect a human to review changes prior to pushing live. Indeed creation and execution of playbooks is possible, but most do not due to corporate policies or compliance reasons.

20. **Is F5 migrating application-specific iApps to Ansible Playbooks with definitions via AS3?**

    a. AS3 has common templates built in (http, https, tcp, etc). There is not a 1:1 conversion of existing iApps.

21. **How does F5 AS3 via Ansible Playbooks prevent collisions with other application/system deployments on the F5 BIG-IP?**

    a. AS3 is aware if a current declaration is in flight and will notify a subsequent request to retry.

22. **How "kind" are the Ansible Playbooks when configuring LTM objects? If I am removing 2 nodes, and adding 2 more, does it just rip the old nodes right out or is it definable to disable, let connections drain, etc**

    a. No it will not do that it, the ansible playbook will have to handle that explicitly. Using AS3 that will be possible. If the end state was initially defined with nodes 1 and 2 and then a subsequent end state was defined with only nodes 3 and 4, the BIG-IP AS3 will rip out nodes1 and 2 and deploy nodes 3 and 4.

23. **To boil it down, is it correct to say that the Ansible Playbook is simply executing the REST API calls to the AS3 endpoints on the appliances to execute the declaritive AS3 definitions?**

    a. Yes that is correct. AS3 is providing another level of abstraction on how to configure the BIG-IP. Further enabling easier integration into existing playbooks.

24. **Can you explain the tenancy of deployments with AS3? I see it wasn't deployed to the Common partition**

a. Yes the application is not deployed in common partition but in its own partition to be able to logically separate an application. The AS3 can reference objects that are defined in the common partition

25. **If items existed within a partition and then an AS3 declarative document is executed against that partition, would it remove all items not contained within in that declarative definition?**

a. Yes the declaration each time has to have the entire end state that is desired

26. **Can we create and download a .ucs backup using Ansible?**

a. Yes: https://docs.ansible.com/ansible/latest/modules/bigip_ucs_module.html

27. **Can you use this methodology to manage a brown-field environment with Tenants already defined differently than you showed in your example.**

a. With AS3, it needs to manage the entire partition/Tenant. The tenant should not pre-exist. Using the F5 Ansible Modules, brown-field can be manipulated.

28. **For rest API is there any auth you have to setup between ansible and F5? F5 rest API requires additional license?**

a. You can use validate_certs: false in each module to disable authentication. If you need to be able to authenticate then can use validate_certs: true

To validate the SSL certificates of the BIG-IP REST API

- set validate_certs: true
- Generate a public private key pair
- Store the public key on BIG-IP
  (https://support.f5.com/csp/article/K13454#bigipsshdaccept)

b. No additional license is required to use the F5 API

29. **Did you cover the use case where a person needs to deploy a list of Wide-IPs with pool. Is there a way to automate that?**

a. It was not covered in the demo, but you can either loop over the playbook for each wide-ip, or create a loop within the playbook for each wideip and pass the vars into the appropriate place.

30. **Will there be BIG-IP module for creating server_ssl profile?**

a. Yes. There is one coming up in version 2.8.

b. https://github.com/F5Networks/f5-ansible/blob/devel/library/modules/bigip_profile_server_ssl.py

31. How are the f5 credentials passed thru playbook? Will it be encrypted?

a. Using Ansible Vault. The demo showcased uses the 'provider' object in ansible, but you can pass it as a variable file or even using vault – esp. if you want to send secure passwords. Ansible Vault is used for encrypting password information.

32. AS3 and Ansible are competing technologies to do F5 configurations?

a. They do-not compete and work hand in hand, While AS3 can work by itself, it also fits into your Ansible ecosystem and can run via calls through Ansible URI module

33. Is it possible to get declarative def from existing f5 config?

a. No, you must convert the configuration into this state through manual/automated process.

34. Each time when you run AS3 does recreate everything ?

a. No, it is idempotent and will only modify/create things that are needed.

35. For the demo - health checks didn't pass yet - so unless there is a fallback there may be no response from GTM .

a. For an unknown state, the ARECORD should still return.

36. Can we run ansible playbooks from BIG-IQ?

a. Ansible modules are available to run against a BIG-IQ. You can write a playbook to run against a BIG-IQ, however not from Big-IQ.

b. There are some ansible modules you can run against BIG-IQ - https://github.com/F5Networks/f5-ansible/tree/devel/library/modules

37. Can we create objects in Common partition using AS3?

a. No, the application is not deployed in common partition but in its own partition to be able to logically separate an application. The AS3 can reference objects that are defined in the common partition

38. What level of administrative access on the devices is required for Ansible to execute the playbook?

    a. Admin level access is needed

39. Can we create a Virtual server in LTM and ASM politic for the same virtual server ? Is this playbook is ready created ?

    a. Yes that is possible. You can reference the ASM policy in the playbook.
Example: https://galaxy.ansible.com/payalsin/bigip-ansible-asm-policy-upload

40. Can you advise on how one goes from TMSH config or config to creating *.yaml or json file for playbook.

    a. It is best to identify a common use case within your organization and identify the actions needed to complete the task. Then identify the items needed from the supported F5 modules:

    https://docs.ansible.com/ansible/latest/modules/list_of_network_modules.html#f5

41. Can ansible decommission an app it had previously deployed?

    a. Ansible does not keep state. A playbook would have to be written explicitly to decommission the app that was deployed

42. Does it deploy iApps?

    a. Yes, Ansible can be used to deploy iApps. Example:
https://github.com/f5devcentral/bigip-ansible-deploy-iapp

43. Is ansible 2.7 fully supported with BIG-IP TMOSv13 or there are any restrictions ?

    a. The Ansible F5 modules are fully supported and should work with TMOSv13