

Authorizing Clients



Bogdan Sucaciu

SOFTWARE ENGINEER

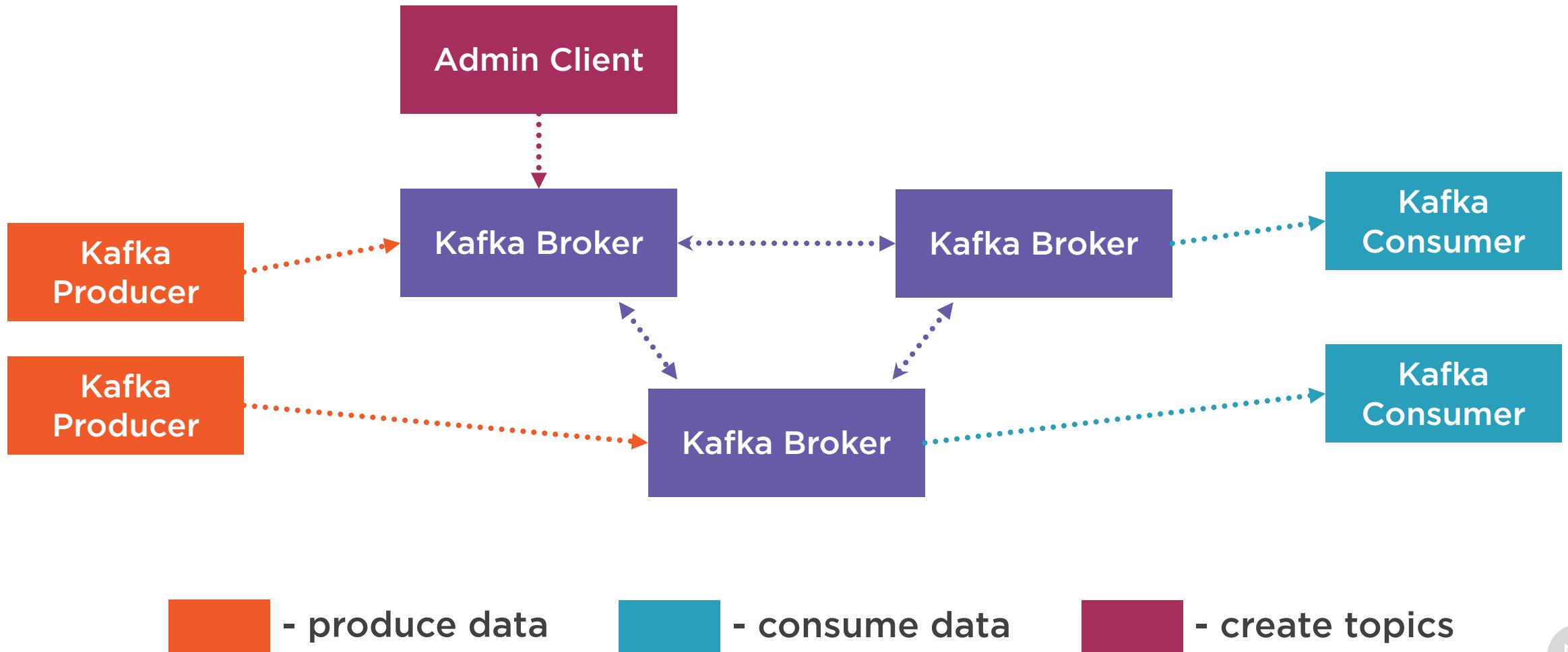
@BSucaciu bsucaciu.com



Authorizing Clients



Authorizing Clients

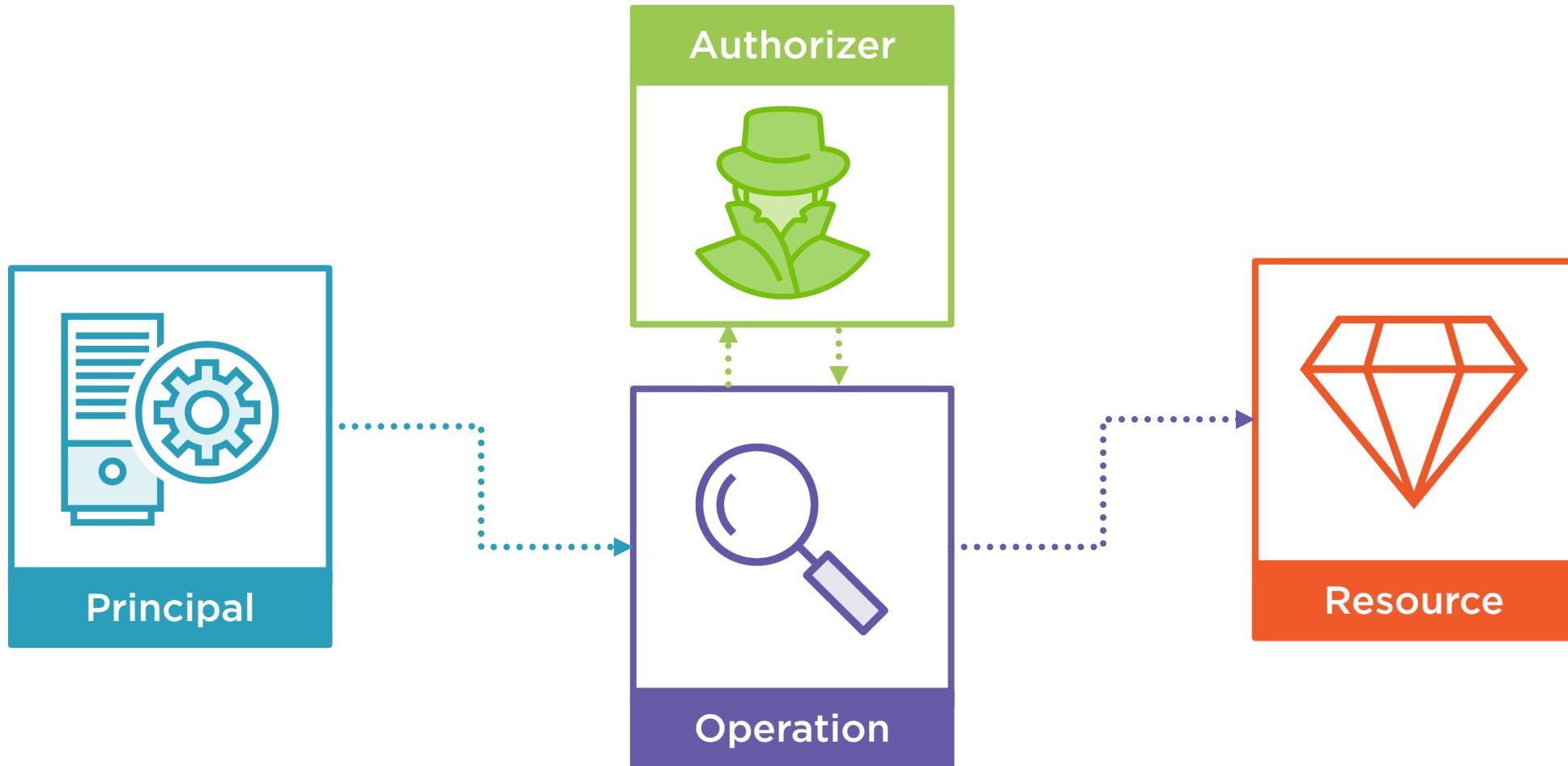


Access Control Lists

(ACL_S)



Access Control Lists



Resources

Topic	TOPIC_AUTHORIZATION_FAILED
Group	GROUP_AUTHORIZATION_FAILED
