IMIX Genome

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November 2012
draft-ietf-bmwg-imix-genome-02

<u>Additional</u> Tests with Variable Packet Sizes

◆ Fixed Packet/Frame Size tests are currently required in RFC 2544, etc.

◆ IF variable size testing is needed,

– Fully Specified

– Repeatability? How Important?

– Generally Specified if repeating sequence is too long for human comprehension (fraction, or number of frames@size for each size)

Scope and Spec

◆ Exact Sequence specification method

◆ No Standard IMIX!!!

◆ IMIX-aaafg has:

64,64,64,1280,1518

◆ Also, frequency of a size

Size, bytes	Code Letter
64	a
128	b
256	c
512	d
1024	e
1280	f
1518	g
MTU	h

New Run-Length Coding

◆ Suggested by Ilya Varlashkin

◆ When a sequence can be decomposed into a series of short repeating sequences, then a run-length encoding approach MAY be used

Count of Repeating Sequences	Packet Size Sequence
20	abcd
5	ggga
10	dcba
...	...

Augment Psuedo-Random Coding?

◆ When a sequence can only be described by a pseudo-random process

◆ Need to encourage the inclusion of the **actual generation process and seed**

◆ Applicability in IPPM...

IP Length	Percent of tot.	Other lengths
64	23	82
128	67	146
1000	10	1018
...		...

Earlier Feedback

- Draft is useful, MTU size is useful
- Previously Added Specification of fully Custom IMIX with sequence
- Tester can specify IMIX Genome between any two entities in test
  - Example with Blade configuration added
- Jumbo Frame sizes added, with note about FCS issues
- WG Last Call?