

# CT for Binary Codes

draft-zhang-trans-ct-binary-codes-03

Dacheng Zhang

Daniel Kahn Gillmor

# Changes since IETF91(1)

- Motivation
  - Add a use case
    - This mechanism can also show some advantages in the scenarios where the signer does not realize that their keys have been compromised. If their update system requires using a CT log they could find out about their compromise.

# Changes since IETF91(2)

- Extend the software entry type.

```
enum { x509_entry(0), precert_entry(1), BIN_entry(TBD1), (65535) } LogEntryType;
```

```
enum { binary(TBD3), binary_digest(TBD4) } Signed_Type;
```

```
struct {  
    LogEntryType entry_type;  
select (entry_type) {  
    case x509_entry: X509ChainEntry;  
    case precert_entry: PrecertChainEntry;  
    case BIN_entry: BIN_Chain_Entry  
    } entry;  
} LogEntry;
```

```
opaque BINARY<1..2^24-1>;
```

```
struct {  
    Signed_Type signed_type;  
    BINARY signed_software;  
    ASN.1Cert certificate_chain<0..2^24-1>;  
} BIN_Chain_Entry;
```

# Changes since IETF91(3)

- The software SHOULD be encapsulated and signed following the ways specified in CMS[RFC5652]. If signed\_type is TBD3, the software is encapsulated in this field. If signed\_type is TBD4, the SHA-256 digest of software is encapsulated in this field.
- "certificate\_chain"
  - If the information chain is provided in the signed\_software field, this field is set to empty.

# Unaddressed issue

- Still not specify the information besides the software/digest which should be signed.
  - Vendor name
  - Software name and version number
  - Architecture/Platform/Distribution
  - Data and time when the signature is generated
  - Any more?
- Do we need to support PGP?

Thanks