

# KIP-357: Add support to list ACLs per principal

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## Status

**Current state:** *Adopted*

**Discussion thread:** [here](#)

**JIRA:** [here](#)

Please keep the discussion on the mailing list rather than commenting on the wiki (wiki discussions get unwieldy fast).

## Motivation

From [JIRA description](#)

*"Currently the `kafka-acls` command has a `--list` option that can list per resource. In order to look at the ACLs for a particular principal the user needs to iterate through the entire list to figure out what privileges a particular principal has been granted. An option to list the ACL per principal would simplify this process."*

We propose new optional argument "--principal" to list the ACLs for the specified principals.

## Public Interfaces

kafka-acls.sh script with "--list" option supports optional argument "--principal" with the following specification

```
val listPrincipalsOpt = parser.accepts("principal", "List ACLs for the specified principal. principal is in
principalType:name format." +
  " Note that principalType must be supported by the Authorizer being used. Multiple principal options can
be passed.")
  .withOptionalArg()
  .describedAs("principal")
  .ofType(classOf[String])
```

Example:

```
>> sh kafka-acls.sh --authorizer-properties zookeeper.connect=localhost:2181 --list --principal User:User1 --
principal User:User2
ACLS for principal `User:User1`
Current ACLs for resource `Group:PREFIXED:TEST_GROUP`:
    User:User1 has Allow permission for operations: Read from hosts: *

Current ACLs for resource `Topic:PREFIXED:TEST_TOPIC`:
    User:User1 has Allow permission for operations: Read from hosts: *
    User:User1 has Allow permission for operations: Create from hosts: *
    User:User1 has Allow permission for operations: Write from hosts: *
    User:User1 has Allow permission for operations: Describe from hosts: *

ACLS for principal `User:User2`
Current ACLs for resource `Group:PREFIXED:TEST_GROUP`:
    User:User2 has Allow permission for operations: Read from hosts: *

Current ACLs for resource `Topic:PREFIXED:TEST_TOPIC`:
    User:User2 has Allow permission for operations: Read from hosts: *
    User:User2 has Allow permission for operations: Create from hosts: *
    User:User2 has Allow permission for operations: Write from hosts: *
    User:User2 has Allow permission for operations: Describe from hosts: *
```

## Proposed Changes

### AclCommand with Authorizer Interface:

We have a method in Authorizer interface to get acls for a given principal.  
We will use this method to fetch acls and filter the results for the requested Resources.

```
Authorizer {
def getAcls(principal: KafkaPrincipal): Map[Resource, Set[Acl]]
}
```

### AclCommand with AdminClient API:

Currently AdminClient API doesn't have a API to fetch acls for a given principal.  
So while using AclCommand with AdminClient API ([KIP-332: Update AclCommand to use AdminClient API](#)),  
we just filter the results returned from the describeAcls API.

We can add new AdminClient API/new DescribeAclsRequest if required in future.

## Compatibility, Deprecation, and Migration Plan

- There won't be any change of current behavior.