### acm: certificates\_expiry

Are certificates expiring soon?

Expired certificates can make services inaccessible for your customers.

Region	Certificate	Message	Action
us-east-1	somedomain.com l 4a2750cd-35bb-4970- a0d6-270fc81d2247	Certicate is valid for more than 3 months	All good
ap- south-1	somedomain.com l 4a2750cd-35bb-4970- a0d6-270fc81d2247	Certicate is valid for more than 3 months	All good
ap- south-1	somedomain.com   4a2750cd-35bb-4970- a0d6-270fc81d2247	Certicate is valid for more than 3 months	All good

### ec2: security\_groups\_open\_to\_world

Are there any security groups open to world?

Security group open to world posses serious security threat so we need to allow only intended parties to access

Region	SecurityGroup	Message	Action
us-east-2	launch-wizard-2   sg-1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
us-east-2	demo-sg   sg- 1234567abc	Security group is restricted to few IP ranges	All good
us-east-2	launch-wizard-1 l sg-1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
us-east-1	launch-wizard-2 l sg-1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
us-east-1	sg_all   sg- 1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
us-east-1	sg_csr   sg- 1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
us-east-1	somesg   sg- 1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
us-east-1	launch-wizard-3 l sg-1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
ap-south-	WinServer   sg- 1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.

ap-south-	SEC_outside 1a l	Security group is open to	Remove rule containing
1	sg-1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
ap-south-	Application 1al sg-1234567abc	Security group is restricted to few IP ranges	All good
ap-south-	sg_shared   sg- 1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
ap-south-	SomeApp 1a   sg- 1234567abc	Security group is restricted to few IP ranges	All good
ap-south-	SEC_Inside1a l sg-1234567abc	Security group is restricted to few IP ranges	All good
ap-south-	Database 1a l sg- 1234567abc	Security group is restricted to few IP ranges	All good
ap-south-	Core Services 1a l sg-1234567abc	Security group is restricted to few IP ranges	All good
ap-south-	WAN 1a l sg- 1234567abc	Security group is restricted to few IP ranges	All good
	replication- bastion   sg- 1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
_	rds-launch-wizard   sg-1234567abc	Security group is restricted to few IP ranges	All good
ap- southeast- 1	DMS   sg- 1234567abc	Security group is restricted to few IP ranges	All good
	BastionSG   sg- 1234567abc	Security group is restricted to few IP ranges	All good
ap- southeast- 1	launch-wizard-1 l sg-1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
	RDS   sg- 1234567abc	Security group is restricted to few IP ranges	All good
eu-west-1	launch-wizard-1 l sg-1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.
eu-west-1	WinServer   sg- 1234567abc	Security group is open to entire world	Remove rule containing IP range: 0.0.0.0/0.

and committy around wide nort range

#### cc2. security\_groups\_wrue\_port\_range

Are there any security groups with wide range of ports?

Security group should not expose wide range of port as it will be valuerable for port scan attacks

Region	SecurityGroup	Message	Action
us-east-2	launch-wizard-2   sg- 1234567abc	Exposes only specific ports	All good
us-east-2	demo-sg   sg- 1234567abc	Exposes only specific ports	All good
us-east-2	launch-wizard-1   sg- 1234567abc	Exposes only specific ports	All good
us-east-1	launch-wizard-2   sg- 1234567abc	Exposes only specific ports	All good
us-east-1	sg_all   sg- 1234567abc	Exposes wide port range	Remove rule containing IP protocol: -1
us-east-1	sg_csr   sg- 1234567abc	Exposes only specific ports	All good
us-east-1	somesg   sg- 1234567abc	Exposes only specific ports	All good
us-east-1	launch-wizard-3   sg- 1234567abc	Exposes only specific ports	All good
ap-south-	WinServer   sg- 1234567abc	Exposes only specific ports	All good
ap-south-	SEC_outside 1a   sg- 1234567abc	Exposes only specific ports	All good
ap-south-	Application 1alsg- 1234567abc	Exposes only specific ports	All good
ap-south-	sg_shared   sg- 1234567abc	Exposes wide port range	Remove rule containing IP protocol: -1
ap-south-	SomeApp 1a   sg- 1234567abc	Exposes only specific ports	All good
ap-south-	SEC_Inside1a   sg- 1234567abc	Exposes wide port range	Remove rule containing IP protocol: -1
ap-south-	Database 1a   sg- 1234567abc	Exposes only specific ports	All good
ap-south-	Core Services 1a l sg- 1234567abc	Exposes wide port range	Remove rule containing IP protocol: -1

