

AclResource

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AclResource

Kind: Interface**Source:** `packages/microservices/external/kafka.interface.ts`**Part of:** [Microservices](#)

`AclResource` describes a Kafka resource targeted by an access control list (ACL) rule. It identifies the resource category, its name, and the pattern Kafka should use when matching the resource name during authorization.

Properties

Property	Type
<code>resourceType</code>	<code>AclResourceTypes</code>
<code>resourceName</code>	<code>string</code>
<code>resourcePatternType</code>	<code>ResourcePatternTypes</code>

Diagram

```
graph LR
  ACL[Kafka ACL Rule] --> Resource[AclResource]
  Resource --> Type[resourceType: AclResourceTypes]
  Resource --> Name[resourceName: string]
  Resource --> Pattern[resourcePatternType: ResourcePatternTypes]
  Type --> KafkaResource[Kafka resource category]
  Pattern --> Matching[Kafka resource matching behavior]
```

Usage

```
import {
  AclResource,
```

```

    AclResourceTypes,
    ResourcePatternTypes,
  } from './kafka.interface';

const topicResource: AclResource = {
  resourceType: AclResourceTypes.TOPIC,
  resourceName: 'orders',
  resourcePatternType: ResourcePatternTypes.LITERAL,
};

// Use the resource definition when creating or filtering Kafka ACLs.
await admin.createAcls({
  acl: {
    resource: topicResource,
    principal: 'User:order-service',
    host: '*',
    operation: 'READ',
    permissionType: 'ALLOW',
  },
});

```

AI Coding Instructions

- Provide all three fields when constructing an `AclResource` ; they define how Kafka locates the protected resource.
- Use `AclResourceTypes` and `ResourcePatternTypes` enum values instead of hard-coded strings.
- Use `LITERAL` matching for a single, exact topic or consumer group name; use prefix matching only when broader access is intentional.
- Ensure `resourceName` matches the Kafka resource naming convention used by the target cluster.
- Pass this interface as the `resource` portion of Kafka ACL create, delete, or filter operations.