# Action Plan & Tasks

1. Planning Tasks

* Common Tasks
* Basic Tests & Validation
  + **Outcome:** A decision on the strategy going forward
* Test & validate the chosen strategy with real data and configuration
  + **Outcome:** A **run-book** (step-by-step upgrade process, post upgrade tasks, rollback, etc.)

1. Execution Tasks: Follow the run-book to upgrade each environments

## 1. Planning Tasks

### 1.1. Common Tasks

* Submit ISRP for 2.6
* Prepare Lab for testing
* Review the current backup/restore process
* Review existing CRDs, customization (nginx, redis) and potential impact
* ~~Review authentication and identity~~
* Review 2.6 release notes
* Evaluate sizing and request new DBs for the gateway component (1 per deployment)
  + [Minimum](https://docs.redhat.com/en/documentation/red_hat_ansible_automation_platform/2.6/html-single/rpm_installation/index#red_hat_ansible_automation_platform_system_requirements) 16GB RAM, 4 CPU, IOPS 3000 Disk, 100GB for /var/lib/pgsql
* Customers & Integration (Lightning, Custom UI, Jenkins, SNOW)
  + Review REST endpoints in used and payloads sent and expected in return
  + Document the changes needed
  + Plan the communication

### 1.2 Basic Tests & Validation

* Basic test and validation of the chosen approach in LAB
* Document the step by step upgrade process
* Document team dependencies and responsibilities/expectations

### 

### 1.3 Test and Validate the chosen with real data & configuration

* Test and validate the chosen strategy with real data & configuration in LAB
  + Ensure the following before upgrading
    - **Create a local administrator account** and verify that you can log in
    - Perform a full backup of existing environment
  + Upgrade the deployment
  + Perform and document the post upgrade tasks ([LINK](https://docs.redhat.com/en/documentation/red_hat_ansible_automation_platform/2.5/html-single/installing_on_openshift_container_platform/index#aap-post-upgrade))
    - ~~Users migration & account linking~~
    - Verify the assigned permissions for all teams in the platform-wide authentication gateway immediately after the upgrade ([LINK](https://docs.redhat.com/en/documentation/red_hat_ansible_automation_platform/2.6/html-single/planning_your_upgrade/index#ref-upgrade-post-upgrade))
    - AUTH\_LDAP\_USER\_FLAGS\_BY\_GROUP ***is\_active*** flag is not available in platform gateway and therefore is not migrated. Instead you can use a deny rule to prevent access to the system by users. ([LINK](https://docs.redhat.com/en/documentation/red_hat_ansible_automation_platform/2.6/html/access_management_and_authentication/gw-configure-authentication#controller-set-up-LDAP))
    - etc.
* Document/Update the step by step upgrade process
* Document/Update the team dependencies including teams involved, PoC and expectations.
* Define and validate the rollback strategy
* ~~Define and validate AAP deployments replication process (side-by-side)~~
* ~~Define and validate the cut over process (side-by-side)~~
* Prepare customer communications
* Re-evaluate capacity of components
  + *AAP 2.5+ deploys a differing architecture wrt the amount of pods in use and their requirements. For AAP 2.4 on OCP, Citi and Red Hat performed stringent performance and capacity planning to correctly size and scale the different components of AAP on OCP (see* [*RCA*](https://docs.google.com/document/d/1c7qFvYnBGaL1zQOc-pOXu5SDqBOyDgCbC0dtBo3DNQ4/edit#heading=h.66y4kqbj468a)*). This should be performed again to correctly plan the capacity needed in total and per namespace for the upgraded deployments.*
  + *Previously with AAP 2.4 we scaled the web pods to handle the volume of incoming API requests to each AAP deployment. With 2.5+ architecture we may need to scale both the web and gateway components accordingly, and this should be taken into consideration during capacity planning.*
* Automate where possible
* Finalize the runbook
  + Upgrade process, rollback, post upgrade tasks, Teams PoC & Expectations, etc.

## 2. Execution Tasks

Execute the runbook in each environment (DEV, UAT, PROD)

### 2.1 Prerequisites

* AAP 2.4 & 2.x certified and available for installation
* Databases
  + A DB for each gateway component
    - [Minimum](https://docs.redhat.com/en/documentation/red_hat_ansible_automation_platform/2.6/html-single/rpm_installation/index#red_hat_ansible_automation_platform_system_requirements) 16GB RAM, 4 CPU, IOPS 3000 Disk, 100GB for /var/lib/pgsql
  + A DB for each replica (side-by-side only)
* Persistent Storage for backup & restore (if applicable)
* Enough capacity for running original and replicas (side-by-side 1 cluster only)