ap-south-	WAN 1a   sg- 1234567abc	Exposes wide port range	Remove rule containing IP protocol: -1
ap- southeast- 1	replication-bastion l sg-1234567abc	Exposes only specific ports	All good
	rds-launch-wizard l sg-1234567abc	Exposes only specific ports	All good
ap- southeast- 1	DMS   sg-1234567abc	Exposes only specific ports	All good
	BastionSG   sg- 1234567abc	Exposes only specific ports	All good
	launch-wizard-1   sg- 1234567abc	Exposes only specific ports	All good
ap- southeast- 1	RDS   sg-1234567abc	Exposes only specific ports	All good
eu-west-1	launch-wizard-1   sg- 1234567abc	Exposes only specific ports	All good
eu-west-1	WinServer   sg- 1234567abc	Exposes only specific ports	All good

### iam: admin\_count

Are there too many admins for the account?

It is hard to manage security goals when there too many admins as chances of mistakes increases

AdminUsers	Message	Action
user, user	Account has 2 admins	All good

#### iam: password\_policy

Is account password policy following best practices?

It is important to have secure password policy as leaked or weak passwords can give direct access to attackers

Option	Message	Action
Minimum Password Length	This has a somedomain.commended value	All good
Require Symbols	Already Enabled	All good
Require Numbers	Already Enabled	All good
Require Uppercase Characters	Already Enabled	All good
Require Lowercase Characters	Already Enabled	All good
Expire Passwords	Already Enabled	All good
Max Password Age	This has a somedomain.commended value	All good
Password Reuse Prevention	New password shouldn't be same as at least last 3 used passwords	Set this to 3
Hard Expiry	User should contact the admin to reset the expired password	Set this to true. Use caution here if there is only admin for your account then don't set this

# iam: root\_user\_access\_keys\_active

Are there any root user access keys active?

Root user access keys are unrestrictable hence shouldn't be used as damage will be determental if they gets leaked

User	Message	Action
<root_account></root_account>	Root user access keys are not active	All good

### iam: cross\_accounts\_without\_external\_id

Are there accounts without ExternalId?

Roles	Message	Action
somedomain.commandRoleFor	Maxagad Imstafaasd does not have ExternalId	Add an ExternalId
apexDemoProject_lambda_fun	cathor can be a carried to the carri	Add an ExternalId
AppDiscovery	Account undefined does not have ExternalId	Add an ExternalId
aws-ec2-spot-fleet-tagging-role	Account undefined does not have ExternalId	Add an ExternalId
aws-elasticbeanstalk-ec2-role	Account undefined does not have ExternalId	Add an ExternalId
aws-elasticbeanstalk-service- role	Account undefined does not have ExternalId	Add an ExternalId
AWSServiceRoleForAmazonE	lasticountaliste filoed does not have ExternalId	Add an ExternalId
AWSServiceRoleForAmazonC	uardDuny undefined does not have ExternalId	Add an ExternalId
AWSServiceRoleForAutoScali	naccount undefined does not have ExternalId	Add an ExternalId
AWSServiceRoleForEC2Spot	Account undefined does not have ExternalId	Add an ExternalId
AWSServiceRoleForEC2Spoth	lectcount undefined does not have ExternalId	Add an ExternalId
AWSServiceRoleForECS	Account undefined does not have ExternalId	Add an ExternalId
AWSServiceRoleForElastiCac	heaccount undefined does not have ExternalId	Add an ExternalId
AWSServiceRoleForElasticLo	ad Rackamping defined does not have Externalld	Add an ExternalId
AWSServiceRoleForOrganizat	ionscount undefined does not have ExternalId	Add an ExternalId
AWSServiceRoleForRDS	Account undefined does not have ExternalId	Add an ExternalId
AWS_Events_Invoke_Step_Fu	n <b>Ationu<u>n</u>805/12 fi82/1</b> does not have ExternalId	Add an ExternalId
aws_ssm	Account undefined does not have ExternalId	Add an ExternalId

