IPFix Evaluation Report

55th IETF - Atlanta, GA

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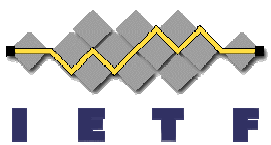
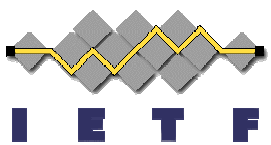


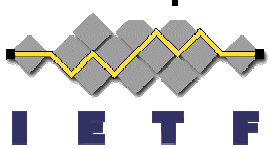
Summary of first version of Evaluation Draft

LFAP	CRANE	IPDR	Net-Flow	Dia-meter	
T	E	E	E	E	Reliability (5.1)
E	E	E	E	E	Sampling (5.2)
T	E	E	T	E	Overload Behavior (5.3)
P	T	T	T	E	Timestamps (5.4)
T	T	T	P	T	Time Synchronization (5.5)
N/A	N/A	N/A	N/A	N/A	Flow Expiration (5.6)
N/A	N/A	N/A	N/A	N/A	Multicast Flows (5.7)
N/A	N/A	N/A	N/A	N/A	Packet Fragmentation (5.8)
N/A	N/A	N/A	N/A	N/A	Ignore Port Copy (5.9)
T	T	T	T	T	Information Model (6.1)
T	T	T	T	T	Data Model (6.2)
T	T	T	E	T	Congestion Awareness (6.3.1)
T	T	T	P	T	Reliability (6.3.2)
T	T	T	T	T	Security (6.3.3)
T	T	T	T	T	Push Mode Reporting (6.4)
F	F	F	F	F	Pull Mode Reporting (6.4)
N/A	N/A	N/A	N/A	N/A	Regular Report. Interval (6.5)
T	T	T	T	T	Notif. on Specif. Events (6.6)
E	E	E	E	E	Anonymization (6.7)
N/A	N/A	N/A	N/A	N/A	Conf. of the metering Proc. (7.1)
N/A	N/A	N/A	N/A	N/A	Conf. of the exporting Proc (7.2)
T	T	T	T	T	Openness (8.1)
T	T	T	T	T	Scalability (8.2)
T	T	T	T	T	Several Collecting Proc (8.3)
13	12	12	10	11	number of Ts
2	4	4	4	5	number of Es
1	0	0	2	0	number of Ps
1	1	1	1	1	number of Fs



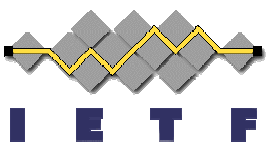
Evaluation Team Revision

LFAP	CRANE	IPDR	NetFlow	Diameter	
T	**E**	**E**	**E**	**E**	**Metering Reliability (5.1)**
E	E	E	E	E	Sampling (5.2)
T	**E**	**E**	**T**	**E**	**Overload Behavior (5.3)**
P	T	T	T	E	Timestamps (5.4)
T	T	T	P	T	Time Synchronization (5.5)
T	T	T	T	T	Information Model (6.1)
T	T	T	T	T	Data Model (6.2)
T	**T**	**T**	**F**	**T**	**Congestion Awareness (6.3.1)**
T	**T**	**T**	**P**	**T**	**Data Transfer Reliability (6.3.2)**
T	**E**	**E**	**E**	**E**	**Security (6.3.3)**
T	T	T	T	T	Push Mode Reporting (6.4)
F	F	F	F	F	Pull Mode Reporting (6.4)
T	T	T	T	T	Notif. on Specif. Events (6.6)
E	E	E	E	E	Anonymization (6.7)
T	T	T	T	T	Openness (8.1)
T	T	T	T	T	Scalability (8.2)
T	T	T	T	T	Several Collecting Proc (8.3)
13	11	11	9	10	number of Ts
2	5	5	4	6	number of Es
1	0	0	2	0	number of Ps
1	1	1	2	1	number of Fs



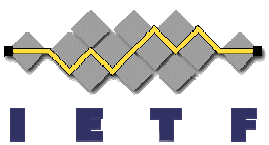
Additional Selection Criteria

- **Simplicity**
- **Template based approach**
  - Concurrent templates
- **TLV based approach**
- **Extensibility**
- **Support for variable length fields**
- **Split reporting**
- **More?**



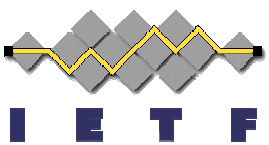
Summary

- None of the protocols conform to the requirements as they stand today (version –07)
- Resolve open issues that might affect evaluation team draft.
- Advocates need to update their respective drafts in response to the evaluation team findings.
- The evaluation team will then update (if needed) the team draft.



Juergen & Reinaldo's Proposal

- **Multi-level protocol extensions**
  - IPFIX protocol needs to be open to several reliability extensions (transport and application layer)
  - Extensions could be standard or experimental track RFCs.
  - This could be a MUST in the specification



Going Forward

- Could we eliminate some of the protocols as a first step? How?
- Can we reach consensus on one of the candidates?
- What changes are *required* in the chosen protocol?