Cluster	CLUSTER_AUTHORIZATION_FAILED
Transactional ID	TRANSACTIONAL_ID_AUTHORIZATION_FAILED
Delegation Token	



Resource Matching

	LITERAL	PREFIXED
test	✓	✓
test_demo	✗	✓
demo	✗	✗

Resource Type: Topic

Resource Name: test



Resource Matching

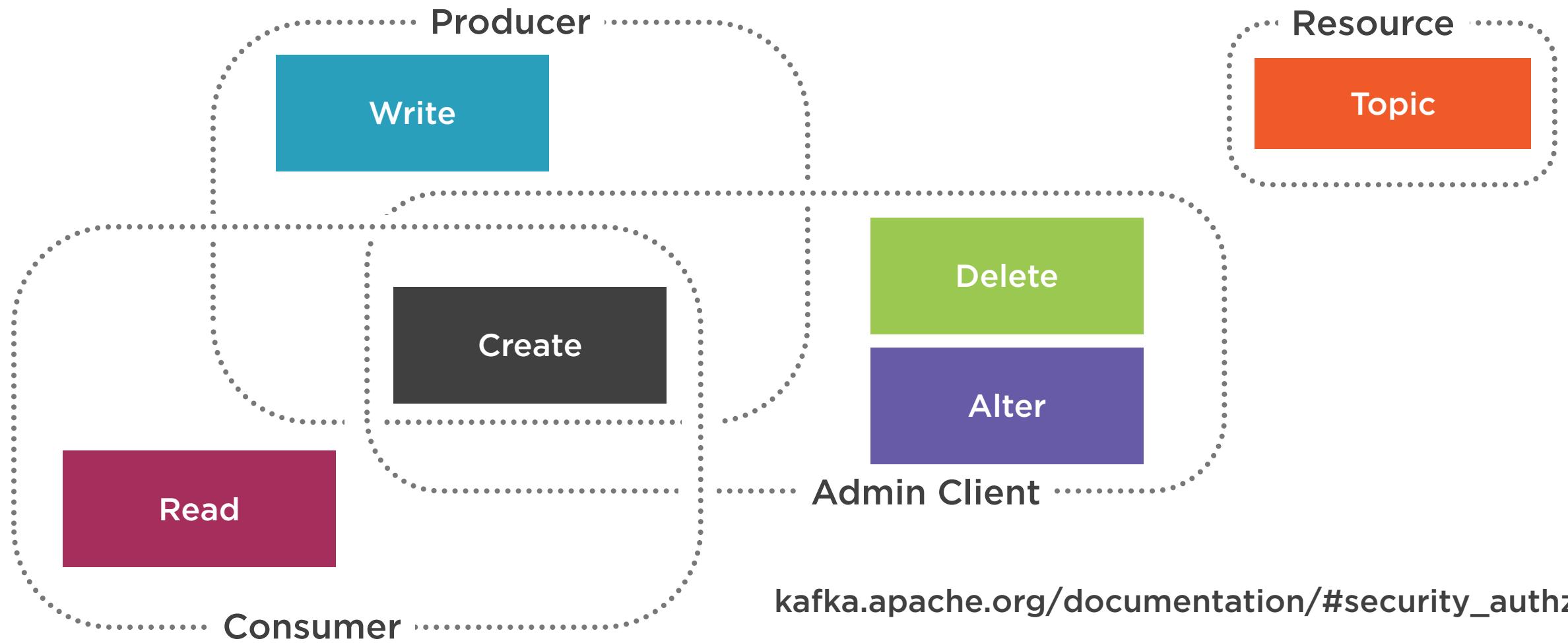
	LITERAL	PREFIXED
test	✓	✓
test_demo	✓	✓
demo	✓	✓