Cisco_CSR_EEM	Account undefined does not have ExternalId	Add an ExternalId
CloudwatchLogAgent	Account undefined does not have ExternalId	Add an ExternalId
cloudwatchlogpush	Account undefined does not have ExternalId	Add an ExternalId
cloud_report	Account 147967597763 has ExternalId	All good
CognitoAccessForAmazonES	Account undefined does not have ExternalId	Add an ExternalId
Cognito_useridentitypoolAuth_	Rodeount undefined does not have ExternalId	Add an ExternalId
Cognito_useridentitypoolUnaut	hARcolont undefined does not have ExternalId	Add an ExternalId
Cognito_dev_tensult_customers	AuthuRtolmdefined does not have ExternalId	Add an ExternalId
Cognito_dev_tensult_customers	Moautht Robefined does not have ExternalId	Add an ExternalId
Cognito_myIdPool1Unauth_Ro	Account undefined does not have ExternalId	Add an ExternalId
Cognito_myIdPool1Unauth_Ro	Acount undefined does not have ExternalId	Add an ExternalId
Cognito_usertestAuth_Role	Account undefined does not have ExternalId	Add an ExternalId
Cognito_usertestUnauth_Role	Account undefined does not have ExternalId	Add an ExternalId
Cognito_testpoolAuth_Role	Account undefined does not have ExternalId	Add an ExternalId
Cognito_testpoolUnauth_Role	Account undefined does not have ExternalId	Add an ExternalId
Cognito_test_customersAuth_R	Alecount undefined does not have ExternalId	Add an ExternalId
Cognito_test_customersAuth_R	<b>Ale2</b> ount undefined does not have ExternalId	Add an ExternalId
Cognito_test_customersUnauth	Radount undefined does not have ExternalId	Add an ExternalId
config-role-ap-south-1	Account undefined does not have ExternalId	Add an ExternalId

userCloudWatchMetric	Account undefined does not have	Add an
dsereroud waterinvieure	ExternalId	ExternalId
dms-access-for-tasks	Account undefined does not have ExternalId	Add an ExternalId
dms-cloudwatch-logs-role	Account undefined does not have ExternalId	Add an ExternalId
dms-vpc-1234567abc	Account undefined does not have ExternalId	Add an ExternalId
dynamoDbReadAccess	Account undefined does not have ExternalId	Add an ExternalId
ec2-read-role	Account 173268405833 has ExternalId	All good
EC2FullAccess	Account undefined does not have ExternalId	Add an ExternalId
EC2SSMRole	Account undefined does not have ExternalId	Add an ExternalId
EC2_Full	Account undefined does not have ExternalId	Add an ExternalId
ecsInstanceRole	Account undefined does not have ExternalId	Add an ExternalId
flowlogsRole	Account undefined does not have ExternalId	Add an ExternalId
user-test-delete	Account undefined does not have ExternalId	Add an ExternalId
ImageResizerLambda	Account undefined does not have ExternalId	Add an ExternalId
KibanaUserGroup-SMS-Role	Account undefined does not have ExternalId	Add an ExternalId
lambda_basic_execution	Account undefined does not have ExternalId	Add an ExternalId
user-windows-ssm	Account undefined does not have ExternalId	Add an ExternalId
migrationhub-discovery	Account undefined does not have ExternalId	Add an ExternalId
migrationhub-dms	Account undefined does not have ExternalId	Add an ExternalId
migrationhub-sms	Account undefined does not have	Add an

# **Security Report**

	ExternalId	ExternalId
nessus-role	Account undefined does not have ExternalId	Add an ExternalId
rds-monitoring-role	Account undefined does not have ExternalId	Add an ExternalId
S3ReadAccess	Account undefined does not have ExternalId	Add an ExternalId
SampleForLeanring	Account undefined does not have ExternalId	Add an ExternalId
stepFunctionsLamdaRole	Account undefined does not have ExternalId	Add an ExternalId

# iam: users\_access\_keys\_unused

Are there any user access keys unused?
It is important to delete unused or unneeded access keys as it reduces risk of
misusing them

User	Message	Action
user	User access key 1 is unused	Delete unused user access key 1
user	User access key 1 is unused	Delete unused user access key 1
usera	User access key 1 is unused	Delete unused user access key 1
user	User access key 1 is actively used	All good
user	User access key 1 is actively used	All good
user-dev	User access key 1 is actively used	All good
user	User access key 1 is actively used	All good

### iam: users\_access\_keys\_old

Are use	er access keys are too old?			
It is important to rotate access keys regularly as it will reduce improper use				
User	Ser Message Action			
user	User access key 1 is not rotated from last 180 days	Rotate user access key 1		
user	User access key 1 is rotated within last 180 days	All good		
usera	User access key 1 is rotated within last 180 days	All good		
user	User access key 1 is rotated within last 180 days	All good		
user	User access key 1 is rotated within last 180 days	All good		
user- dev	User access key 1 is rotated within last 180 days	All good		
user	User access key 1 is not rotated from last 180	Rotate user access key		

### iam: user\_accounts\_mfa\_enabled

Are there any user access keys unused?

