

Additional PRF input
draft-solinas-tls-additional-prf-input
Hiroshima, November 2009

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Purpose

- Some people want additional data to be included in the master secret calculation (inside the PRF, of course)
- Give a single generic structure for adding this instead of requiring each extension to define how its material would get mixed into the PRF

Mechanism

```
struct {
    uint16 AdditionalPRFInputType;
    opaque AdditionalPRFInputValue<0..2^16-4>;
} AdditionalPRFItem;
struct {
    AdditionalPRFItem item_list<0..2^16>
} AdditionalPRFInput;
```

- **IANA registry for types**
- **Two types defined**
 - Additional random (any size)
 - OtherInfo for NIST SP 800-56A

Status

- Simon pointed out in the -00 that there was no structure, so it was added
- Pasi pointed out in the -01 that this new extension allows TLS extensions without IETF consensus
 - Have some possible ways forwards to prevent this hole
- No other issues so far