

# Configure SSH Algorithms

## OPERATING INSTRUCTIONS

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# 1 Description

This instruction describes how to configure a system-wide Secure Shell (SSH) algorithm setting.

## 2 Procedure

### 2.1 Configure SSH Algorithms

#### Prerequisites

- No documents are required.
- No tools are required.
- The following conditions must apply:
  - The user has the System Security Administrator role.
  - The list of wanted set of algorithms is known.
  - The user has basic knowledge of cryptography.
  - An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.

#### Steps

1. Navigate to Ssh Managed Object (MO), for example:  
`>dn ManagedElement=NODE06ST,SystemFunctions=1,SecM=1,Ssh=1`
2. Enter Config mode:  
`(Ssh=1)>configure`
3. Is it required to change selectedCiphers?  
Yes: Continue with next step.  
No: Proceed with Step 5.  
**Note:** The strongest SSH ciphers are selected by default.
4. Set attribute selectedCiphers to configure ciphers, for example:



```
(config-Ssh=1)>selectedCiphers=[aes256-ctr,aes192-ctr,aes128-ctr]
```

The string list must follow the constraints stated in datatype SshAlgorithm under Ssh.

5. Is it required to change selectedKeyExchanges?

Yes: Continue with next step.

No: Proceed with Step 7.

**Note:** The strongest key exchanges are selected by default.

6. Set attributesselectedKeyExchanges to configure key exchanges, for example:

```
(config-Ssh=1)>selectedKeyExchanges=[diffie-hellman-group-exchange-sha1,diffie-hellman-group14-sha1]
```

The string list must follow the constraints stated in datatype SshAlgorithm under Ssh.

7. Is it required to change selectedMacs?

Yes: Continue with next step.

No: Proceed with Step 9.

**Note:** The strongest message authentication codes are selected by default.

8. Set attributesselectedMacs to configure message authentication codes, for example:

```
(config-Ssh=1)>selectedMacs=[hmac-ripemd160@openssh.com,hmac-ripemd160,hmac-sha1-96]
```

The string list must follow the constraints stated in datatype SshAlgorithm under Ssh.

9. Commit the settings:

```
(config-Ssh=1)>commit
```

10. Verify the settings:

```
(Ssh=1)>show -v
```

The following is an example output:



```
selectedCiphers
  "aes256-ctr"
  "aes192-ctr"
  "aes128-ctr"
selectedKeyExchanges
  "diffie-hellman-group-exchange-sha1"
  "diffie-hellman-group14-sha1"
selectedMacs
  "hmac-ripemd160@openssh.com"
  "hmac-ripemd160"
  "hmac-sha1-96"
[...]
```