It is important to delete unused or unneeded access keys as it reduces risk of misusing them

User	Message	Action
user	User account is MFA enabled	All good
user	User account is MFA enabled	All good
user	User account is MFA enabled	All good
usera	User account is MFA enabled	All good
user	User account is MFA enabled	All good
user	User account is MFA enabled	All good
user	User account is MFA enabled	All good
user-dev	User account is MFA enabled	All good
user	User account is MFA enabled	All good
user	User account is MFA enabled	All good

#### rds: default\_security\_groups\_used

Are there any default security groups used for RDS instances?

Default security groups are open to world by default and requires extra setup make them secure

Region	Instance	Message	Action
		u vita di managaran	Use custom security group instead default security group

#### rds: default\_vpcs\_used

Are there any default vpc used for RDS instances?

Default vpcs are open to world by default and requires extra setup make them secure

Region	Instance	Message	Action
us-west-1	someapp-123456abc	Default VPC is not used	All good

#### rds: encryption\_enabled

Is encryption enabled for RDS instances?

It is important to encrypt data at rest

Region	Instance	Message	Action
	1 1		Enable storage ecryption at rest for the instace

### rds: publically\_accessible

Are there any publically accessible RDS instances?

It is important to restrict RDS instances for private access only for most of the usecases

Region	Instance	Message	Action
us-west-1	someapp-123456abc	RDS instance is not publically accessible	All good

#### trails: cloud\_trails\_bucket\_access\_logs

Are access logs enabled for buckets containing Cloud Trails?

Cloud trails contains important security information so we need to limit access to them and also enable access logs for such buckets

Bucket	Message	Action
dev.tensult.cloudtrail	Access logs are not enabled	Enabled access logs

### trails: cloud\_trails\_bucket\_deletes\_mfa\_enabled

Is deleting cloud trails protected by MFA?

Cloud trails deletes should be MFA enabled so that attacker won't able to delete them

Bucket	Message	Action
dev.tensult.cloudtrail	Deletes are not MFA enabled	Enable MFADelete

### trails: cloud\_trails\_enabled

Is cloud trails enabled for account?

Cloud trails helps understand who did what and this is utmost important when a security breach happens

Region	CloudTrails	Message	Action
us-east-2	cloudtrail-dev	Cloud trails are enabled	All good
us-east-1	cloudtrail-dev	Cloud trails are enabled	All good
us-west-1	cloudtrail-dev	Cloud trails are enabled	All good
us-west-2	cloudtrail-dev	Cloud trails are enabled	All good
ca-central-1	cloudtrail-dev	Cloud trails are enabled	All good
ap-south-1	cloudtrail-dev	Cloud trails are enabled	All good
ap-northeast-2	cloudtrail-dev	Cloud trails are enabled	All good
ap-southeast-1	cloudtrail-dev	Cloud trails are enabled	All good
ap-southeast-2	cloudtrail-dev	Cloud trails are enabled	All good
ap-northeast-1	cloudtrail-dev	Cloud trails are enabled	All good
eu-central-1	cloudtrail-dev	Cloud trails are enabled	All good
eu-west-1	cloudtrail-dev	Cloud trails are enabled	All good
eu-west-2	cloudtrail-dev	Cloud trails are enabled	All good
sa-east-1	cloudtrail-dev	Cloud trails are enabled	All good

ap-northeast-1

eu-central-1

eu-west-1

eu-west-2

sa-east-1

### trails: cloud\_trails\_encryption\_at\_rest

cloudtrail-dev

cloudtrail-dev

cloudtrail-dev

cloudtrail-dev

cloudtrail-dev

Are Cloud trails encrypted at rest?					
Critical data should always be encrypted at rest					
Region	Region CloudTrail Message Action				
us-east-2	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		
us-east-1	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		
us-west-1	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		
us-west-2	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		
ca-central-1	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		
ap-south-1	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		
ap-northeast-2	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		
ap-southeast-1	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		
ap-southeast-2	cloudtrail-dev	Encryption not enabled	Enable encryption at rest		

Encryption not enabled

Enable encryption at rest

ap-southeast-1

ap-southeast-2

ap-northeast-1

eu-central-1

eu-west-1

eu-west-2

sa-east-1

#### trails: cloud\_trails\_global\_service\_events

cloudtrail-dev

cloudtrail-dev

cloudtrail-dev

cloudtrail-dev

cloudtrail-dev

cloudtrail-dev

cloudtrail-dev

Are global service events included in CloudTrails? We need to enable this option to keep track of events from global service like IAM CloudTrail Region Message Action us-east-2 cloudtrail-dev Global service events are included All good cloudtrail-dev All good us-east-1 Global service events are included Global service events are included All good cloudtrail-dev us-west-1 cloudtrail-dev All good Global service events are included us-west-2 All good cloudtrail-dev Global service events are included ca-central-1 ap-south-1 All good cloudtrail-dev Global service events are included ap-northeast-2 cloudtrail-dev Global service events are included All good

Global service events are included

All good

# trails: cloud\_trails\_log\_validation

Is log file validation enabled for cloud trails?

