# 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.