Resource Type: Topic

Resource Name: *



Operations



kafka.apache.org/documentation/#security_authz



Principals

mTLS

CN=connect, OU=community, O=Pluralsight, L=Utah, S=UT, CO=US

SASL PLAIN

username: consumer

SASL SCRAM

--user producer

SASL
OAUTHBEARER

claim_sub = broker

SASL GSSAPI

kafka/broker-1@PLURALSIGHT.COM

principal.builder: CustomPrincipalBuilder



Authorizer

>= Apache Kafka 2.4

```
authorizer.class.name = kafka.security.authorizer.AclAuthorizer
```

broker.properties

< Apache Kafka 2.4

```
authorizer.class.name = kafka.security.auth.SimpleAclAuthorizer
```

broker.properties



Authorizer

broker.properties

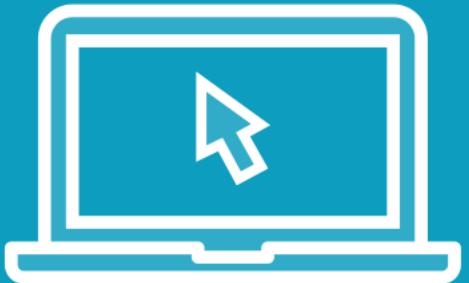
```
authorizer.class.name = kafka.security.authorizer.AclAuthorizer
```

```
super.users = User:admin, User:kafka/broker-1@PLURALSIGHT.COM
```

```
allow.everyone.if.no.acl.found = true
```



Demo

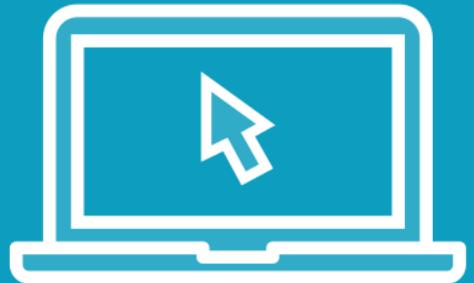


ACLAUTHORIZER

Authorize Producer and Consumer



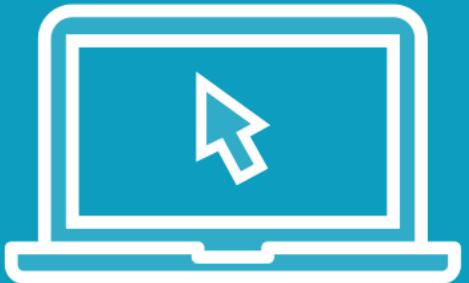
Demo



Authorize Kafka Streams



Demo



Authorize Kafka Connect



Choosing the Right Solution



Encryption

Always Clients /
Maybe Inter
Broker

Research E2E
Encryption



Authentication

SASL OAuthBearer

SASL PLAIN

mTLS

SASL SCRAM

SASL GSSAPI

Default Set up Complexity



Authentication

SASL OAuthBearer

SASL PLAIN

mTLS

SASL SCRAM

SASL GSSAPI

Default Security Level



Authorization

Deny by Default

Allow by Default



Get in Touch with Me



Bogdan Sucaciу 
Pluralsight Author

[Follow](#)

Pluralsight

@BSucaciу

linkedin.com/in/bogdan-sucaciу

bsucaciу.com



Keep Yourself up-to-date

KAFKA SUMMIT

Apache Kafka Meetups