Cloud trails helps understand who did what so enabling log file validation keep their integrity intact

Region	CloudTrail	Message	Action
us-east-2	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
us-east-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
us-west-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
us-west-2	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
ca-central-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
ap-south-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
ap-northeast-2	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
ap-southeast-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
ap-southeast-2	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
ap-northeast-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
eu-central-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
eu-west-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
eu-west-2	cloudtrail-dev	Log validation is enabled for the cloud trail	All good
sa-east-1	cloudtrail-dev	Log validation is enabled for the cloud trail	All good

### vpc: flow\_logs\_enabled

Is flow logs enabled for vpc?

VPC flow logs tells about the request patterns and helps to detect security threats

Region	Vpc	Message	Action
us-west-1	vpc- 1234567abc		Enable vpc flow logs for debugging access requests to the VPC
ap-south-	vpc- 1234567abc	VPC flow logs are not enabled	Enable vpc flow logs for debugging access requests to the VPC
ap-south-	vpc- 1234567abc	VPC flow logs are not enabled	Enable vpc flow logs for debugging access requests to the VPC
ap-south-	vpc- 1234567abc	VPC flow logs are not enabled	Enable vpc flow logs for debugging access requests to the VPC
	vpc- 1234567abc	VPC flow logs are enabled	All good
	vpc- 1234567abc		Enable vpc flow logs for debugging access requests to the VPC
	vpc- 1234567abc	VPC flow logs are not enabled	Enable vpc flow logs for debugging access requests to the VPC
	vpc- 1234567abc	VPC flow logs are not enabled	Enable vpc flow logs for debugging access requests to the VPC

### vpc: subnets\_with\_igw\_route

Which subnets have route to public?

It is important to know which subnets have routes to public and can somedomain.come valuerable to attacks. Also sometimes we misconfigure private subnets with public routes

Region	Subnet	Message	Action
us-east-1	default-east-1-1a l subnet-abc123	Subnet has route to the world	If the subnet is private then it shouldn't have route to the world
us-west-1	dms-subnet- abc123   subnet- abc123	Subnet does not have route to the world	All good
us-west-1	dms-subnet-	Subnet does not	All good

	abc123   subnet-	have route to the	
	abc123	world	
us-west-1	rds-subnet-abc123   subnet-abc123	Subnet does not have route to the world	All good
us-west-1	rds-subnet-abc123   subnet-abc123	Subnet does not have route to the world	All good
ap-south-	sb_shared_1b l subnet-abc123	Subnet does not have route to the world	All good
ap-south-	sb_secure_In_1a l subnet-abc123	Subnet does not have route to the world	All good
ap-south-	sb_secure_out_1a   subnet-abc123	Subnet does not have route to the world	All good
ap-south-	sb_secure_App_1a   subnet-abc123	Subnet does not have route to the world	All good
ap-south- 1	sb_Transit_1b   subnet-abc123	Subnet has route to the world	If the subnet is private then it shouldn't have route to the world
ap-south- 1	sb_Transit-1a l subnet-abc123	Subnet has route to the world	If the subnet is private then it shouldn't have route to the world
ap-south- 1	default_1b   subnet-abc123	Subnet has route to the world	If the subnet is private then it shouldn't have route to the world
ap-south-	sb_shared_1a l subnet-abc123	Subnet does not have route to the world	All good
ap- southeast- 1	public 1   subnet- abc123	Subnet has route to the world	If the subnet is private then it shouldn't have route to the world
ap- southeast- 1	private 2   subnetabc123	Subnet does not have route to the world	All good
_	Private2-Slave I subnet-abc123	Subnet does not have route to the	All good

# **Security Report**

1		world	
ap- southeast- 1	rds_sub1   subnet- abc123	Subnet does not have route to the world	All good
	Private1-DMS   subnet-abc123	Subnet does not have route to the world	All good
	replication_sub   subnet-abc123	Subnet does not have route to the world	All good
ap- southeast- 1	private 1   subnetabc123	Subnet does not have route to the world	All good
ap- southeast- 1	public 1   subnet- abc123	Subnet does not have route to the world	All good
	Private1-Slave I subnet-abc123	Subnet does not have route to the world	All good
ap- southeast- 1	rds_sub2   subnet-abc123	Subnet does not have route to the world	All good