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Key Chain Yang Data Model

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Changes Since IETF 95

- Added “replay-protection-only” algorithm for BFD
- Changed module name from ietf-routing-key-chain back to ietf-key-chain

New Crypto Algorithm



```
feature replay-protection-only {  
    description
```

```
        "Provide replay-protection without any  
        authentication as required by protocols  
        such as Bidirectional Forwarding Detection  
        (BFD).";
```

```
}
```



- `+--ro crypto-algorithm-state`
- `+--ro (algorithm)?`
- `+--:(hmac-sha-1-12) {crypto-hmac-sha-1-12}?`
- `| +--ro hmac-sha1-12? empty`
- `+--:(aes-cmac-prf-128) {aes-cmac-prf-128}?`
- `| +--ro aes-cmac-prf-128? empty`
- `+--:(md5)`
- `| +--ro md5? empty`
- `+--:(sha-1)`
- `| +--ro sha-1? empty`
- `+--:(hmac-sha-1)`
- `| +--ro hmac-sha-1? empty`
- `+--:(hmac-sha-256)`
- `| +--ro hmac-sha-256? empty`
- `+--:(hmac-sha-384)`
- `| +--ro hmac-sha-384? empty`
- `+--:(hmac-sha-512)`
- `| +--ro hmac-sha-512? empty`
- `+--:(clear-text) {clear-text}?`
- `| +--ro clear-text? empty`
- **`+--:(replay-protection-only) {replay-protection-only}?`**
- **`+--ro replay-protection-only? empty`**



Model Structure

- Global List of key-chains
- Each key-chain has list of keys (reusable container)
 - Send/Accept Lifetime or Send and Accept Lifetime
 - Lifetime (reusable container) supports multiple specification options
 - Algorithm (reusable container)
 - Key



Current Status

- Provide model definition for industry defacto standard key-chain
- Base model for protocol authentication import for (OSPF, ISIS, BFD and others to follow)
- Support graceful key/algorithm rollover.
- Provide containers for key-chain entries and authentication protocols.

Next Steps



- Possible Operational State updates
- Functionality complete, ready for WGLC